



Finest Quality Instruments
for Surgeons



gSource®

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gSource: Finest Quality Instruments for Surgeons

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About the gSource Catalog

The gSource catalog is arranged in order by instrument family. The first two digits of the gSource part number correspond to a general instrument group. Each page is marked with a general instrument group # followed by the page #.

This 2017 edition includes over 4,100 specially selected instruments with many primarily used in orthopedic and spinal procedures.

More than 100 instruments in the catalog are part of a collection of modified or improved versions of standard instruments referred to as the gLine. These instruments were created based on feedback received from surgeons and other healthcare professionals. The letter "g" in front of the instrument description identifies an item as a gLine instrument.

Please inquire about the availability of any instrument not shown in this catalog. For a quick answer on availability of other patterns not in the gSource catalog, refer to our website. You can view new instruments and use the cross reference feature to help you search for the gSource equivalent of a brand-name part number. You can also email or fax us a copy of the instrument picture and description or instrument brand-name part number.

Instrument making is still a fine art done by master craftsmen in our German, Polish and U.S. facilities. As such, slight variations in pattern, overall length and style may occur. Every effort has been made to represent the instruments in this catalog with accurate pictures and detailed tip illustrations.

Ordering gSource Instruments

Healthcare Facilities

gSource is represented by a select group of distributors and representatives located worldwide. Contact gSource Customer Service for the authorized distributor or representative in your area.

Medical Device Companies (OEM)

Contact gSource Customer Service directly.

gSource, LLC
19 Bland Street
Emerson, NJ 07630
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ISO 13485:2003 Certified
FS 589741
FDA Registered

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01/2 - introduction to gSource

gSource

gSource is committed to putting the finest instruments into the hands of surgeons and their teams.

Not all instruments are created equal. Adequate for the job is, in reality, inadequate. A better instrument reduces distractions and facilitates surgical procedures. A better instrument helps a surgeon perform at his/her best. A better instrument leads to better results. gSource provides better instruments.

gSource Attributes

Whether crafted from German surgical stainless steel, or machined from U.S. surgical stainless steel, our instruments are recognized by their finely finished surface. They are designed to perform with precise surgical function and are also conceived to be affordable. It is this combination that distinguishes the gSource brand.

Orthopedic and Spinal Focus

Founded in 1999, gSource is more than a source for quality instrumentation. gSource is an advocate for the orthopedic and spinal community. We can be relied upon to provide superior instrumentation and do so in a time-critical fashion.

Service First

Your inquiries will be answered quickly and accurately by knowledgeable professionals. We are committed to being a valuable business partner and to always provide a real return on investment.

Custom Instrumentation

gSource will create entirely new instruments in a timely and economical manner. For an accurate quotation and delivery schedule, send us a sample, sketch or drawing.

Trusted Supplier to World Leaders

Many world leaders and innovators in orthopedics and spine have found in gSource a trusted and reliable partner. Contact us the next time you require an off-the-shelf or custom instrument.

Guarantee

All standard instruments are guaranteed for life against manufacturing defects of material and workmanship. Any instrument proving to be defective will be replaced or the purchase price refunded.

1. Tungsten carbide inserts are guaranteed for three years. Replaceable parts, other than springs, are guaranteed for one year. Replaceable springs are guaranteed for life against manufacturing defects of material and workmanship.
2. This guarantee is void if instruments are altered or not maintained or repaired properly or if they are not used for their intended surgical purpose.
3. Any unused instrument may be returned for full credit within 90 days of invoice date.

gSource Advantages

- Realistic price
- Verified quality
- On-time delivery
- Skilled German craftsmanship
- Precise U.S. machining
- Orthopedic and spinal focus
- Product development support
- CAD support
- Custom labeling, packaging and marking
- Unique and standard instrument patterns
- Large selection and inventory
- Forgings inventory
- Customer inventory management
- Instrument sharpening and repair
- Superior personal customer service
- ISO 13485:2003 Certified
- Full satisfaction guarantee



gSource, LLC Emerson, NJ USA
Founded 1999

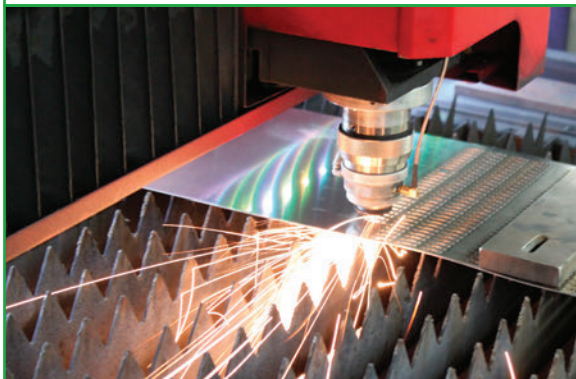
Orthopedic and Spinal Focus



Product Development and CAD Support



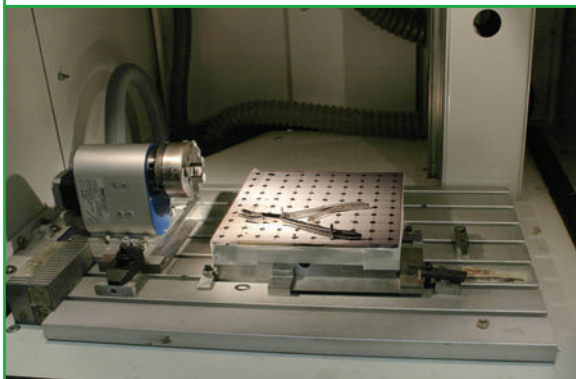
Precise Machining*



Skilled Craftsmanship*



Custom Laser Marking



ISO 13485:2003 Certified



01/4 - introduction to gSource

**Verified Quality
Hardness Tester**



**Verified Quality
Height Gauge**



Verified Quality — Optical Comparator



Custom Labeling and Packaging



Customer Inventory Management



On-Time Delivery



gSource Verified Quality

Every gSource instrument must pass detailed Quality Assurance (QA) tests before it can be sold.

Instruments are inspected for:

- Critical Dimensions
- Function
- Pattern Consistency
- Workmanship
- Material

We perform the following QA tests to ensure that every instrument we sell will perform its function during critical surgical procedures.

Surface inspection

All instruments are visually inspected for defects in material and surface finish. They must have a flawless satin finish and be free of excess lubricants and foreign substances.

Dimensions verified

Critical dimensions are measured with calipers, micrometers, or other specialty gauges and compared to technical drawings or gSource catalog descriptions. To ensure pattern consistency selected instruments are compared to inspection samples.

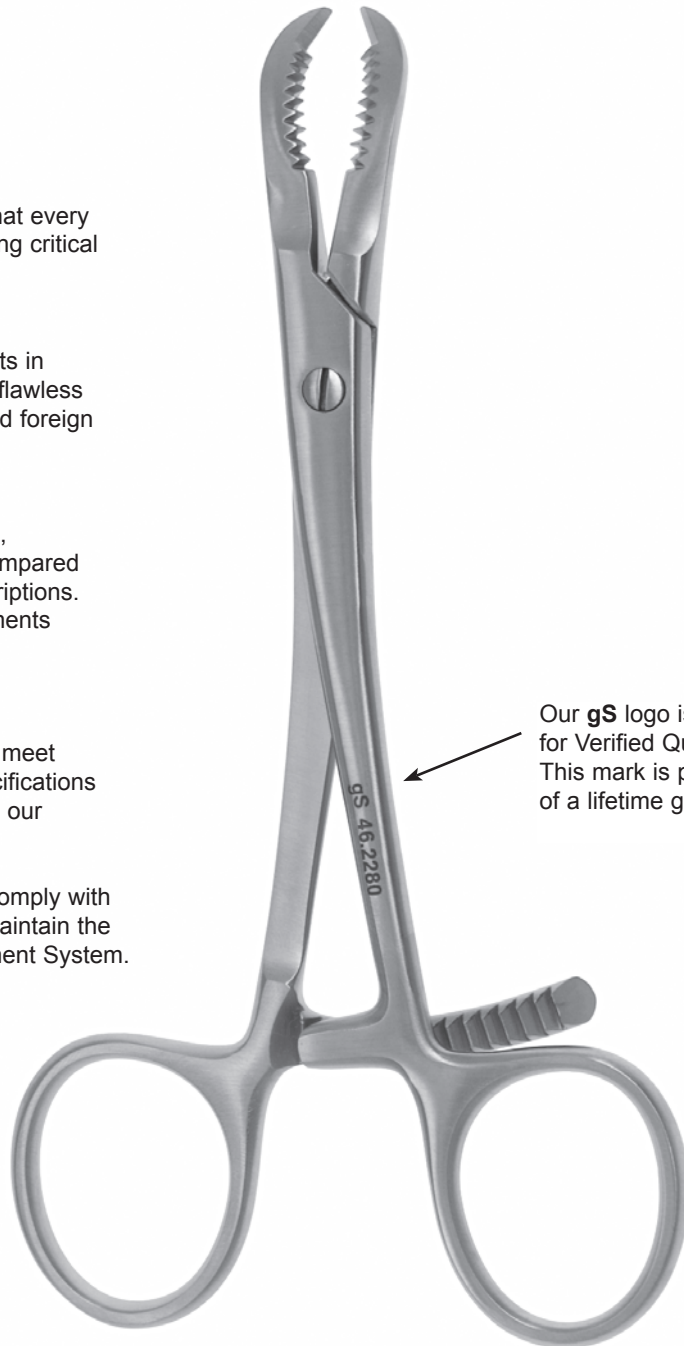
gSource Quality Policy

We ensure that gSource products consistently meet relevant and applicable requirements and specifications and we strive to provide outstanding service to our external and internal customers.

Top management ensures its commitment to comply with relevant and applicable requirements and to maintain the effectiveness of the gSource Quality Management System.



ISO 13485:2003 Certified
FS 589741
FDA Registered



Our **gS** logo is a symbol for Verified Quality. This mark is proof of a lifetime guarantee.

01/6 - introduction to gSource

gSource Quality Testing

In addition to general inspections, function tests are used to verify instrument quality.

Scissors

Cutting tests are performed on testing material. Scissors must not snag or bind when cutting appropriate layers of material. The heavier the scissors, the more layers of material they must cut. Blades must close smoothly without hesitation. Visual inspection is performed for burrs, especially on the cutting edge. Screw lock must be secure and a slight amount of hinge play should exist when opened.

Forceps

Closed jaws are checked against a light source to ensure that no substantial amount of light passes through. Jaws are clamped on plastic testing material. The impression should be clean and consistent. Teeth must mesh together closely. Jaws must be properly aligned. Ratchets must engage crisply and smoothly. While engaged at the first ratchet tooth, instruments should not open when tapped lightly against the edge of a table.

Needle Holders

Jaws must close tightly so that little or no light shines through the front 2/3 of closed jaws when tested against a light source. Jaws must hold suture material, and pass similar tests as outlined under forceps.

Retractors

Ratchets are checked for proper holding action. Tips are verified as either sharp, blunt or semi-sharp. Ratchet mechanisms must close smoothly. Holding power is tested to make sure ratchets remain engaged during use. Ratchet teeth must align properly.

Cutting Forceps

Cutting tests are performed with the appropriate test material. Forceps must cut cleanly with the front half of the jaws. Tips must close properly from the top to the middle of the jaws.

Pin and Wire Cutters

Cutting tests are performed according to the recommended maximum capacity of each instrument.

Only after an instrument has passed our QA inspection criteria will it be released to the market.

gSource Manufacturing

gSource instruments are manufactured from stainless steel. Stainless steel, though not truly stainless, is a highly corrosion and rust-resistant material. The metal is extremely strong and durable and has the ability to form protective or “passivation” layers.

Stainless steel differs from carbon steel by the amount of chromium present. Unprotected carbon steel rusts readily when exposed to air and moisture. This iron oxide film (the rust) is active and accelerates corrosion by forming more iron oxide. Stainless steels contain sufficient chromium to form a passive film of chromium oxide, which prevents further surface corrosion and blocks corrosion from spreading into the metal's internal structure. Passivation only occurs if the proportion of chromium is high enough.

Most gSource surgical instruments are made from German stainless steel type 1.4021 - equivalent to American steel type 420. This steel is highly corrosion resistant and has excellent longevity when properly maintained. Steel type 1.4021 is composed primarily of iron. Other components are:

Carbon	0.17-0.25%
Silicon	≤ 1.0%
Manganese	≤ 1.0%
Phosphorous	≤ 0.045%
Sulphur	≤ 0.043%
Chromium	12.0-14.0%

During the manufacturing process every effort is made to ensure that the instruments are corrosion resistant. However, if not properly maintained, stainless steel can rust and stain, reducing the life of the instrument or rendering it useless. For more detailed information on instrument care, see Section 100 – Instrument Care & Cleaning.

Heat Treatment

Heat treating makes the instruments hard and enables them to withstand rigorous use. Stainless steel is brought to a very high temperature and then cooled until it has reached the proper hardness. Hardness is measured in units called Rockwell Hardness (HRc). A typical hardness range for needle holders is HRc 40-48. For scissors, the range is HRc 50-58.

Heat treating and steel selection are just two of the more than 80 steps required to produce surgical instruments to gSource standards. We monitor and verify the accuracy of our manufacturing process through frequent audits.

Evaluation Samples

Samples for evaluation are available from gSource. Evaluation samples can only be supplied against a valid purchase order number and are invoiced at the time of shipment on established payment terms. Undamaged, unused evaluation samples may be returned for full credit within 45 days.

Trial Use Samples

gSource offers trial use samples for select instruments. Please contact gSource Customer Service to determine availability. gSource trial use samples may be used in surgery and are marked with "gSource Sample" and "Trial Use Only". gSource does not ship sterile instruments and sterilization is advised at your facility according to recommended parameters.

Trial use samples are supplied only against a valid purchase order number. Zero dollar purchase orders are not acceptable. Trial use samples are invoiced at the time of shipment at established cost with payment terms of net 60 days. Credit will be issued for the return of undamaged trial use samples within 60 days of invoice date. Trial use samples not returned to gSource within 60 days of invoice date will be payable in full. Customer may elect to purchase trial use samples. Trial use samples, used or unused, may be assessed at 25% restocking and reconditioning fee charge based upon the invoice amount.

Returns

gSource will accept instruments covered by the gSource guarantee. We cannot accept the following for credit or refund:

1. Instruments not in their original condition.
2. Instruments which have been used in surgery, unless defective. Used instruments must be sterilized prior to return and must be accompanied by a completed Certificate of Sterilization.
3. Instruments with an invoice date of more than 90 days.
4. Custom-made, custom-marked, special order or altered instruments.
5. K-Wires, Steinmann Pins, Cerclage Wire, Distraction Screws, Gigli Saw Blades.

At our discretion, a 15% restocking fee of the total value returned may apply, unless return is due to gSource error, defective product or if product was received damaged. Should instruments require neutralization for custom etching, a charge of \$5.00 USD per unit will be assessed.

Instructions for Returns to gSource

A Return Authorization (RA#) is required for all returns to gSource. Please contact gSource Customer Service via email or telephone to obtain an RA# prior to your return.

The following information must be provided when requesting an RA#:

1. gSource part number(s) and quantity being returned
2. Reason for return
3. gSource invoice number or pack slip #

All returns to gSource must be accompanied by a completed Certificate of Sterilization (CofS). This is to comply with OSHA Standards (29CFR1910.1030) requiring all used instruments be sterilized prior to shipping. New instruments may be indicated on the CofS.

Please do not sterilize instruments that have not been used. A copy of our CofS will be provided to you at time of RA# assignment should you require one. Please note that sign off on a CofS by a third party is not acceptable.

Once assigned an RA#:

1. Package your returned instruments carefully and securely, using original gSource packaging and labeling where possible to securely protect against damage during transit.
2. Include a copy of the gSource invoice or pack slip, the Certificate of Sterilization and any other documentation needed.
3. Send your return to:
gSource
Attn: Returns
19 Bland Street
Emerson, NJ 07630
The RA# must be noted prominently on the package. gSource reserves the right, at our discretion, to refuse any package not properly marked.
4. Ship your return to gSource via prepaid shipping.

All returns are subject to inspection by gSource Quality. A credit memo will be issued once the samples have passed inspection.

01/8 - introduction to gSource

Instrument Sharpening and Repair

gSource offers sharpening, spring and screw replacement and refurbishing repair services to ensure quality performance during the entire life of your gSource instruments.

Our highly skilled in-house repair technicians will expertly sharpen and repair your gSource instruments, and other instrument brands, according to gSource Verified Quality standards. Our superior customer service teamed with our instrument repair technicians will ensure you receive an excellent repair experience. Visit www.gSource.com for more information about our sharpening and repair services.



Repair Warranty

Instruments repaired by gSource repair technicians are guaranteed to be free from defects in material and workmanship for 90 days when used for their intended surgical purpose. Any repair that proves defective in workmanship or material within this 90 day period will either be repaired again or replaced, at the discretion of gSource, without charge. Instruments must be cleaned and sterilized prior to returning to gSource.

This warranty is void for gSource instruments serviced by any person or facility other than gSource. Warranty is not valid for gSource instruments that prove defective as a result of improper care and cleaning or misuse.

Instructions for Sending Repairs to gSource

1. Review our Repair Price List.
2. Print out and complete our Order Form. Please be sure to complete your contact information and address for the return shipment. Refer to the Price List for Repair Codes to include on Order Form where noted. Include the quantity, part number and description of the instrument being returned where noted.
3. Sterilize instrument prior to shipment to gSource. All returns to gSource must be accompanied by a Certificate of Sterilization.
4. Enclose the completed order form and Certificate of Sterilization in the package with the sterilized instrument needing sharpening or repair and ship via prepaid shipping to:
gSource
Attn: Repair Dept.
19 Bland Street
Emerson, NJ 07630

After sharpening and/or repair of your instrument is completed, you will receive an invoice for payment. Payment must be received prior to shipment of your repaired instrument. We accept VISA, MasterCard and AMEX credit card payments. When you receive your invoice, please contact gSource Customer Service with your credit card payment information. Our default ship method is UPS Ground unless an alternate method is specified.

Oxidation of lead surface is a normal process.

Per DIN EN 285, autoclave temperatures should not exceed:

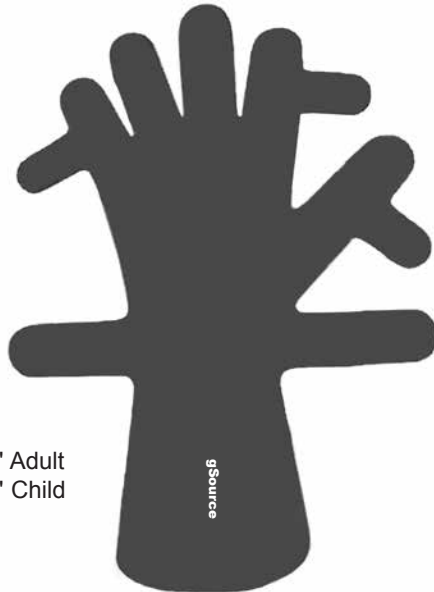
Dry Heat:
356°F (180°C)
30 minutes

Steam:
248°F (120°C)
20 minutes

Avoid chemical sterilization.

gS 11.1900 14" Adult
gS 11.1920 10" Child

Lead Hand
with tabs



gS 11.1930 11"

Lead Hand



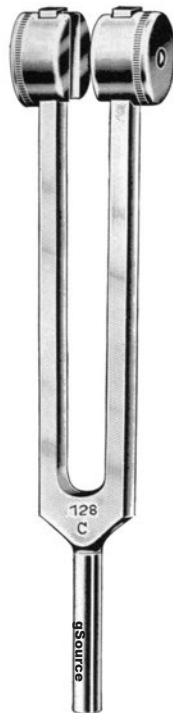
CPS = Cycles
Per Second

C-128 CPS
frequency for
neurological
testing.

C-256 has
extra long
2" handle to
facilitate bone
conduction
tests.

gS 11.4128 8" C-128
gS 11.4256 6 1/2" C-256

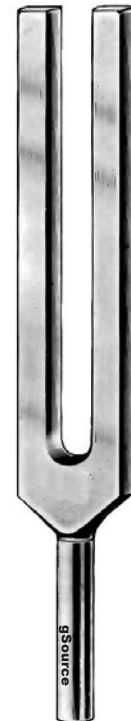
Tuning Fork
aluminum



C-512 CPS
frequency
for auditory
and conduction
testing.

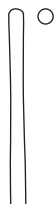
gS 11.4512 6 1/2" C-512

Tuning Fork
aluminum



11/2 - diagnostic

11



gS 11.7110 4 1/2"
 gS 11.7111 5"
 gS 11.7112 5 1/2"
 gS 11.7113 6 1/4"
 gS 11.7114 7"
 gS 11.7115 8"
 gS 11.7116 10"

Probe with Eye
 stainless steel
 2mm diameter probe end



gS 11.7211 4 1/2"
 gS 11.7213 5"
 gS 11.7214 5 1/2"
 gS 11.7216 6 1/4"
 gS 11.7218 7"
 gS 11.7220 8"
 gS 11.7225 10"

Double Ended Probe
 stainless steel
 2mm diameter probe end



gS 11.7133 5"
 gS 11.7134 5 1/2"
 gS 11.7135 6"
 gS 11.7136 7"
 gS 11.7137 8"

Grooved Director
 with tongue tie



gS 11.7141 5"
 gS 11.7142 5 1/2"
 gS 11.7143 6"
 gS 11.7144 7"
 gS 11.7145 8"

Grooved Director
 with tongue tie and probe



To test nerve reactions.

gS 11.6140 7"
Wartenberg Pin Wheel



To check fracture and
remove ingrown tissue.

gS 11.9500 6"
Sharp Hook



To check fracture and
remove ingrown tissue.

gS 11.9525 6 1/4"
Sharp Hook
grooved handle



Includes brush and needle.

gS 11.5920 7 3/4"
**Buck Neurological
Hammer**
stainless steel



To test deep tendon reflexes.

gS 11.5600 7"
gS 11.5680 8"

Taylor Percussion Hammer



gS 11.5300 6 1/2"
gS 11.5340 blade only

Finger Ring Cutter
hollow handle



TiN coated blade stays sharp longer.

Plier handle provides strong, secure grip for better control.

gS 11.5360 6 1/2"
gS 11.5362 blade only

Finger Ring Cutter
plier handle



did you know... ?

The Taylor Percussion Hammer, gS 11.5600 and gS 11.5680 shown on this page, is also known as the tomahawk reflex hammer. It was designed by Dr. John Madison Taylor, a pediatric neurologist, in 1888 while working at the Philadelphia Orthopedic Hospital. This instrument is used to test deep tendon reflexes as part of a neurological physical examination in order to detect abnormalities in the central or peripheral nervous system.

Dr. Taylor was born in 1855. He was a graduate of Princeton in 1876, and received his medical degree from the University of Pennsylvania in 1878. After serving as resident physician, he became assistant physician at Children's Hospital in Philadelphia. He established a large private practice in pediatrics and neurology in Philadelphia and also held academic positions, including appointments as professor of diseases of children at the Philadelphia Polyclinic. Dr. Taylor passed away in 1931.

WL = Working Length

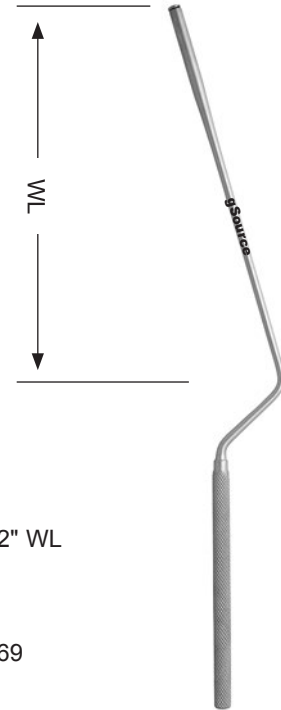
gS 12.1605 #3K 4"
gS 12.1604 #3KL 5"
gS 12.1606 #3KXL 6"

Scalpel Handle #3K
 Beaver-style
 for blades 61 through 69



gS 12.1760 10", 5 1/2" WL

Landolt Bayonet Scalpel Handle
 for blades 61 through 69
 knurled handle



gS 12.1580 #3 standard 5"
gS 12.1590 #3S mm/cm scale 5"
gS 12.1610 #3L long 8"
gS 12.1615 #3LA long angled 8 1/2"
gS 12.1617 #3XL extra long 12"

Scalpel Handle #3
 for blades 9 through 17



gS 12.1640 5"

Scalpel Handle #9 (7K)
 for blades 9 through 17



12/2 - scalpel handles and knives

12

gS 12.2580 5"

Scalpel Handle #1015/8
for blades 9 through 17
hollow handle



gS 12.2780 standard 6"
gS 12.2781 angled 5 3/4"

Scalpel Handle #1017/8
for blades 9 through 17
knurled handle



gS 12.1700 standard 6"
gS 12.1701 angled 6"

Siegel Scalpel Handle
for blades 9 through 17
knurled handle

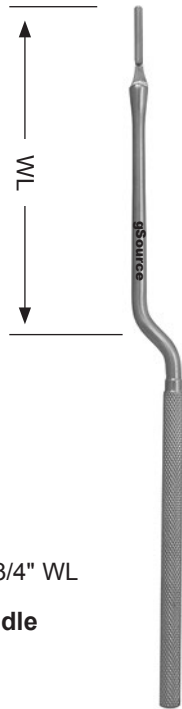


gS 12.1620 6 1/2"

Scalpel Handle #7
for blades 9 through 17

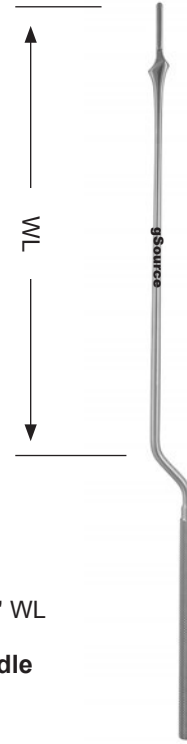


WL = Working Length



gS 12.1750 8 1/4", 3 3/4" WL

Bayonet Scalpel Handle
for blades 9 through 17
knurled handle



gS 12.1800 12", 6 3/4" WL

Bayonet Scalpel Handle
for blades 9 through 17
knurled handle

gS 12.1600 #4 standard 5 1/4"
gS 12.1601 #4 mm/cm scale 5 1/4"
gS 12.1602 #4L long 8 1/2"
gS 12.1603 #4LA long angled 8 1/2"

Scalpel Handle #4
for blades 18 through 36



gS 12.2590 5 1/2"

Scalpel Handle #1015/9
for blades 18 through 36



12/4 - scalpel handles and knives

12

gS 12.2540 5 1/2"

**Post-Mortem Scalpel
Handle #1015/4**
for 60 and 70 blades

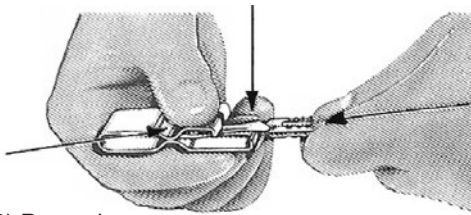


gS 12.2591 5 1/2"

**Post-Mortem Scalpel
Handle #1015/9**
for 60 and 70 blades



1) Insert blade side up to align to guide.



3) Pull blade
off handle.

2) Press down.

Useful for safe and easy
removal of blades from all
handle styles. Helps to
protect hands against
accidental cuts and
punctures.

gS 12.1000 2 1/2"

Blade Safe
surgical blade remover



gS 12.4200 5"

Soft Corn Knife
slightly curved oval blade



Useful for fistulotomy procedures.

gS 12.4000 9"

Ulrich Fistula Knife
straight



did you know... ?

Scalpel blade removers, such as gS 12.1000 shown on page 12/4, can also be used to put blades on the handle. Using a scalpel blade remover can help to reduce accidental lacerations and injuries, commonly caused when removing the blade with fingers or forceps.

The Centers for Disease Control and Prevention (CDC) estimates that about 385,000 sharps-related injuries occur annually among health care workers in hospitals. Approximately 4% of injuries are associated with reusable scalpels.

Listed below are the "sharps" safety guidelines for healthcare professionals as found on the CDC website: www.cdc.gov

Be Prepared

- Organize your work area with appropriate sharps disposal containers within reach
- Work in well-lit areas
- Receive training on how to use sharps safety devices
- Before handling sharps, assess any hazards-get help if needed

Be Aware

- Keep the exposed sharp in view
- Be aware of people around you
- Stop if you feel rushed or distracted
- Focus on your task
- Avoid hand-passing sharps and use verbal alerts when moving sharps
- Watch for sharps in linen, beds, on the floor, or in waste containers

Dispose of Sharps with Care

- Be responsible for the device you use
- Activate safety features after use
- Dispose of sharps in rigid sharps containers; do not overfill containers
- Keep fingers away from the opening of sharps containers

12/6 - scalpel handles and knives

did you know... ?

The most common scalpel handle shapes are:

1) Flat handles: Commonly used for both rounded and straight incisions. The design of these handles is best suited for straight long cuts and general surgery. These include:

#3	#4	#7	#9
Page 12/1	Page 12/3	Page 12/2	Page 12/1
gS 12.1580	gS 12.1600	gS 12.1620	gS 12.1640
gS 12.1590	gS 12.1601		
gS 12.1610	gS 12.1602		
gS 12.1615	gS 12.1603		
gS 12.1617			

2) Rounded handles: Allow rotation between the finger and thumb. They are generally considered a better instrument for curved incisions. These include:

Beaver-style scalpel handle

Page 12/1

gS 12.1604

gS 12.1605

gS 12.1606

This handle can only be used with Beaver-style blades (61-69).

Siegel scalpel handle

Page 12/2

gS 12.1700

gS 12.1701

This handle accepts standard scalpel blades and in addition to having a rounded, knurled gripping surface, it has a smooth tapered tip that can also serve as a probe. Dr. Daniel Siegel's rounded design is ergonomic and allows the tips of the fingers to dictate the direction and depth of the incision.

Bayonet scalpel handle

gS 12.1750 Page 12/3

gS 12.1760 Page 12/1

gS 12.1800 Page 12/3

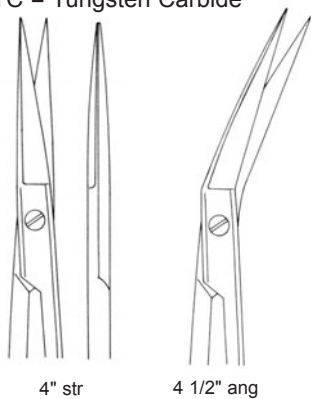
The bayonet style handles are useful for achieving optimized visibility and access in surgical field, and for fine maneuvering and manipulation within field.

The most commonly used scalpel handle grips are:

1) Palmar grip: Usually used when making initial incisions or larger cuts. The index finger extends to the top rear of the blade and the thumb secures along the side of the handle. The second through fourth fingers hold the handle along the base of the thumb. It is commonly referred to as the "dinner knife" grip.

2) Pencil grip: Usually used when precise cuts with smaller blades are needed. The tips of the first and second fingers and the tip of the thumb hold the scalpel handle near the top rear of the blade while the handle rests on the fleshy base of the index finger and thumb. The handle should not rest too far along the index finger as it could cause an unstable grip and finger cramping.

TC = Tungsten Carbide



- gS 13.1640** 3 1/2" str
- gS 13.1660** 3 1/2" cvd
- gS 13.1670** 4" str
- gS 13.1671** 4" str left-handed
- gS 13.1672** 4" cvd
- gS 13.1680** 4 1/2" str
- gS 13.1720** 4 1/2" cvd
- gS 13.1721** 4 1/4" cvd left-handed
- gS 13.2380** 4 1/2" angled
- gS 13.1842** 4 1/2" str TC
- gS 13.1844** 4 1/2" cvd TC

Iris Scissors
sharp points



- gS 13.2381** str
 - gS 13.2382** cvd
- Iris Scissors**
4 1/2"
ribbon handles, sharp points



b/b = blunt/blunt
s/s = sharp/sharp

- gS 13.2384** str b/b
- gS 13.2385** cvd b/b
- gS 13.2386** str s/s
- gS 13.2390** cvd s/s

Knapp Iris Scissors
4"

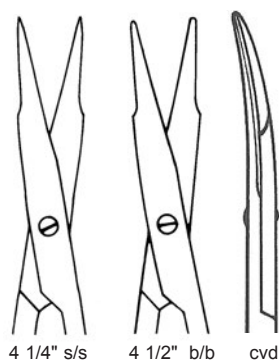


- gS 13.2392** str
 - gS 13.2393** cvd
- Fine Scissors**
4 1/2"
round shank, sharp points



13-14/2 - scissors

b/b = blunt/blunt
s/b = sharp/blunt
s/s = sharp/sharp
TC = Tungsten Carbide



13-14

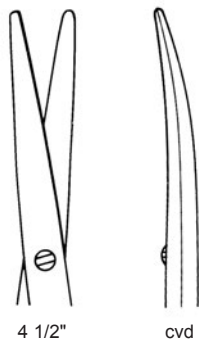
gS 13.4160 3 3/4" cvd

Gradle Scissors
sharp points



gS 13.2680 4 1/4" str b/b
gS 13.2720 4 1/4" cvd b/b
gS 13.2740 4 1/4" str s/s
gS 13.2760 4 1/4" cvd s/s
gS 13.2770 5 1/2" str b/b
gS 13.2772 5 1/2" cvd b/b
gS 13.2816 4 1/2" cvd s/s TC
gS 13.2830 4 1/2" cvd b/b TC

Stevens Tenotomy Scissors
fine blades



gS 13.2600 4 1/2" str
gS 13.2640 4 1/2" cvd
gS 13.2642 4" str TC
gS 13.2644 4" cvd TC

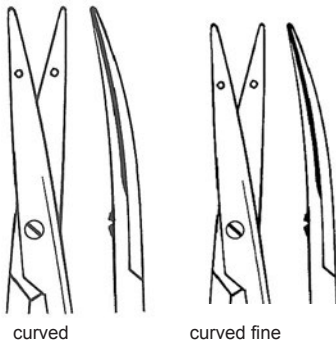
Strabismus Scissors
blunt points



gS 13.6320 str s/s
gS 13.6340 str s/b
gS 13.6360 str b/b
gS 13.6380 cvd s/s
gS 13.6400 cvd s/b
gS 13.6420 cvd b/b
gS 13.6440 ang s/s

Plastic Surgery Scissors
4 3/4"

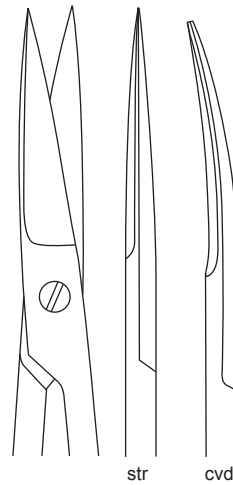




Suture holes in blade align when closed.

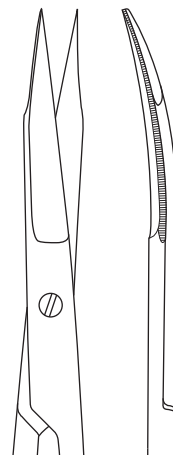
gS 13.3011 cvd
gS 13.3012 cvd fine

Little Scissors
4 3/4"
with suture holes, blunt points



gS 13.4170 str
gS 13.4172 cvd

Nail Scissors
4"
sharp points



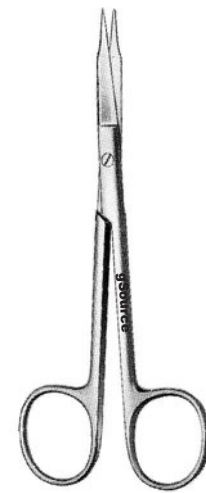
gS 13.6600 5" cvd

Ragnell Scissors
flat blades
blunt points



gS 13.7200 5" cvd

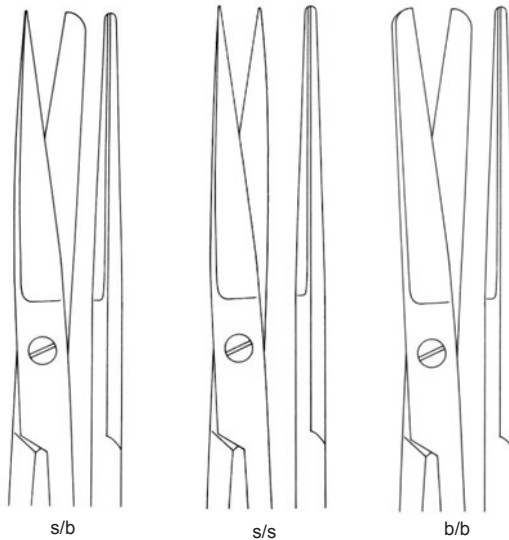
Goldman-Fox Scissors
serrated blade
sharp points



13-14/4 - scissors

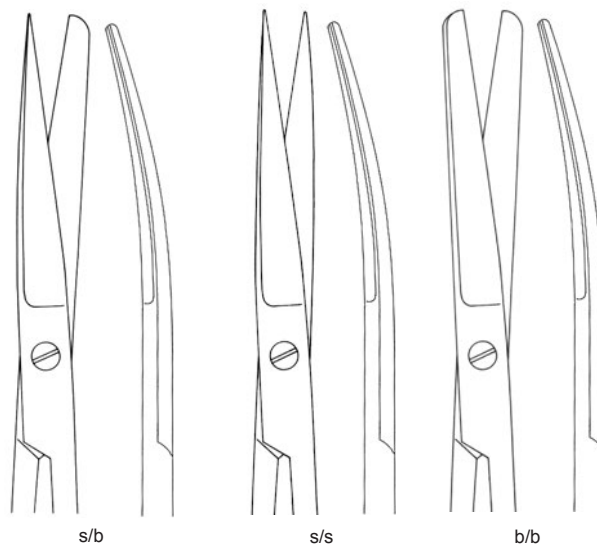
b/b = blunt/blunt
s/b = sharp/blunt
s/s = sharp/sharp

- gS 13.4001** 4 1/2" s/b
gS 13.4002 4 1/2" s/s
gS 13.4003 4 1/2" b/b
gS 13.4008 5" s/b left-handed
gS 13.4009 5" b/b left-handed
gS 13.4011 5" s/b
gS 13.4012 5" s/s
gS 13.4013 5" b/b
gS 13.4018 5 1/2" s/b left-handed
gS 13.4021 5 1/2" s/b
gS 13.4022 5 1/2" s/s
gS 13.4023 5 1/2" b/b
gS 13.4031 6 1/2" s/b
gS 13.4032 6 1/2" s/s
gS 13.4033 6 1/2" b/b



Operating Scissors straight blades

- gS 13.4004** 4 1/2" s/b
gS 13.4005 4 1/2" s/s
gS 13.4006 4 1/2" b/b
gS 13.4014 5" s/b
gS 13.4015 5" s/s
gS 13.4016 5" b/b
gS 13.4024 5 1/2" s/b
gS 13.4025 5 1/2" s/s
gS 13.4026 5 1/2" b/b
gS 13.4028 5 1/2" s/b left-handed
gS 13.4034 6 1/2" s/b
gS 13.4035 6 1/2" s/s
gS 13.4036 6 1/2" b/b



Operating Scissors curved blades

TC = Tungsten Carbide

gS 13.5360 4 1/2"
 gS 13.5430 5"
 gS 13.5580 5 3/4"
 gS 13.5581 5 3/4" left-handed
 gS 13.5660 7"
 gS 13.5661 7" left-handed
 gS 13.5930 7" delicate
 gS 13.5720 8"
 gS 13.5760 9"
 gS 13.5761 9" left-handed
 gS 13.5820 10"
 gS 13.5860 11"

gS 13.7436 5 3/4" TC delicate
 gS 13.7438 7" TC
 gS 13.7440 7" TC delicate
 gS 13.7480 8" TC
 gS 13.7505 9" TC
 gS 13.7525 9" TC delicate

Metzenbaum Scissors
 straight blunt points



13-14

gS 13.5380 4 1/2"
 gS 13.5450 5"
 gS 13.5620 5 3/4"
 gS 13.5920 5 3/4" delicate
 gS 13.5621 6" left-handed
 gS 13.5700 7"
 gS 13.5701 7" left-handed
 gS 13.5940 7" delicate
 gS 13.5740 8"
 gS 13.5780 9"
 gS 13.5781 9" left-handed
 gS 13.5840 10"
 gS 13.5880 11"

gS 13.7433 5 3/4" TC
 gS 13.7439 7" TC
 gS 13.7460 7" TC delicate
 gS 13.7485 8" TC
 gS 13.7520 9" TC
 gS 13.7535 9" TC delicate
 gS 13.7466 10" TC
 gS 13.7545 11" TC

Metzenbaum Scissors
 curved blunt points



13-14/6 - scissors

TC = Tungsten Carbide

gS 13.3560 5 1/2" str
gS 13.3561 5 1/2" str left-handed
gS 13.3580 5 1/2" cvd
gS 13.3581 5 1/2" cvd left-handed
gS 13.3585 6" str
gS 13.3590 6" cvd
gS 13.3600 6 3/4" str
gS 13.3601 6 3/4" str left-handed
gS 13.3620 6 3/4" cvd
gS 13.3621 6 3/4" cvd left-handed
gS 13.3920 9" str
gS 13.3940 9" cvd

gS 13.3971 5 1/2" str TC
gS 13.3972 5 1/2" cvd TC
gS 13.3975 6 3/4" str TC
gS 13.3976 6 3/4" cvd TC
gS 13.3977 9" str TC
gS 13.3978 9" cvd TC

Mayo Scissors

blunt beveled blades



5 1/2"



6 3/4"



gS 13.3950 5 1/2" str
gS 13.3951 5 1/2" cvd
gS 13.3952 6 3/4" str
gS 13.3954 6 3/4" cvd

gS 13.3961 5 1/2" cvd TC
gS 13.3996 6 3/4" cvd TC

Mayo-Stille Scissors

blunt rounded blades

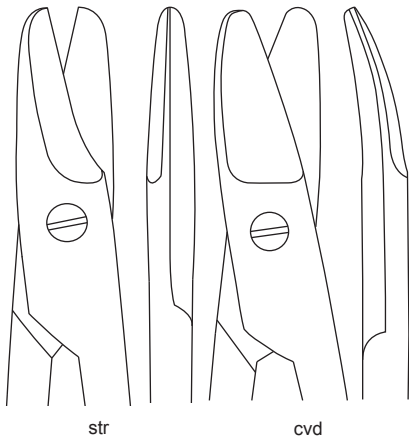


gS 13.4250 str
gS 13.4270 cvd

Mayo Noble Scissors

6 1/2"
 blunt beveled blades



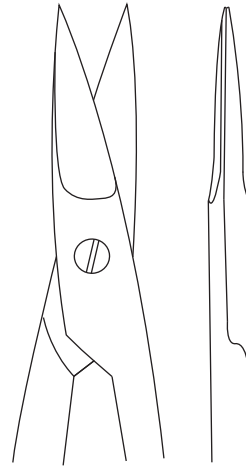


gS 13.4180 5 1/2" str

gS 13.4182 5 1/4" cvd

Sistrunk Scissors

blunt points, heavy pattern



gS 13.4190 5 1/4" str

Sistrunk Scissors

sharp points, heavy pattern



13-14



gS 13.7250 5 1/2" cvd

Jones Dissecting Scissors

delicate blades, sharp points
one serrated blade



gS 13.3114 5 1/2" cvd

Joseph Scissors

sharp points



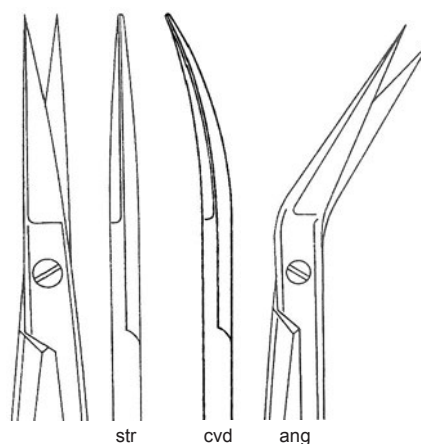
13-14/8 - scissors

TC = Tungsten Carbide

13-14

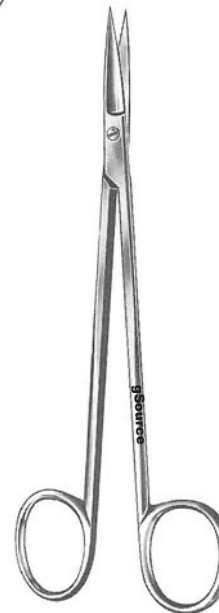
gS 13.2780 6" str
gS 13.2782 6" cvd
gS 13.2800 7" str
gS 13.2802 7" cvd

Reynolds Scissors
blunt points



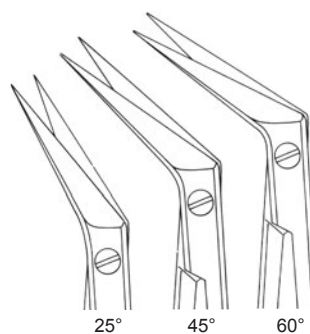
gS 13.7060 str
gS 13.7070 cvd
gS 13.7120 ang
gS 13.7140 str TC
gS 13.7145 cvd TC

Kelly Scissors
6 1/4"
sharp points



gS 14.7125 6 3/4"

Knight Nasal Scissors
angled on side
blunt points



gS 14.0000 25°
gS 14.0001 45°
gS 14.0002 60°

Potts-Smith Scissors
7 1/2"
delicate sharp points





gS 14.2010 7 3/4" cvd

Dandy Trigeminal Scissors

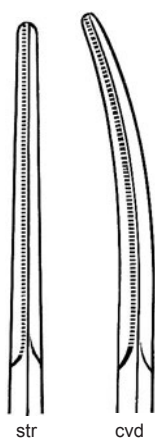
angled, sharp points



gS 13.4340 str
gS 13.4360 cvd

Doyen Scissors

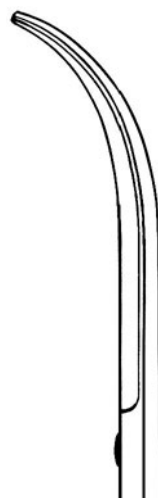
7"
blunt points



gS 13.3540 str
gS 13.3542 cvd

Gorney Scissors

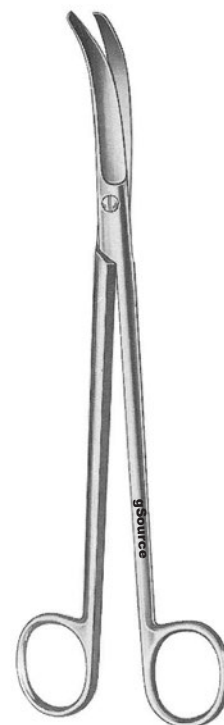
8", blunt points
one serrated blade



gS 13.4290 8 1/2"

Jorgenson Scissors

heavy curve
blunt points

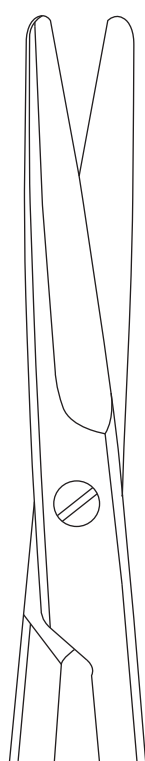


13-14/10 - scissors

13-14

gS 13.3965 str
gS 13.3966 cvd

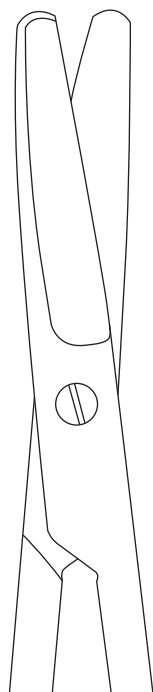
Mayo-Harrington Scissors
9"
blunt rounded blades



str



cvd



gS 14.3000 13"

**Bariatric Extra Long
Mueller Rectal Scissors**
angled handle, blunt points



gS 15.1680 3 1/2"
gS 15.1920 5"

Spencer Stitch Scissors
delicate hooked blade



gS 15.1800 3 1/2"

Shortbent Stitch Scissors
delicate hooked blade



gS 15.1950 4 1/2"

Angled Stitch Scissors
angled delicate
hooked blade



gS 15.2040 4 3/4"

Northbent Stitch Scissors
delicate hooked blade



15/2 - stitch scissors

15

gS 15.2200 5 1/2"

Littauer Stitch Scissors
delicate hooked blade



gS 15.6600 6"

Ingrown Nail Splitting Scissors
one serrated blade



did you know... ?

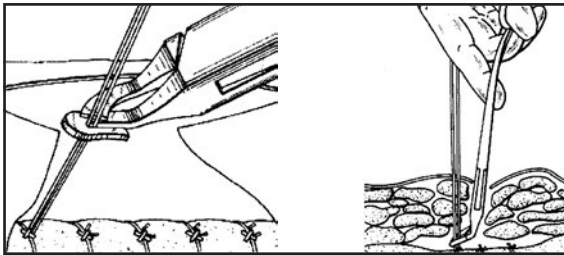
Stitch scissors are also known as suture scissors. The word suture comes from the Latin "sutura", a sewn seam. In Latin, the verb "suere" means to sew, stitch, or tack together. The word scissors is derived from the Latin word "cisorium" meaning cutting tool.

These scissors are an indispensable tool in the medical field. They provide hospitals, doctor's clinics and operating rooms with the proper instrument to cut and remove suture string. Sizes vary depending on what length of suture is being removed. They are specifically designed to remove sutures through the design of the tip.

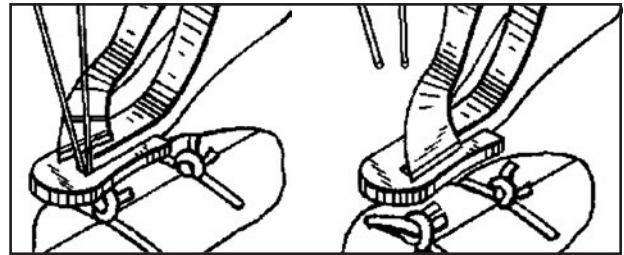
The basic tip design may be pointed or blunt ended. The blades are either hooked, curved or have a curved blunt blade to enable easy removal of sutures. The hook helps medical personnel easily lift the sutures to be cut.

Suture scissors are available in several sizes. The 3 1/2" suture scissors, gS 15.1680 and gS 15.1800, on page 15/1, are used when cutting and removing stitches in very small and tight places. The 3 1/2" Spencer Stitch Scissors, gS 15.1680, is the most popular model.

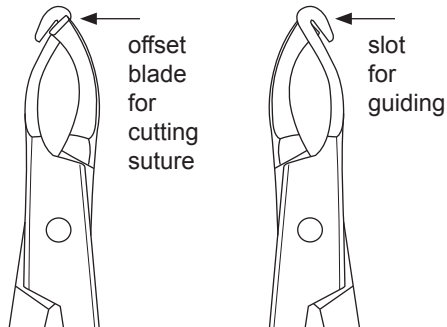
CGS = Chromic/Gut/Synthetic



After the suture knot is tied, the slot opening on the suture cutter uses the suture as a guide to gently push aside tissue while descending down until the knot is reached.



The knot stops the suture cutter as it is thicker than the slot is wide. The offset blade is set to be approximately 2mm above the knot and cuts the suture with precision and ease.



Helps to clip sutures at the correct level above the knot.

gS 15.2300

Suture Cutter

flat and reversible
for CGS 3-0/7-0, silk 2-0/6-0 range



15/4 - bandage scissors

15

Most popular scissors for bandage and dressing removal.

gS 15.7680 3 1/2"
gS 15.7800 4 1/2"
gS 15.7920 5 1/2"
gS 15.7921 5 1/2" left-handed
gS 15.8011 6 1/2" left-handed
gS 15.8040 7 1/4"
gS 15.8041 7 1/4" one serrated blade
gS 15.8043 7 1/4" left-handed
gS 15.8070 8"

Lister Bandage Scissors
angled blade



Oversized finger ring helps relieve pressure on third metacarpal.

gS 15.8080 8"
gS 15.8082 8" one serrated blade

Lister Bandage Scissors
one large ring



Delicate blades and angled shank are ergonomically designed to cut finger and toe bandages.

Fine knob slides easily under bandages.

Keeps hands away from material being cut.

gS 15.8920 5 1/2"

Hi-Level Bandage Scissors (Knowles)
one serrated blade angled

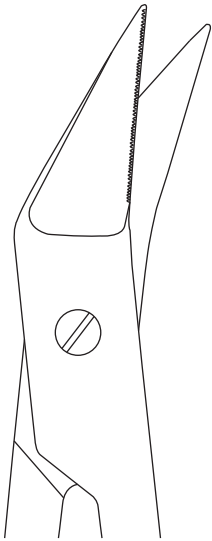


For removal of finger and toe bandages.

gS 15.9040 5 1/2"

Knowles Bandage Scissors
one serrated blade straight





gS 15.9160 6 1/2"

Bandage Scissors
one serrated blade
angled, sharp points



For cutting tape and
bandages.

gS 15.1600 8"

Esmarch Shears
heavy blades



For cutting plaster casting
material.

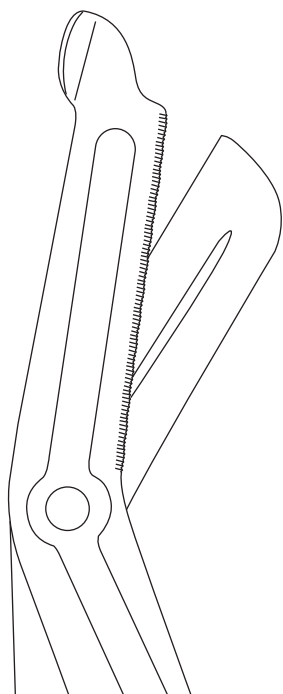
gS 15.9250 9 1/2"

Bruns Shears
one serrated blade
heavy blades



15/6 - bandage scissors

15



7 1/2"



For cloth, bandages,
and light plaster.

gS 15.9299 5 1/2" black
gS 15.9300 7 1/2" black
gS 15.9301 7 1/2" blue
gS 15.9302 7 1/2" green
gS 15.9303 7 1/2" red

Utility Scissors

plastic handle, autoclavable
one serrated blade



gS 15.9200 7" str
gS 15.9202 7" cvd

Moleskin Scissors
one serrated blade
sharp/blunt points



For lightweight plaster
casting material.

Angled blade keeps hands
away from cutting material.

gS 15.9340 7 1/2"

Hercules Scissors
one serrated blade heavy



Notch next to hinge
screw can be used to
cut cerclage wire.
(17 gauge/Ø1.5mm max)

gS 15.9360 8"

Utility Shears
one serrated blade
locking clip



gS 15.9400 6 1/4"

Scissor Forceps
plier handle with springs
sharp points



15/8 - bandage scissors

did you know... ?

Lister bandage scissors, as shown on page 15/4, were invented by Dr. Joseph Lister, a British surgeon whose most significant achievement was his work on antiseptics, establishing the basis of modern sterile surgery.

Dr. Lister was born in 1827 and lived in a Quaker home in Upton, Essex county of England. He was the son of Joseph Jackson Lister, inventor of the compound microscope. He attended the University of London and graduated with a Bachelor of Medicine degree before entering the Royal College of Surgeons in London at the age of 26. In 1854, Dr. Lister became a surgeon assistant at the University of Edinburgh, Edinburgh Royal Infirmary in Scotland.

As professor of surgery at the University of Glasgow, Dr. Lister became aware of a paper published by the French chemist Louis Pasteur, suggesting three methods to eliminate the micro-organisms responsible for gangrene: filtration, exposure to heat, or exposure to chemical solutions. Conducting his own experiments, Dr. Lister confirmed Pasteur's conclusions and used his findings to develop antiseptic techniques for wounds. He found that carbolic acid solution, now known as phenol, reduced the incidence of gangrene when swabbed on wounds. He published a series of articles describing this procedure in 1867.

Prior to Dr. Lister's studies, people believed that chemical damage from exposure to bad air (miasma) was responsible for wound infections. Hospital wards were aired out as a precaution. A surgeon was not required to wash his hands before seeing a patient as it was not considered necessary and facilities for washing hands

were not available. Dr. Lister instructed surgeons to wear clean gloves and wash their hands before and after operations with 5% carbolic acid solutions. Instruments were also washed in the same solution and assistants sprayed the solution in the operating room. He also suggested not using porous natural materials in the manufacture of medical instrument handles.

Dr. Lister left Glasgow in 1869, returning to Edinburgh as Professor of Surgery at the University of Edinburgh, and continued to develop improved methods of antiseptics and asepsis. This led to the rise of sterile surgery.

In 1879 Listerine mouthwash was named after him for his work in antiseptics. Also named in his honor is the bacterial genus *Listeria*, typified by the food-borne pathogen *Listeria monocytogenes*.

Dr. Lister was president of the Royal Society between 1895 and 1900. Following his death in 1912, a Memorial Fund led to the founding of the Lister Medal, an award presented by the Royal College of Surgeons of England in recognition of contributions to surgical science. It is considered as a most prestigious prize to be awarded to a surgeon.

Bandage scissors are angled tip scissors, with a blunt tip on the bottom blade, which helps in cutting bandages without gouging the skin. The bottom blade of the scissors is longer and goes easily under the bandages. The most popular is gS 15.8040, Lister Bandage Scissors 7 1/4", shown on page 15/4.

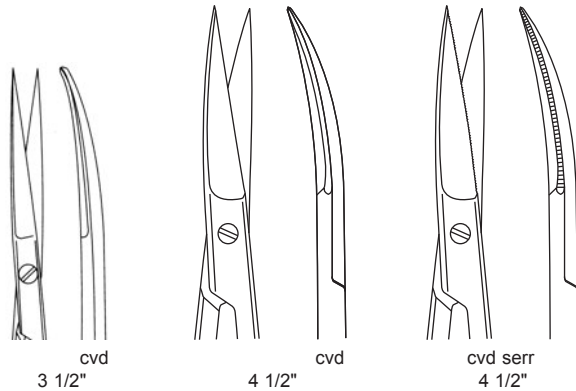
Super-Cut Scissors are renowned for their unsurpassed sharpness.

The stainless steel used to manufacture our Super-Cuts has been specially heat-treated to achieve a long-lasting razor sharp edge.

One serrated blade on gS 16.5610 helps to prevent tissue slippage and facilitates effortless cutting.

- gS 16.5415** 3 1/2" str
- gS 16.5420** 3 1/2" cvd
- gS 16.5440** 4 1/2" str
- gS 16.5600** 4 1/2" cvd
- gS 16.5610** 4 1/2" cvd serr

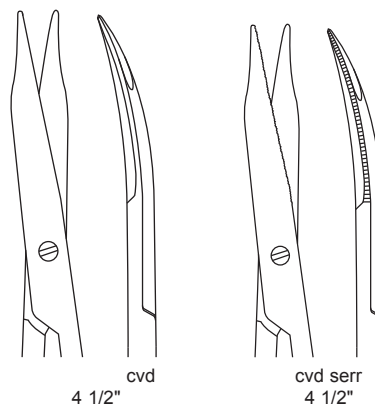
Super-Cut Iris Scissors
sharp points



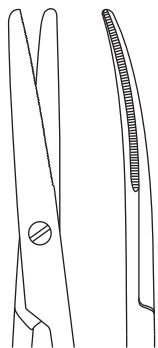
One serrated blade on gS 16.5905 helps to prevent tissue slippage and facilitates effortless cutting.

- gS 16.5840** 4 1/2" str
- gS 16.5900** 4 1/2" cvd
- gS 16.5905** 4 1/2" cvd serr
- gS 16.5940** 5 1/4" cvd

Super-Cut Stevens Tenotomy Scissors
blunt points



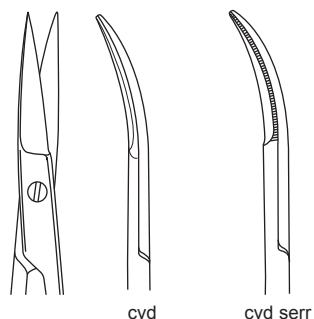
16/2 - super-cut scissors



Useful in ophthalmic as well as facial and hand procedures.

gS 16.7530 4 1/2" cvd serr

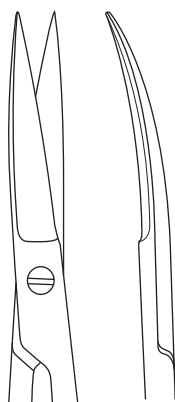
Super-Cut Strabismus Scissors
blunt points



Useful for tissue dissection. S-shaped shanks help to maneuver in tight areas effectively. One serrated blade on gS 16.7545 helps to prevent tissue slippage and facilitates effortless cutting.

gS 16.7540 cvd
gS 16.7545 cvd serr

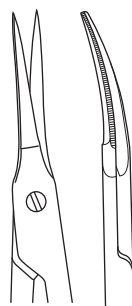
Super-Cut LaGrange Scissors
4 1/2", sharp points



Useful for fine tissue dissection required during plastic surgery procedures.

gS 16.7550 4 3/4" cvd

Super-Cut Wagner Scissors
sharp points

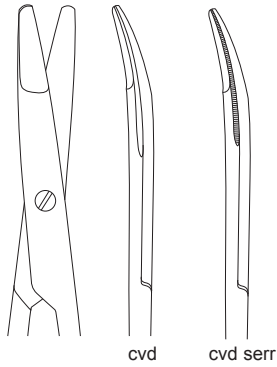


Useful for denser tissue dissection. One serrated blade helps to prevent tissue slippage and facilitates effortless cutting.

gS 16.7560 4 3/4" cvd serr

Super-Cut Turmspitz Scissors
sharp points

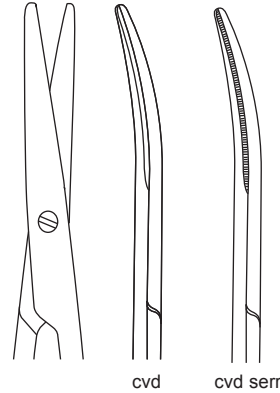




Flat blunted blades are useful for cutting tissue. One serrated blade on gS 16.7575 helps to prevent tissue slippage and facilitates effortless cutting.

gS 16.7570 cvd
gS 16.7575 cvd serr

Super-Cut Kilner Scissors
4 3/4", blunt points



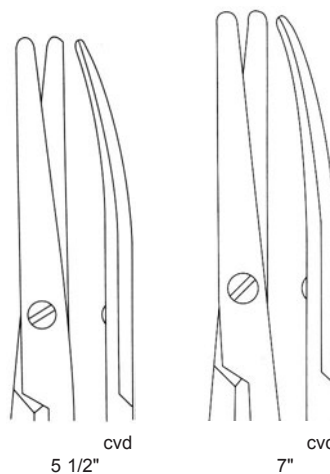
gS 16.4640 str
gS 16.4700 cvd
gS 16.4710 cvd serr

Super-Cut Baby Metzenbaum Scissors
4 1/2", blunt points



gS 16.4800 5 1/2" str
gS 16.4820 5 1/2" cvd
gS 16.4920 7" str
gS 16.4940 7" cvd
gS 16.4960 7" cvd delicate
gS 16.5018 8" str
gS 16.5020 8" cvd
gS 16.5180 9" cvd
gS 16.5300 11" cvd
gS 16.5350 12" cvd
gS 16.5370 14" cvd

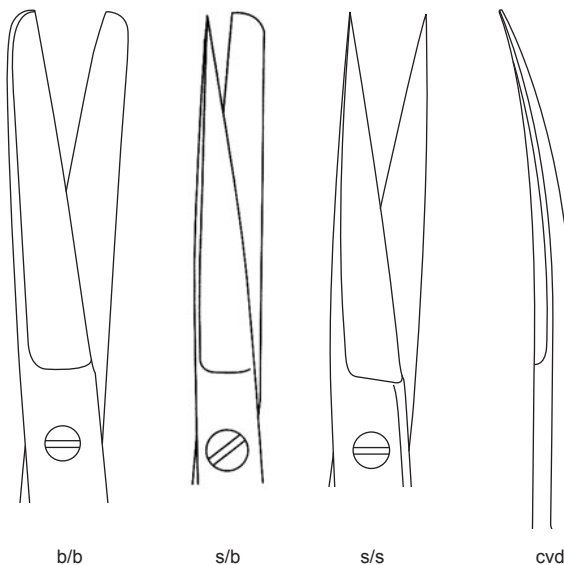
Super-Cut Metzenbaum Scissors
blunt points



16/4 - super-cut scissors

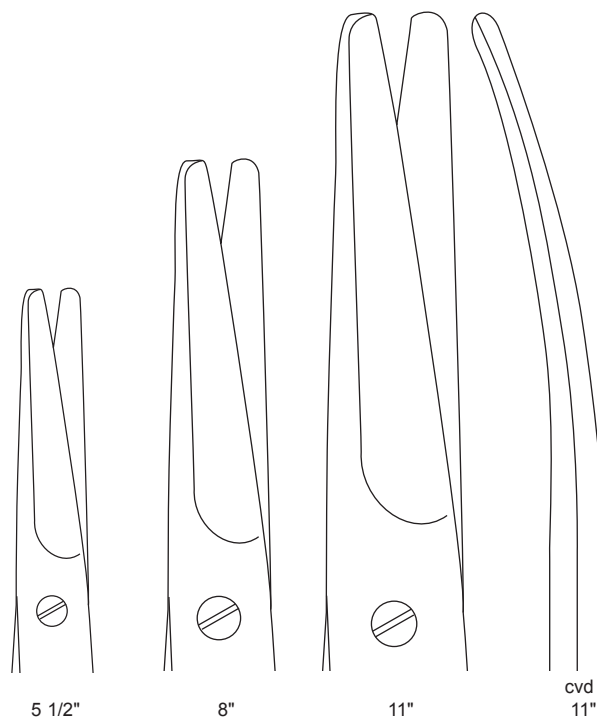
b/b = blunt/blunt
s/b = sharp/blunt
s/s = sharp/sharp

gS 16.3200 str s/b
gS 16.3210 str s/s
gS 16.3222 cvd b/b
gS 16.3202 cvd s/b
gS 16.3214 cvd s/s

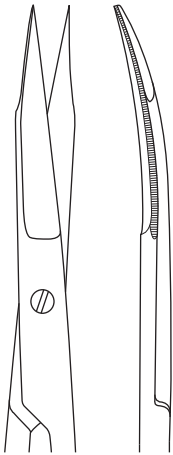


Super-Cut Operating Scissors
5 1/2"

gS 16.3800 5 1/2" str
gS 16.3802 5 1/2" cvd
gS 16.3920 6 3/4" str
gS 16.3980 6 3/4" cvd
gS 16.4190 8" str
gS 16.4195 8" cvd
gS 16.4210 9" str
gS 16.4220 9" cvd
gS 16.4225 11" cvd



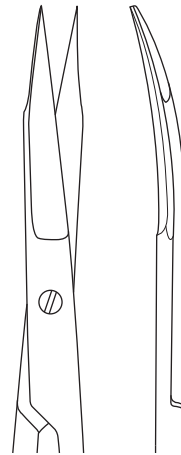
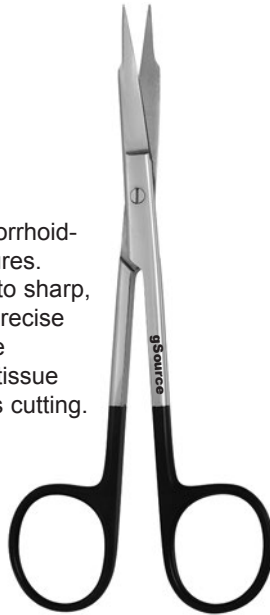
Super-Cut Mayo Scissors
beveled blades, blunt points



Useful in plastic surgery or hemorrhoidectomy and other rectal procedures. Curved, beveled blades taper into sharp, fine tips which allow small and precise cuts in small surgical areas. One serrated blade helps to prevent tissue slippage and facilitates effortless cutting.

gS 16.7580 5" cvd serr

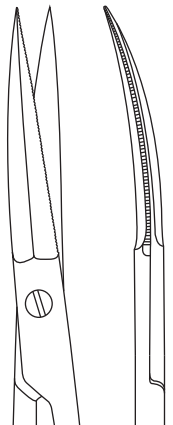
**Super-Cut
Goldman-Fox Scissors**
sharp points



S-shaped shanks help to maneuver in tight areas effectively.

gS 16.7585 5 1/4" cvd

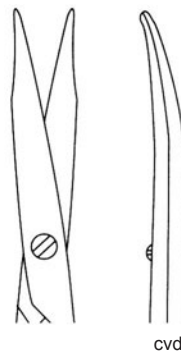
**Super-Cut
Goldman-Fox Scissors**
sharp points



Useful in facial and plastic surgery procedures. Sharp tips allow small and precise cuts in small surgical areas and are helpful in spreading tissue. One serrated blade helps to prevent tissue slippage and facilitates effortless cutting.

gS 16.7590 5 1/2" cvd serr

**Super-Cut
Peck Joseph Scissors**
sharp points



Long handles and very delicate blades for fine tissue dissection.

gS 16.5955 str
gS 16.5960 cvd

**Super-Cut Jamison
Scissors (Stevens)**
6 1/4", blunt points



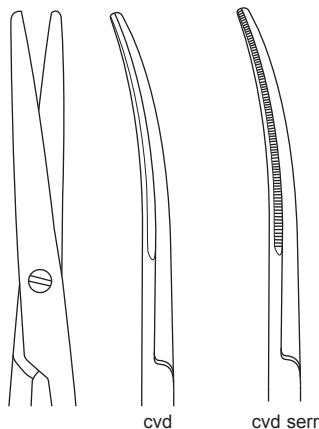
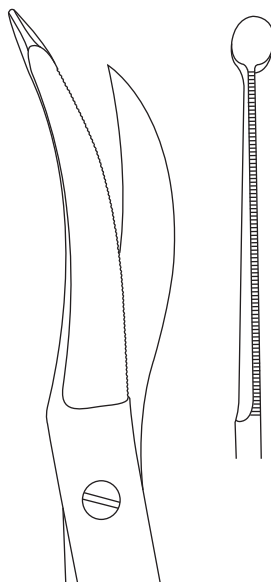
16/6 - super-cut scissors

Blades are slightly curved for quick and easy cutting through tissue. One serrated blade helps to facilitate cutting the perineum and posterior vaginal wall in episiotomy procedures.

gS 16.7620 7" cvd serr

Super-Cut Waldmann Episiotomy Scissors

fine knob/sharp point



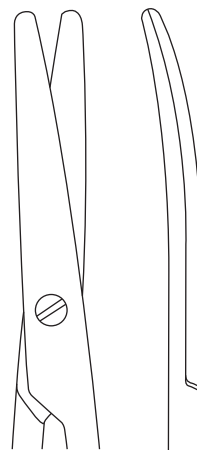
Long handles and delicate blades for fine tissue dissection. One serrated blade on gS 16.7610 helps to prevent tissue slippage and facilitates effortless cutting.

gS 16.7600 cvd

gS 16.7610 cvd serr

Super-Cut Toennis Adson Scissors

7", blunt points



Useful for cutting and dissecting soft tissue. Curved blade helps to maneuver contours effectively.

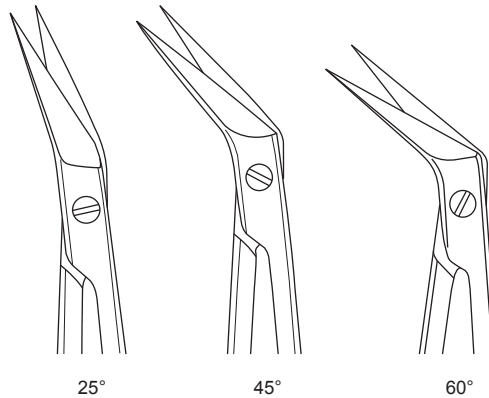
gS 16.7630 7" cvd

Super-Cut McIndoe Scissors

blunt points



Useful for trimming and opening vessels in cardiovascular and thoracic procedures. Used to cut vertically along blood vessels to expose the inside in procedures such as carotid endarterectomy or femoral endarterectomy. Available in 25, 45, or 60 degrees based on the location of the surgical site and user preference.



gS 16.2500 25°
gS 16.2545 45°
gS 16.2560 60°

**Super-Cut Potts-Smith
 Scissors**
 7 1/2", delicate sharp points



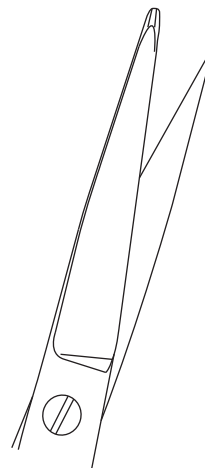
Our Super-Cuts Bandage Scissors:

- Offer superb control.
- Reduce hand fatigue.
- Cut through multiple layers with precision and ease.
- Retain sharp edges longer than ordinary scissors.

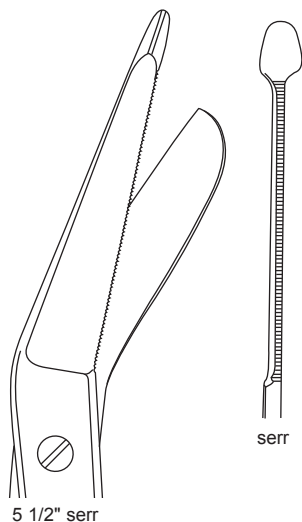
Delicate blades and angled shank are ergonomically designed to cut finger and toe bandages. Fine knob slides easily under bandages. Keeps hands away from material being cut.

gS 16.3020 5 1/2"

**Super-Cut Hi-Level
 Bandage Scissors**
 delicate blades

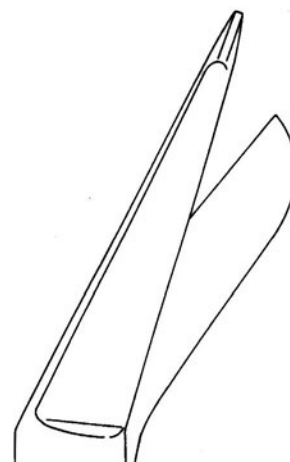


16/8 - super-cut scissors



gS 16.3100 5 1/2"
gS 16.3110 5 1/2" serr
gS 16.3120 7 1/4"

**Super-Cut Lister
 Bandage Scissors**



Oversized finger ring
 helps relieve pressure
 on third metacarpal.

gS 16.3140 8"

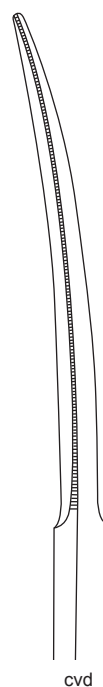
**Super-Cut Lister
 Bandage Scissors**
 one large ring

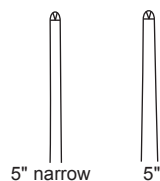


Useful for cutting moleskin,
 a cotton fabric frequently
 used in the prevention and
 treatment of blisters, corns,
 or calluses. One blade is
 serrated.

gS 16.3150 str serr
gS 16.3152 cvd serr

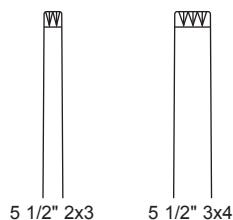
**Super-Cut Moleskin
 Scissors**
 7", sharp/blunt points





- gS 17.3513** 5" narrow
- gS 17.3514** 5 1/2" narrow
- gS 17.3516** 6" narrow
- gS 17.3518** 7" narrow
- gS 17.3520** 8" narrow
- gS 17.3640** 4 1/2"
- gS 17.3680** 5"
- gS 17.3720** 5 1/2"
- gS 17.3760** 6"
- gS 17.3780** 7"
- gS 17.3800** 8"
- gS 17.3860** 10"
- gS 17.3900** 12"

Tissue Forceps
1x2 teeth



- | | | teeth |
|-------------------|--------|-------|
| gS 17.3920 | 5" | 2x3 |
| gS 17.3960 | 5 1/2" | 2x3 |
| gS 17.3970 | 6 1/4" | 2x3 |
| gS 17.3980 | 10" | 2x3 |
| gS 17.4040 | 5 1/2" | 3x4 |
| gS 17.4042 | 6 1/4" | 3x4 |

Tissue Forceps



- gS 17.4100** 4 1/2"
- gS 17.4140** 5"
- gS 17.4180** 5 1/2"
- gS 17.4220** 6"
- gS 17.4222** 7"
- gS 17.4226** 8"
- gS 17.4228** 10"

Tissue Forceps
1x2 teeth
fluted handle



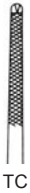
- gS 17.1800** 5"
- gS 17.1880** 6"

Semken Tissue Forceps
1x2 teeth



17/2 - tissue forceps

TC = Tungsten Carbide



gS 17.2010 serrated
gS 17.2012 TC cross serrated

Gillies Forceps
6"
1x2 teeth



gS 17.4070 7"
gS 17.4072 8"
gS 17.4074 10"
gS 17.4076 12"

Potts-Smith Tissue Forceps
1x2 teeth
serrated



17



gS 17.1693 6 3/4" TC

Cushing Tissue Forceps
1x2 teeth
cross serrated

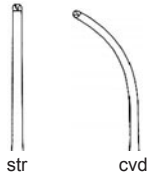


gS 17.1690 str
gS 17.1692 cvd

Cushing Tissue Forceps
6 3/4"
1x2 teeth

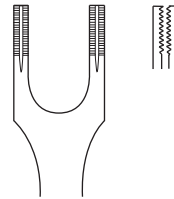


TC = Tungsten Carbide



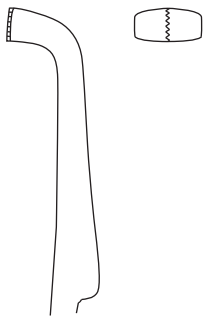
gS 17.0430 str
gS 17.0450 cvd
gS 17.0440 str TC

Gerald Tissue Forceps
 7"
 1x2 teeth, delicate



gS 17.8900 4 1/2" 8mm

Muscle Biopsy Clamp
 with slide catch



Useful in
 approximating
 wound edges.

gS 17.4400 4"

**Lange Wound Approximation
 Forceps**
 cross action, curved, with teeth



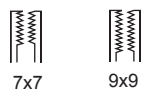
gS 17.1973 6"
gS 17.1974 8"
gS 17.1975 10"

Brown Forceps
 side grasping 9x9 teeth



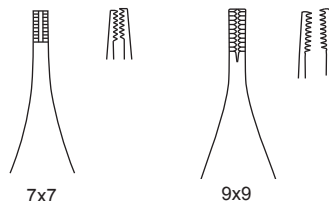
17/4 - tissue forceps

TC = Tungsten Carbide



teeth
gS 17.1920 7x7
gS 17.1929 9x9

Adson Brown Forceps
 4 3/4"
 side grasping teeth



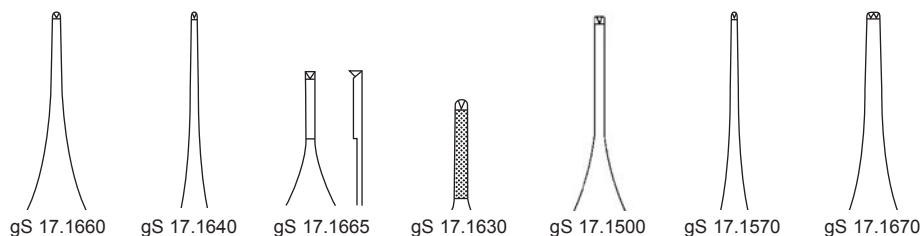
Lightweight forceps due to fenestrations.

teeth
gS 17.1925 7x7
gS 17.1935 9x9

Adson Brown Forceps
 4 3/4", side grasping teeth
 fenestrated handles

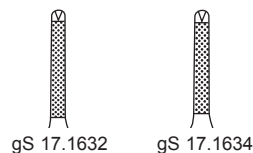


17



teeth
gS 17.1660 4 3/4" 1x2 1.3mm
gS 17.1640 4 3/4" 1x2 delicate 0.9mm
gS 17.1665 4 3/4" 1x2 deli tying platform smooth 0.9mm
gS 17.1630 4 3/4" 1x2 cross serrated 1.3mm
gS 17.1500 6" 1x2 2.0mm
gS 17.1570 6" 1x2 delicate 0.9mm
gS 17.1670 4 3/4" 2x3 1.7mm
gS 17.1632 4 3/4" 1x2 TC cross serrated 1.6mm
gS 17.1634 6" 1x2 TC cross serrated 2.0mm

Adson Tissue Forceps



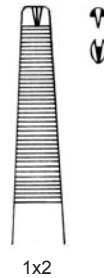
TC = Tungsten Carbide



Lightweight forceps
due to fenestrations.

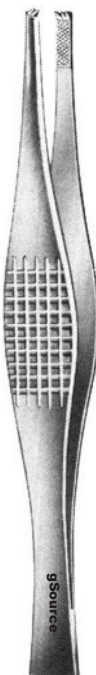
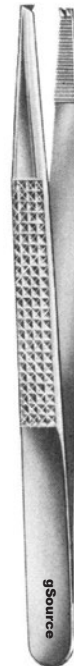
gS 17.1666 4 3/4" 1.0mm

Adson Tissue Forceps
1x2 teeth
fenestrated handle



teeth
gS 17.4302 6 3/4" 1x2
gS 17.4307 7" 2x3
gS 17.4312 9 1/2" 1x2

Bonney Tissue Forceps
serrated



teeth
gS 17.4238 1x2
gS 17.4240 2x3
Ferris Smith Tissue Forceps
7", serrated



gS 17.6020 8" 2.0mm
Daicoff Vascular Needle Pulling Forceps
1x2 teeth, TC, cross serrated



17/6 - tissue forceps



gS 17.2860 7 1/4"

Cushing Tissue Forceps
1x2 teeth
bayonet



gS 17.6110 8 3/4"

D'Errico Tissue Forceps
1x2 teeth
bayonet



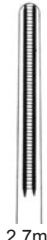
17



1.5mm



2.0mm



2.7mm



3.5mm

gS 17.0616 6 1/4" 1.5mm
gS 17.0620 8" 1.5mm
gS 17.0624 9 1/2" 1.5mm
gS 17.0626 12" 1.5mm

gS 17.0816 6 1/4" 2mm
gS 17.0820 8" 2mm
gS 17.0824 9 1/2" 2mm
gS 17.0830 12" 2mm

gS 17.0832 6 1/4" 2.7mm
gS 17.0833 8" 2.7mm
gS 17.0834 9 1/2" 2.7mm
gS 17.0835 12" 2.7mm

gS 17.1016 6 1/4" 3.5mm
gS 17.1020 8" 3.5mm
gS 17.1024 9 1/2" 3.5mm
gS 17.1030 12" 3.5mm

DeBakey Tissue Forceps
atraumatic

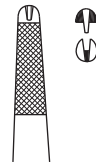


DA = Double Action
TC = Tungsten Carbide



gS 17.0916 6 1/2"
gS 17.0920 8"
gS 17.0924 9 1/2"
gS 17.0930 12"

DeBakey Forceps
2mm
angled atraumatic



Useful for larger
patients during
bariatric procedures.

gS 17.8000 12" with platform
**Bariatric Extra Long
Suture Forceps DA**
1x2 teeth, TC, cross serrated



gS 17.0458 7"
gS 17.0459 9"

Singley Tissue Forceps
serrated fenestrated tips

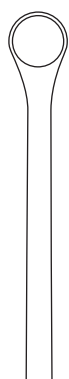


gS 17.2920 6"
gS 17.2960 8"
gS 17.2980 10"

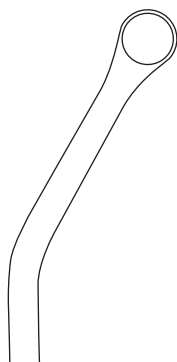
Russian Tissue Forceps
serrated cupped tips



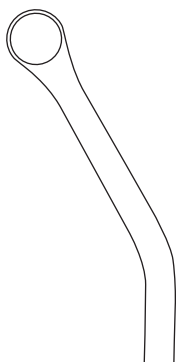
17/8 - tissue forceps



straight



curved
up



curved
down

gS 17.6260 straight
gS 17.6262 curved up
gS 17.6264 curved down

Adson Hypophyseal Forceps

9", 6mm round cups
bayonet



17

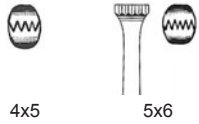


Useful for larger
patients during
bariatric procedures.

gS 17.0470 14"

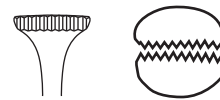
**Bariatric Extra Long
Singley Tuttle Tissue Forceps**
serrated fenestrated tips





		teeth
gS 17.2050	4 3/4"	4x5
gS 17.2070	5 1/2"	4x5
gS 17.2100	6"	3x4
gS 17.2120	6"	4x5
gS 17.2160	6"	5x6
gS 17.2240	7 1/2"	5x6
gS 17.2255	8 1/2"	5x6
gS 17.2257	9 1/2"	5x6

Allis Tissue Forceps



gS 17.2250 6"

Allis Adair Forceps
10x11 teeth



gS 17.2306	6 1/4"
gS 17.2308	8"
gS 17.2312	10"
gS 17.2314	12"

Allis Tissue Forceps
atraumatic teeth



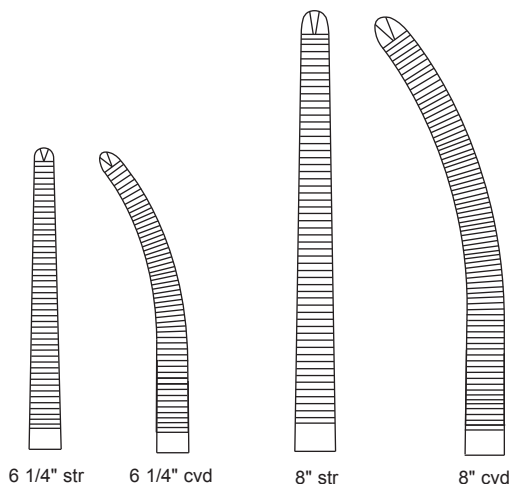
gS 17.2280 8"

Thoms Tissue Forceps
6x7 teeth



17/10 - tissue forceps

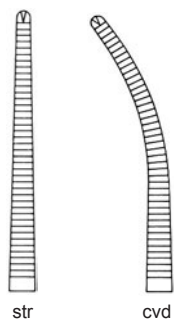
gS 17.5150	13cm [5"] str
gS 17.5151	13cm [5"] cvd
gS 17.5152	14cm [5 1/2"] str
gS 17.5154	14cm [5 1/2"] cvd
gS 17.5160	16cm [6 1/4"] str
gS 17.5180	16cm [6 1/4"] cvd
gS 17.5260	18cm [7"] str
gS 17.5280	18cm [7"] cvd
gS 17.5360	20cm [8"] str
gS 17.5380	20cm [8"] cvd
gS 17.5460	22cm [8 1/2"] str
gS 17.5480	22cm [8 1/2"] cvd
gS 17.5500	24cm [9 1/2"] str
gS 17.5520	24cm [9 1/2"] cvd
gS 17.5560	26cm [10"] str
gS 17.5580	26cm [10"] cvd
gS 17.5586	30cm [12"] str
gS 17.5587	30cm [12"] cvd



Rochester Ochsner Forceps
1x2 teeth
serrated



17



gS 17.5060	str
gS 17.5080	cvd

Kocher Forceps
5 1/2", 1x2 teeth
serrated



gS 17.4250	6 1/4"
gS 17.4255	7"
gS 17.4241	8"
gS 17.4260	9 1/2"
gS 17.4264	12"

Babcock Forceps
serrated fenestrated tips





3 1/2"

gS 18.4640 3 1/2" str
gS 18.4660 4 1/2" str

Plain Splinter Forceps
serrated



3"

gS 18.4860 3" str
gS 18.4900 4 1/2" str

Feilchenfeld Splinter Forceps
serrated



str



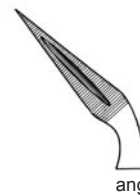
cvd

gS 18.5100 4 1/4" str
gS 18.5120 4 1/4" cvd

Carmalt Splinter Forceps
serrated



str



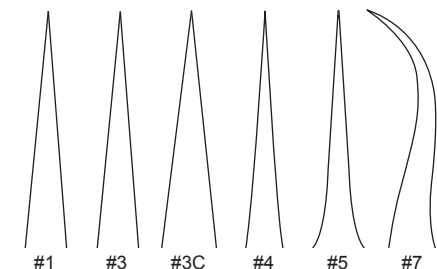
ang

gS 18.5780 6" str
gS 18.5785 6" ang

Virtus Splinter Forceps
serrated

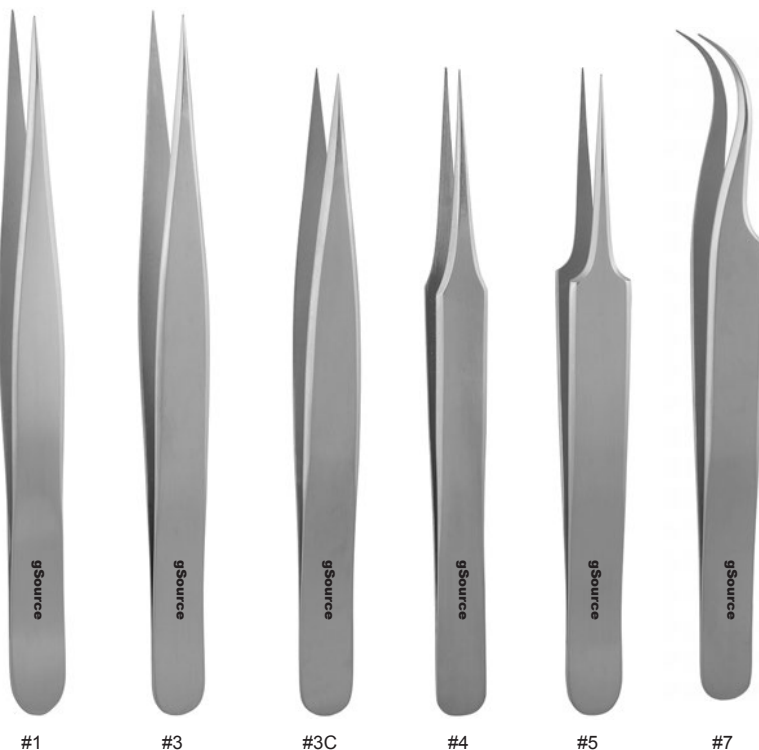


18/2 - splinter forceps

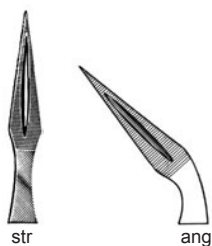


		style
gS 18.5500	4 3/4"	#1 fine
gS 18.5502	4 3/4"	#3 very fine
gS 18.5504	4 1/2"	#3C very fine
gS 18.5506	4 1/2"	#4 very fine
gS 18.5508	4 1/2"	#5 very fine
gS 18.5510	4 3/4"	#7 very fine

Swiss Jewelers Forceps
smooth



18



gS 18.6090	5 1/2" str
gS 18.6110	5 1/4" ang

Williams Splinter Forceps
serrated



gS 18.6210	4 3/4" cvd
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Peet Splinter Forceps
double curve





- gS 19.1799** 4 1/2"
- gS 19.1800** 5"
- gS 19.1840** 5 1/2"
- gS 19.1880** 6"
- gS 19.1882** 7"
- gS 19.1884** 8"
- gS 19.1886** 10"
- gS 19.1888** 12"

Dressing Forceps
serrated



- gS 19.1920** 4 1/2"
- gS 19.1935** 6 1/4"
- gS 19.1937** 7"
- gS 19.1940** 8"
- gS 19.2000** 10"
- gS 19.2060** 12"

Dressing Forceps
narrow, serrated



- gS 19.2280** 4 1/2"
- gS 19.2282** 5"
- gS 19.2284** 5 1/2"
- gS 19.2286** 6"
- gS 19.2288** 7"
- gS 19.2290** 8"
- gS 19.2292** 10"

Dressing Forceps
fluted handle
serrated



- gS 19.1760** 5"
 - gS 19.1761** 6"
- Semken Dressing Forceps**
delicate, serrated

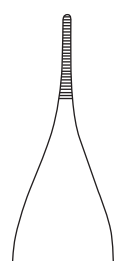
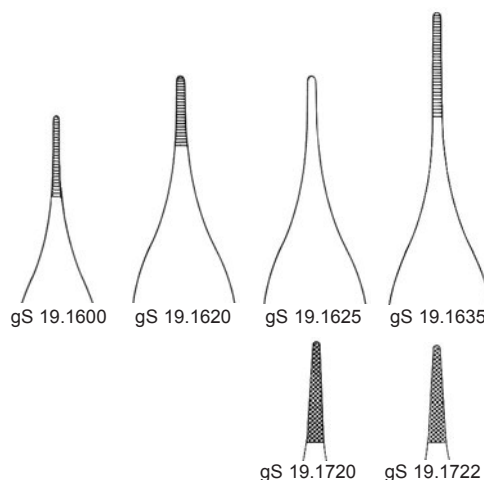


19/2 - dressing forceps

TC = Tungsten Carbide

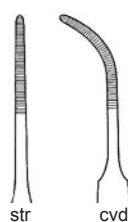
gS 19.1600 4 3/4" delicate, serrated
gS 19.1620 4 3/4" standard, serrated
gS 19.1625 4 3/4" smooth
gS 19.1720 4 3/4" standard TC, serrated
gS 19.1635 6", serrated
gS 19.1722 6" TC, serrated

Adson Dressing Forceps



gS 19.1621 4 3/4"

Adson Dressing Forceps
 standard, serrated
 fenestrated handles



gS 19.2800 7" str
gS 19.2806 7" cvd
gS 19.2810 7" str TC 1.0mm

Gerald Dressing Forceps
 delicate
 serrated



TC = Tungsten Carbide



gS 19.1770 6"
Cotton and Dressing Forceps
angled with lock, serrated



gS 19.1750 7"
gS 19.1756 7" TC
Cushing Dressing Forceps
straight, serrated
smooth handle



gS 19.2840 7 1/4"
gS 19.2855 7 1/4" TC
Cushing Bayonet Dressing Forceps
serrated



gS 19.2860 8 1/2"
Adson Bayonet Dressing Forceps
serrated



19/4 - dressing forceps



gS 19.2982 8 3/4"

**D'Errico Bayonet
Dressing Forceps**
serrated



did you know... ?

The word forceps is derived from the Latin “forca”, meaning a snare or trap. Mechanically, forceps employ the principle of the lever to grasp and apply pressure.

These type of forceps are commonly referred to as “thumb forceps” or “pick ups”. They are held between the thumb and two or three fingers of one hand, with the top end resting on top of the outside of the hand at the base of the thumb and index finger. Spring tension at one end holds the grasping ends apart until pressure is applied. This allows one to quickly and easily grasp small objects or tissue to move and release it, or to grasp and hold tissue with easily variable pressure. They are used to hold tissue in place when applying sutures, to gently move tissues out of the way during exploratory surgery and to move dressings or draping without using the hands or fingers.

Dr. Harvey Cushing is credited with creating the field of brain surgery as a surgical discipline. Born in Cleveland, Ohio in 1869, he attended Yale University, and after graduating in 1891, entered Harvard Medical School and received his medical degree in 1895. He performed post-graduate training as an intern at Massachusetts General Hospital and then at Johns Hopkins Hospital. At Hopkins he was influenced by several famous physicians: William H. Welch, Howard A. Kelly, Sir William Osler and in particular William Halsted, who most influenced his surgical skills.

In 1911, he was appointed surgeon-in-chief at the Peter Bent Brigham Hospital in Boston and then as professor of surgery at the Harvard Medical School in 1912. He reported on an endocrinological syndrome caused by a malfunction of the pituitary gland, which he termed “polyglandular syndrome”, also known as Cushing’s disease. In 1915, before the Clinical Congress of Surgeons in Boston, he showed the possibility of influencing stature by operating on the pituitary gland. In 1930, Dr. Cushing was awarded the Lister Medal for his contributions to surgical science. From 1933 to 1937, when he retired, he worked at Yale University School of Medicine.

He developed many of the tools and techniques of surgical practice which are still in use today. He was one of the first physicians in the U.S. to use x-rays to diagnose patients; he introduced an apparatus to measure blood pressure during operations; he recommended keeping a record of the patient’s vital signs during an operation, and he was the first to use electrocoagulation, the clotting of tissue using a high frequency electrical current applied locally with a metal instrument or needle with the aim of stopping bleeding, for surgery. Cushing Forceps are shown on pages 2 and 3 in this section.

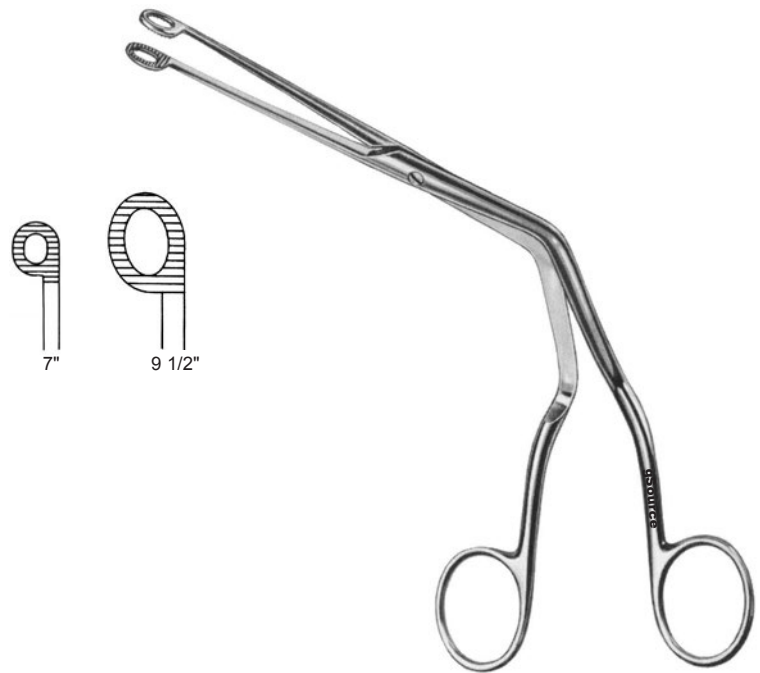
Dr. Cushing achieved worldwide recognition because of his innovation, skill and published observations. He is credited for training the first generation of neurosurgeons in the U.S. At the end of his career, he was rewarded through the foundation of the first national neurosurgical association, the Harvey Cushing Society, now known as the American Association of Neurological Surgeons (AANS). The Harvey Cushing/John Hay Whitney Medical Library at Yale University was also named in his honor. He passed away in 1939.

Useful for guiding a tracheal tube into the larynx or a nasogastric tube into the esophagus under direct vision. It is also used to place pharyngeal packs and remove foreign bodies.

The angle in the forceps enables them to be used with the handles out of the direct line of sight.

gS 20.3901 7"
gS 20.3902 8"
gS 20.3903 9 1/2"

Magill Catheter Forceps
 serrated



gS 20.5440 7" str
Presbyterian Tubing Forceps
 smooth

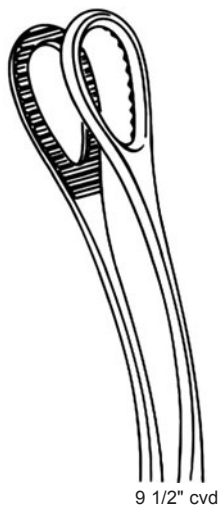
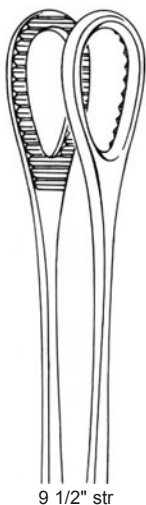


gS 20.4925 7" str
gS 20.4927 10" str
Ramsey Sponge Forceps
 serrated

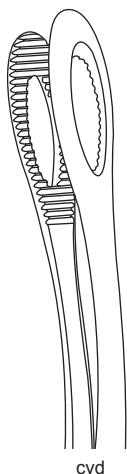
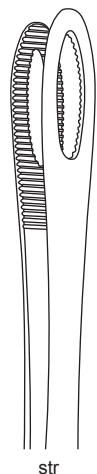


20/2 - sponge and towel forceps

- gS 20.4660** 7" str serr
- gS 20.4680** 7" cvd serr
- gS 20.4700** 7" str smooth
- gS 20.4720** 7" cvd smooth
- gS 20.4860** 9 1/2" str serr
- gS 20.4880** 9 1/2" cvd serr
- gS 20.4900** 9 1/2" str smooth
- gS 20.4920** 9 1/2" cvd smooth

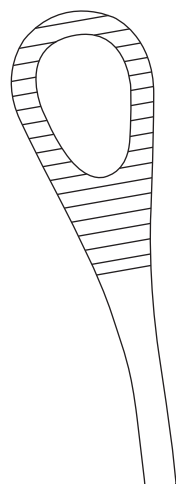


Foerster Sponge Forceps



- gS 20.4922** 10" str
- gS 20.4923** 10" cvd

Foerster Sponge Forceps narrow serrated long



- gS 20.8000** 12 1/2" cvd

Bariatric Extra Long Kelly Sponge Forceps serrated



sponge and towel forceps - 20/3

Useful for attaching and securing drape material or for grasping tissue in order to apply traction.

gS 20.5700 3"
gS 20.5780 3 1/2"

Jones Towel Forceps
perforating sharp points



gS 20.5580 3 1/2"
gS 20.5620 5 1/4"

Backhaus Towel Forceps
perforating sharp points



gS 20.5640 5 1/4"

Backhaus Roeder Towel Forceps
perforating, sharp ball tips

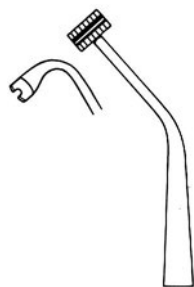


gS 20.5660 4"
gS 20.5680 5 1/4"

Lorna Towel Forceps (Edna)
non-perforating fine teeth



20/4 - sponge and towel forceps



gS 20.5560 5 3/4"

Peers Towel Forceps
non-perforating
serrated tips



gS 20.5571 5"

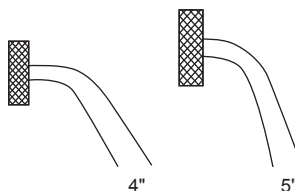
Ball and Socket Towel Forceps
non-perforating ball tip



gS 20.5564 4"

gS 20.5565 5 1/4"

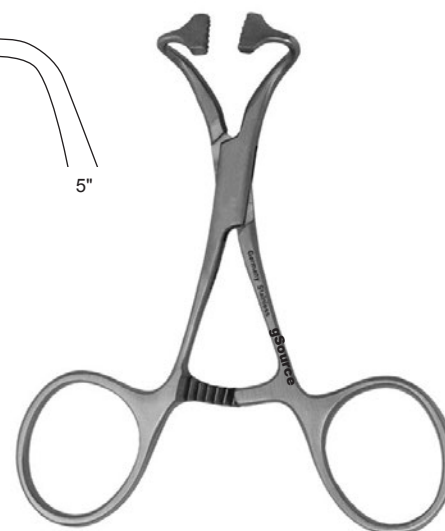
**Tohoku-Japan
Non-perforating
Towel Forceps**
cross serrated



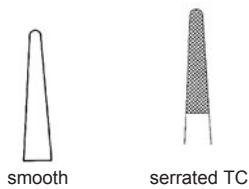
gS 20.5554 4"

gS 20.5555 5"

**Non-perforating
Towel Forceps**
cross serrated

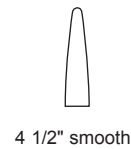


TC = Tungsten Carbide



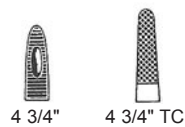
- gS 21.1640** 5" smooth
- gS 21.1660** 5" serr
- gS 21.1650** 5" smooth TC
- gS 21.1670** 5" serr TC

Halsey Needle Holder



- gS 21.1710** 4 1/2" smooth extra delicate
- gS 21.1680** 5" smooth
- gS 21.1712** 4 3/4" smooth TC extra delicate
- gS 21.1714** 4 3/4" serrated TC
- gS 21.1700** 5" smooth TC

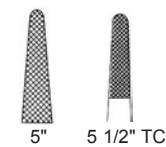
Webster Needle Holder



- gS 21.1920** 4 3/4"
- gS 21.1940** 4 3/4" TC

Derf Needle Holder

serrated



- gS 21.2620** 5"
- gS 21.2640** 5 1/2"
- gS 21.2660** 5 1/2" TC

Hegar-Baumgartner Needle Holder

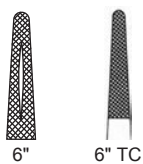
serrated



21/2 - needle holders

21

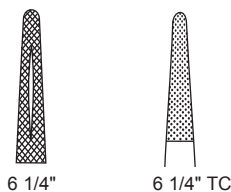
TC = Tungsten Carbide



gS 21.2700 6"
gS 21.2710 7"
gS 21.2721 8"
gS 21.2730 9"

gS 21.2740 6" TC
gS 21.2741 6" TC left-handed
gS 21.2750 7" TC
gS 21.2760 8" TC
gS 21.2780 9" TC
gS 21.2782 10" TC
gS 21.2784 12" TC

Crile-Wood Needle Holder
serrated



gS 21.4280 6 1/4"
gS 21.4284 7"
gS 21.4288 8"

gS 21.4290 6 1/4" TC
gS 21.4294 7" TC
gS 21.4298 8" TC

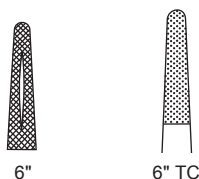
Mayo Hegar Needle Holder
delicate, serrated



gS 21.3700 5 1/2"
gS 21.3720 6"
gS 21.3780 7"
gS 21.3840 8"
gS 21.3845 9 1/2"
gS 21.3860 10 1/2"
gS 21.3865 12"

gS 21.4000 5 1/2" TC
gS 21.4020 6" TC
gS 21.4080 7" TC
gS 21.4140 8" TC
gS 21.4150 9 1/2" TC
gS 21.4160 10 1/2" TC
gS 21.4170 12" TC

Mayo Hegar Needle Holder
serrated



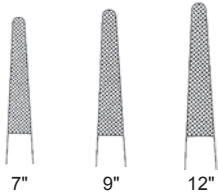
TC = Tungsten Carbide



gS 21.1850 5" serr TC
Converse Needle Holder

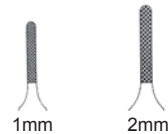


gS 21.2040 5"
Collier Needle Holder
fenestrated jaw
serrated



gS 21.4516 6 1/4" TC
gS 21.4518 7" TC
gS 21.4520 8" TC
gS 21.4523 9" TC
gS 21.4526 10" TC
gS 21.4531 12" TC

DeBa key Needle Holder
delicate, serrated



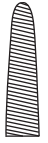
gS 21.3400 5" 1mm TC
gS 21.3420 6" 1mm TC
gS 21.3440 7" 1mm TC
gS 21.3460 8" 1mm TC
gS 21.3480 9" 1mm TC
gS 21.3485 10" 1mm TC
gS 21.3570 5" 2mm TC
gS 21.3640 6" 2mm TC
gS 21.3650 7" 2mm TC
gS 21.3660 8" 2mm TC
gS 21.3670 9" 2mm TC
gS 21.3680 10" 2mm TC

Ryder Needle Holder
delicate, serrated



21/4 - needle holders

TC = Tungsten Carbide



5 1/4"



7 1/4"

gS 21.2300 5 1/4"
gS 21.2320 7 1/4"

Brown Needle Holder
serrated



gS 21.2450 10"

Masson Needle Holder
serrated



7 1/2"

gS 21.2520 7 1/2" TC
gS 21.2540 10 1/2" TC

Sarot Needle Holder
serrated



8"

gS 21.2330 8"
gS 21.2332 8" TC
gS 21.2335 10" TC
gS 21.2340 12" TC

Heaney Needle Holder
curved, serrated



TC = Tungsten Carbide

Combination needle holder and suture scissors.

- gS 21.5240** 4 1/2" delicate serr
- gS 21.5280** 5 1/2" serr
- gS 21.5320** 6 1/2" serr
- gS 21.5340** 7 1/4" serr

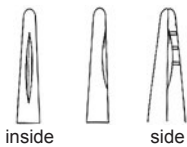
- gS 21.5400** 4 1/2" delicate serr TC
- gS 21.5420** 4 3/4" delicate smooth TC
- gS 21.5480** 5 1/2" serr TC
- gS 21.5520** 6 1/2" serr TC
- gS 21.5522** 7 1/4" serr TC

4 1/2" TC

5 1/2" TC

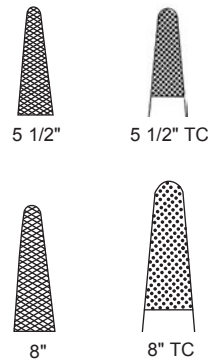


Olsen Hegar Needle Holder



- gS 21.2060** 5" smooth jaw with groove
- gS 21.2080** 5" TC serrated jaw

Neivert Needle Holder
one offset ring



- gS 21.2980** 5 1/2"
- gS 21.2990** 8"
- gS 21.3000** 5 1/2" TC
- gS 21.3020** 8" TC

Mathieu Needle Holder
serrated



21/6 - needle holders

TC = Tungsten Carbide

21

did you know... ?

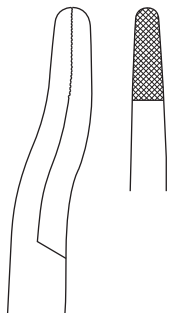
Alfred Hegar was a German gynecologist born in 1830 in Darmstadt. He became Professor of Gynecology and Obstetrics at the University of Freiburg in 1864 and was the author of important works on uterine surgery techniques, colporrhaphy (surgical repair of a defect in the vaginal wall), pregnancy diagnosis and childbed fever infection. An operation for repairing a ruptured perineum was known as "Hegar's operation". He also developed surgical tools, such as a needle holder and Hegar's dilator, for widening the cervical canal. He passed away in 1914.

Needle holders are used to hold the needle when closing a wound with sutures. Although needle holders look similar to hemostats, their jaws are thicker and shorter. Shorter patterns are needed when working close to the surface while longer patterns are for deeper cavities. Like hemostats, they also have ratcheted handles that lock when closed, in order to hold the needle. This allows a surgeon to pass the needle through both sides of the wound without dropping it, as rotation of the needle holder is required during this process.

The size of the needle will determine the size of the needle holder to be used. Generally, if the needle is small, the jaws of the needle holder should also be small. If a needle is not held securely in the jaws of a selected needle holder, choose a larger size needle holder to avoid the needle slipping or becoming overstressed, which may lead to breakage.

Some gSource needle holders, forceps, scissors, pin cutters, pliers, and wire tighteners are manufactured using tungsten carbide (TC) in the working ends or jaws of the instrument. Tungsten carbide is an alloy of tungsten and carbon. It is harder than the steel used in the manufacture of needles, wires, and pins and therefore is very durable. While generally more expensive, these instruments offer long-term savings due to TC material being stronger and more resistant to "metal-on-metal" wear than stainless steel patterns. Instruments manufactured with tungsten carbide are usually identified by their gold-plated handles.

Instruments with tungsten carbide should never be immersed in sterilizing solutions containing benzyl ammonium chloride (BAC) as it will soften and dissolve the tungsten carbide. Never use bleach as it will cause severe pitting.

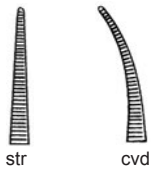


Useful for larger patients.

gS 21.8000 14" TC

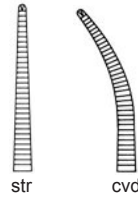
**Bariatric Extra
Long Needle Holder**
serrated





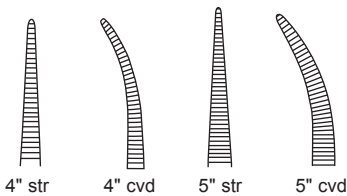
gS 22.1630 str
gS 22.1670 cvd

Hartmann Mosquito Forceps
4", serrated



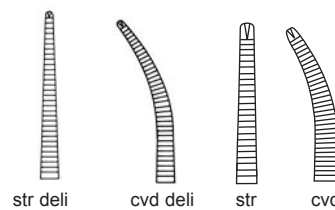
gS 22.1752 str
gS 22.1754 cvd

Hartmann Mosquito Forceps
4", serrated 1x2 teeth



gS 22.1710 4" str
gS 22.1730 4" cvd
gS 22.1750 5" str
gS 22.1751 5" cvd

Micro Hartmann Forceps
delicate serrated



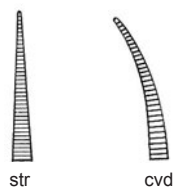
gS 22.1758 str delicate
gS 22.1759 cvd delicate
gS 22.1760 str
gS 22.1780 cvd

Mosquito Forceps
5", serrated 1x2 teeth



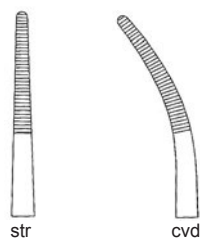
22/2 - hemostatic forceps

22



gS 22.1812 str
gS 22.1813 cvd

**Petit-Point Jacobson
Mosquito Forceps**
5", very delicate serrated

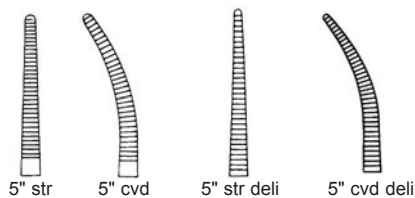


gS 22.2060 str
gS 22.2080 cvd

**Providence Hospital
Forceps**
5 1/2", serrated

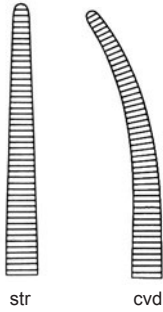


gS 22.2560 5" str
gS 22.2600 5" str delicate
gS 22.2580 5" cvd
gS 22.2620 5" cvd delicate
gS 22.2590 5 1/2" cvd
gS 22.2655 7" str
gS 22.2656 7" cvd
gS 22.2657 8" str
gS 22.2658 8" cvd



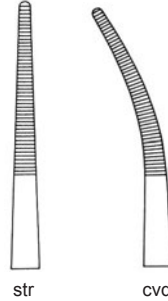
Mosquito Forceps (Halsted)
serrated





- gS 22.2760** str
- gS 22.2800** str delicate
- gS 22.2780** cvd
- gS 22.2820** cvd delicate

Crile Forceps
5 1/2"
serrated jaws



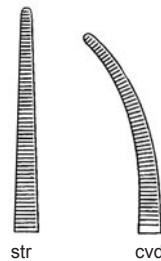
- gS 22.2660** str
- gS 22.2680** cvd

Kelly Forceps
5 1/2"
serrated jaws



- gS 22.2690** 5 1/2" str
- gS 22.2691** 5 1/2" cvd
- gS 22.2692** 6 1/4" str
- gS 22.2693** 6 1/4" cvd
- gS 22.2694** 7 1/4" str
- gS 22.2695** 7 1/4" cvd

Coller Forceps
delicate serrated



- gS 22.8422** str
- gS 22.8424** cvd

Leriche Forceps
6"
delicate serrated



22/4 - hemostatic forceps

22



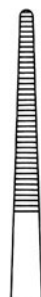
str



cvd

gS 22.2860 str
gS 22.2880 cvd

Rankin-Crile Forceps
6 1/4"
serrated jaws



str



cvd

gS 22.2960 str
gS 22.2980 cvd

Rankin-Kelly Forceps
6 1/4"
serrated jaws



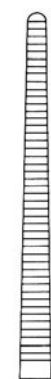
gS 22.4020 13cm [5"] str
gS 22.4040 13cm [5"] cvd
gS 22.4060 14cm [5 1/2"] str
gS 22.4061 14cm [5 1/2"] str left-handed
gS 22.4080 14cm [5 1/2"] cvd
gS 22.4160 16cm [6 1/4"] str
gS 22.4180 16cm [6 1/4"] cvd
gS 22.4260 18cm [7"] str
gS 22.4280 18cm [7"] cvd
gS 22.4360 20cm [8"] str
gS 22.4380 20cm [8"] cvd
gS 22.4460 22cm [8 1/2"] str
gS 22.4480 22cm [8 1/2"] cvd
gS 22.4500 24cm [9 1/2"] str
gS 22.4520 24cm [9 1/2"] cvd
gS 22.4560 26cm [10"] str
gS 22.4580 26cm [10"] cvd
gS 22.4600 30cm [12"] str
gS 22.4620 30cm [12"] cvd
gS 22.4920 40cm [16"] cvd



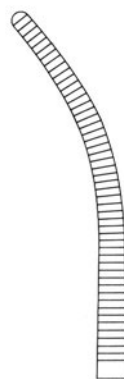
5 1/2" str



5 1/2" cvd



6 1/4" str



6 1/4" cvd

Rochester Pean Forceps
serrated





gS 22.1820 7" slight cvd
Jacobson Hemostatic Forceps
delicate serrated



gS 22.8482 8" slight cvd
Heiss Artery Forceps
serrated



str



cvd

gS 22.8440 str
gS 22.8460 cvd
Adson Hemostatic Forceps
7 1/4"
serrated



str



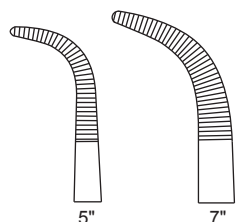
cvd

gS 22.8470 str
gS 22.8472 cvd
Adson Artery Forceps
7 1/4"
serrated 1x2 teeth



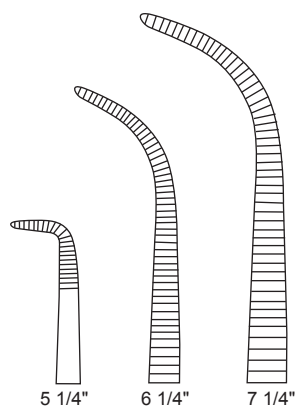
22/6 - hemostatic forceps

22



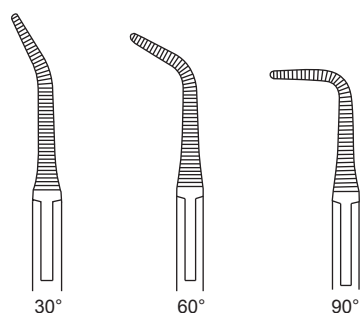
gS 22.6550 5"
gS 22.6560 7"

Mixer Baby Forceps
curved serrated



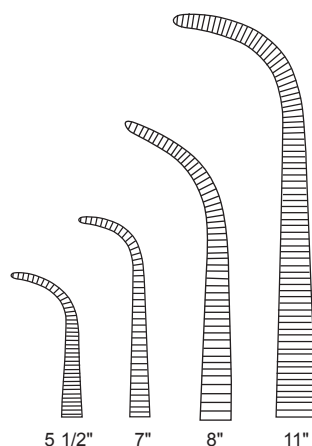
gS 22.6570 5 1/4" delicate
gS 22.6620 6 1/4"
gS 22.6640 7 1/4"

Mixer Forceps
curved serrated



gS 22.6730 30°
gS 22.6760 60°
gS 22.6790 90°

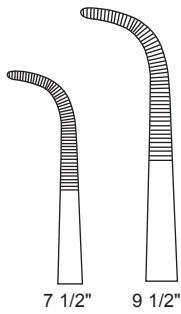
Bailey Forceps
7"
angled, fine serrated



gS 22.2710 5 1/2"
gS 22.2712 7"
gS 22.2713 8"
gS 22.2714 9"
gS 22.2715 10"
gS 22.2725 11"

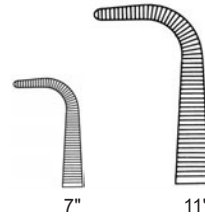
Gemini Forceps
curved serrated





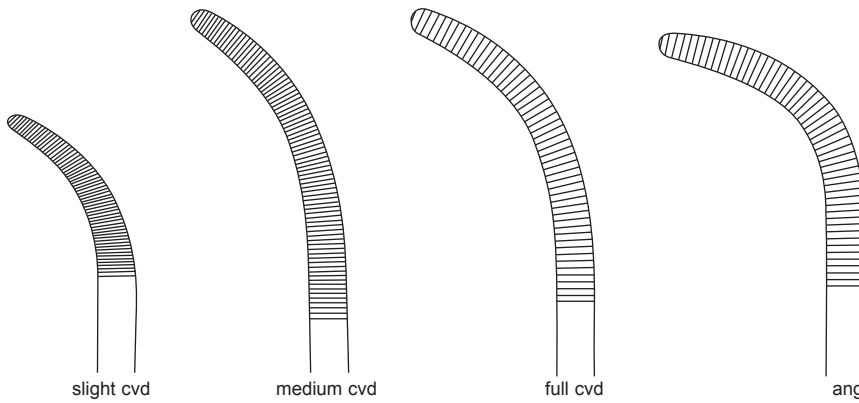
gS 22.6680 7 1/2"
gS 22.6682 9 1/2"

Kantrowitz Forceps
right angle
serrated



gS 22.6670 7"
gS 22.6671 11"

Meeker Artery Forceps
right angle
serrated



Useful in thoracic procedures due to partially serrated jaws and ability to grasp arteries or maneuver tapes around the arteries of the heart.

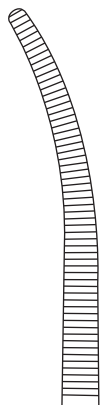
gS 22.7702 slight cvd
gS 22.7704 medium cvd
gS 22.7706 full cvd
gS 22.7708 ang

Rumel Dissecting Forceps
9"
serrated



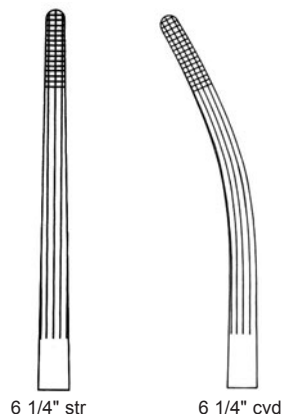
22/8 - hemostatic forceps

22



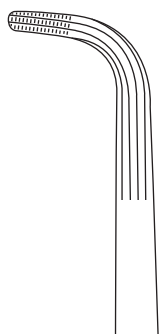
gS 22.2740 8 1/2" cvd

Vanderbilt Deep Vessel Forceps
serrated



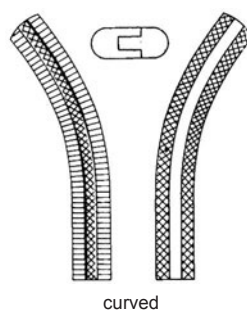
gS 22.6160 6 1/4" str
gS 22.6180 6 1/4" cvd
gS 22.6360 8" str
gS 22.6380 8" cvd

Rochester-Carmalt Fcps
cross serrated tip
longitudinally serrated jaws



gS 22.6650 8 1/2" full cvd

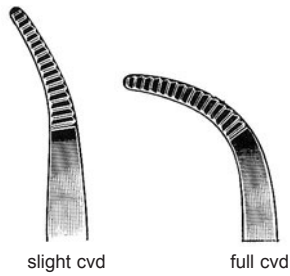
Mixer Forceps
cross serrated tip
longitudinally serrated jaws



gS 22.9160 6 1/4" str
gS 22.9180 6 1/4" cvd
gS 22.9260 7 3/4" str
gS 22.9280 7 3/4" cvd

Ferguson Forceps
serrated 1x2 jaws





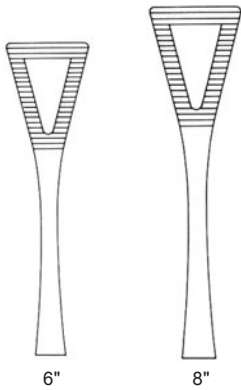
gS 22.7602 slight cvd
gS 22.7604 full cvd

Schmidt Forceps
7 1/2"
serrated



gS 22.7606 7 1/2" slight cvd

Schmidt Forceps
one open ring
serrated



gS 22.8660 6"
gS 22.8662 8"

Pennington Tissue Forceps
serrated jaw



gS 22.7960 6 1/4"

Lahey Traction Forceps
3x3 sharp



22/10 - hemostatic forceps

22



gS 22.8715 6"

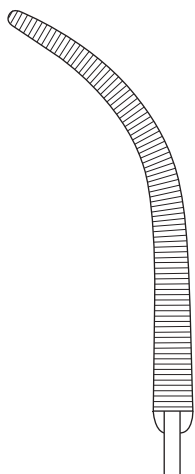
Pratt Scalp Forceps
fine teeth



did you know... ?

The primary use of a hemostat is to clamp and hold onto blood vessels. It is important to block off blood vessels during surgery so that the patient does not bleed to death. "Hemo" is a Latin prefix word that means blood and "stat" is an abbreviation for the Latin word "*statim*" meaning immediately.

Hemostats resemble a pair of scissors with the blade replaced by a blunted grip. They also feature a locking mechanism to allow them to act as clamps.



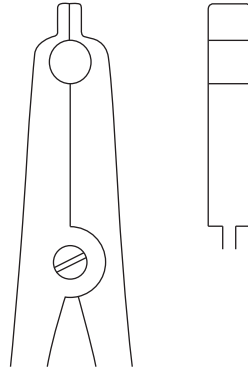
Useful for larger patients.

gS 22.9310 14" cvd

**Bariatric Extra Long
Zenker Ligature Forceps**
serrated



Used to hold and apply Raney scalp clips in order to provide hemostasis of the edges of scalp flaps. Helps to prevent loss of large amounts of blood and pooling of blood in certain areas of the scalp.



gS 23.6000 6 1/4"

Raney Clip Applying Forceps



did you know... ?

Neurosurgery in the late 19th and early 20th centuries was often hindered due to a lack of effective methods of scalp hemostasis.

The benefits of manual pressure in hemostasis (gauze pads held down manually at the base of the flap and around the margins of the wound, possibly in combination with hemostatic clamps) was rediscovered by Dr. Charles Frazier in 1906 and endorsed by Dr. Harvey Cushing. It was Dr. Cushing's practice to place hemostats along the cut edge of the galea aponeurotica (the aponeurosis underlying the scalp and linking the frontalis and occipitalis muscles, also called epicranial aponeurosis) while simultaneously applying pressure. The forceps would be reflected over the scalp edge, allowing the instruments to hang which ensured the galeal edge folded sharply backward. Occlusion of scalp bleeding was ensured by the combined weight of the instruments and the pressure of the reflected and out-folded galea. Dr. Cushing indicated this technique afforded him the luxury of bloodless incisions on several occasions. The chance of tears forming in the galea from the weight-induced hemostasis was reduced with the introduction of angular hemostatic forceps in 1927 by Dr. Anatole Kolodny.

Attempts to reduce the bulk of bunched hemostats lead to the development of steel clips. Dr. Henry Souttar was

first to describe small steel clips applied with forceps to the scalp edge. In 1933 Dr. Alfred Adson and Dr. Edgar Fincher squeezed silver clips onto the scalp margin. In 1934 Dr. Percival Bailey brought the Michel clip applier to the U.S., which he fashioned by modifying an instrument in use by Dr. Clovis Vincent in Paris.

Two brothers, Aidan and Rupert Raney, worked in southern California and came up with a unique idea leading to the development of the modern Raney scalp clips in 1936. This innovation allowed safe and bloodless craniotomies to be performed and revolutionized scalp hemostasis.

The Raney Clip Applying Forceps, shown on this page, can be used to apply Raney Scalp Clips. The clips have overlapping jaws with smooth radii to help ensure secure atraumatic placement.

did you know... ?

A craniotomy is the surgical removal of part of the bone from the skull to expose the brain. Specialized tools are used to remove the section of bone called the bone flap. The bone flap is temporarily removed, then replaced after the brain surgery has been done.

Some craniotomy procedures may use the guidance of computers and imaging (magnetic resonance imaging (MRI) or computerized tomography (CT) scans) to reach the precise location within the brain that is to be treated. This technique requires the use of a frame placed onto the skull or a frameless system using superficially placed markers or landmarks on the scalp. When either of these imaging procedures is used along with the craniotomy procedure, it is called stereotactic craniotomy.

Scans made of the brain, in conjunction with these computers and localizing frames, provide a three dimensional image, for example, of a tumor within the brain. It is useful in making the distinction between tumor tissue and healthy tissue and reaching the precise location of the abnormal tissue.

Other uses include stereotactic biopsy of the brain (a needle is guided into an abnormal area so that a piece of tissue may be removed for exam under a microscope), stereotactic aspiration (removal of fluid from abscesses, hematomas, or cysts), and stereotactic radiosurgery (such as gamma knife radiosurgery).

An endoscopic craniotomy is another type of craniotomy that involves the insertion of a lighted scope with a camera into the brain through a small incision in the skull.

Aneurysm clipping is another surgical procedure which may require a craniotomy. A cerebral aneurysm (also called an intracranial aneurysm or brain aneurysm) is a bulging weakened area in the wall of an artery in the brain, resulting in an abnormal widening or ballooning. Because of the weakened area in the artery wall, there is a risk for rupture (bursting) of the aneurysm. Placement of a metal clip across the "neck" of the aneurysm isolates the aneurysm from the rest of the circulatory system by blocking blood flow, thereby preventing rupture.

Craniectomy is a similar procedure during which a portion of the skull is permanently removed or replaced later during a second surgery after the swelling has gone down.

Other related procedures that may be used to diagnose brain disorders include cerebral arteriogram, computed tomography (CT) scan of the brain, electroencephalogram (EEG), magnetic resonance imaging (MRI) of the brain, positron emission tomography (PET) scan, and X-rays of the skull.

A craniotomy may be done for a variety of reasons, including, but not limited to, the following:

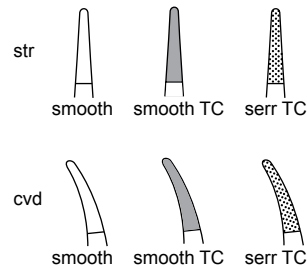
- Diagnosing, removing, or treating brain tumors
- Clipping or repairing of an aneurysm
- Removing blood or blood clots from a leaking blood vessel
- Removing an arteriovenous malformation (AVM), an abnormal mass of blood vessels (arteries and veins)
- Draining a brain abscess. An infected pus-filled pocket
- Repairing skull fractures
- Repairing a tear in the membrane lining the brain (dura mater)
- Relieving pressure within the brain (intracranial pressure) by removing damaged or swollen areas of the brain that may be caused by traumatic injury or stroke
- Treating epilepsy, a neurological condition involving the brain that makes people more susceptible to seizures
- Implanting stimulator devices to treat movement disorders such as Parkinson's disease or dystonia (a type of movement disorder)

TC = Tungsten Carbide



gS 24.1320 5 1/2" cvd

Barraquer Needle Holder
with lock



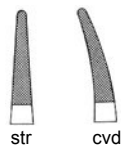
gS 24.2860 5 1/2" str smooth
gS 24.2880 5 1/2" cvd smooth
gS 24.2882 5 1/2" str smooth TC
gS 24.2884 5 1/2" cvd smooth TC
gS 24.2886 5 1/2" str serr TC
gS 24.2887 5 1/2" cvd serr TC

Castroviejo Needle Holder
with lock



did you know... ?

Microsurgical procedures require equipment which magnifies the operating field. Microsurgical instruments must be capable of delicately manipulating structures barely visible to the naked eye, with handles large enough to hold comfortably and securely. They must also take into account the tremor of the surgeon's hand, which can be greatly amplified under magnification.



gS 24.2892 7" str serr TC
gS 24.2893 7" cvd serr TC

Castroviejo Needle Holder
with lock



did you know... ?

Ramón Castroviejo was a Spanish and American eye surgeon known for his achievements in corneal transplantation. Born in 1904 in Logroño, Spain he received his medical education at the University of Madrid. He graduated in 1927 and worked at the Chicago Eye, Ear, Nose and Throat Hospital and the Mayo Clinic before coming to Columbia Presbyterian Medical Center in New York in 1931. He became the director of Ophthalmology at St. Vincent's Hospital and later purchased the Hammond House and modified the top two floors of the building to open as an eye hospital.

He improved the technique for grafting of the human cornea in the 1930's and 1940's, prompting the worldwide adoption of corneal transplantation as a standard way to deal with severe corneal pathology. Rather than create a circular window in the cornea, he created a rectangular one and was successful in his transplants. Although the medical community was slow to recognize his successes, Dr. Castroviejo was eventually commended and recognized for his sight-saving corneal tissue transplant techniques, which he continued to refine and teach for many years. Dr. Castroviejo also promoted the donation of corneal tissue in the United States and designed numerous ophthalmic instruments, including the Castroviejo needle holder, an instrument used in eye and microsurgery, as shown on page 1 in this section. After his retirement he moved to Madrid, and passed away in 1987.

Ignacio Barraquer was a Spanish ophthalmologist known for advancing cataract surgery. Dr. Barraquer was born in 1884 in Barcelona, Catalonia, Spain and received his medical doctorate in 1908 in Barcelona. Upon his father's retirement, he was appointed as Acting Professor of Ophthalmology at the School of Medicine and held this position until 1923. He invented many surgical instruments and procedures involving cataract surgery. Among his other achievements, Barraquer also founded, planned, and designed the Centro de Oftalmología Barraquer. He passed away in 1965.

José Barraquer came from a family of four generations of prominent ophthalmologists, and is acknowledged as the father of refractive surgery. He was the son of Ignacio Barraquer and was born in 1916 in Barcelona, Spain, but moved in 1953 to Bogota, Colombia. There, he founded the Barraquer Institute of America, where he trained many of the refractive surgeons practicing around the world today. The Barraquer Institute of America is a civilian non-profit scientific institution dedicated to the research, study, teaching and dissemination of the science of ophthalmology. One of its goals is to provide free eye care to poor Colombians. The Barraquer Institute also established the first eye bank in Colombia.

Dr. Barraquer promoted the improvement of suture material and technique in cataract and corneal surgery, and designed numerous surgical instruments, including the Barraquer Needle Holder, as shown on page 1 in this section. He was dedicated to the idea of reshaping the cornea to change the eye's refractive power. He developed the breakthrough eye technology that made LASIK (Laser-Assisted Stromal In-situ Keratomileusis) surgery possible. LASIK involves the use of lasers to carve very thin slices of cornea which are then reshaped so as to reduce nearsightedness and other optical health problems. He invented the cryolathe and microkeratome, which are the instruments used to perform LASIK surgery. Dr. Barraquer continued to practice, invent and teach until his death in 1998.



gS 25.2312 sharp
gS 25.2313 blunt

Tyrell Hook
5", 1 prong
1.5mm



gS 25.1980 5" sharp

Skin Hook
1 prong
3.5mm



gS 25.2575 5 1/2" sharp

Cushing Dura Hook
1 prong
2.0mm



sharp



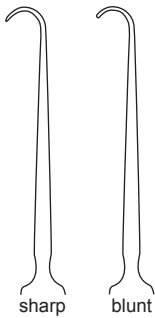
blunt

gS 25.2561 sharp
gS 25.2562 blunt

Frazier Hook
5", 1 prong
2.5mm



25/2 - skin and nerve hooks

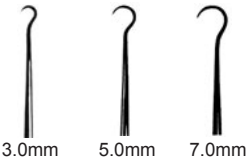


gS 25.1990 sharp
gS 25.1992 blunt

Wiener Skin Hook
5", 1 prong
3.5mm



gS 25.1212 5" sharp
O'Connor Skin Hook
1 prong
5.0mm



gS 25.1600 3.0mm
gS 25.1640 5.0mm
gS 25.1680 7.0mm

Kleinert-Kutz Hook
6", 1 prong
sharp



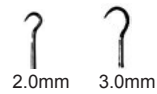
gS 25.2102 6 1/2" sharp
Johnson Skin Hook
1 prong
4.0mm





	#
gS 25.1101	1 1.0mm
gS 25.1102	2 2.0mm
gS 25.1103	3 3.0mm
gS 25.1104	4 4.0mm

Niro Skin Hook
6 3/4", 1 prong
sharp



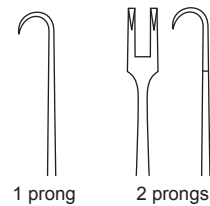
gS 25.1770	2.0mm
gS 25.1830	3.0mm

Gillies Hook
7", 1 prong
sharp



gS 25.1450	1.8mm
gS 25.1455	2.5mm

Converse Skin Hook
7", 1 prong
delicate, sharp



gS 25.1351	1 prong
gS 25.1352	2 prongs

Lahey Skin Hook
4 3/4", sharp
4.0mm

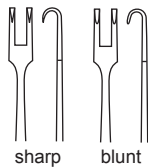


25/4 - skin and nerve hooks



gS 25.4490 1.5mm
gS 25.4500 2.5mm

Guthrie Hook
5", 2 prongs
sharp

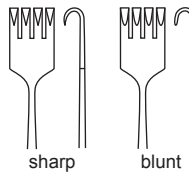


gS 25.1400 sharp
gS 25.1402 blunt

Freer Skin Hook
6", 2 prongs
2.0mm



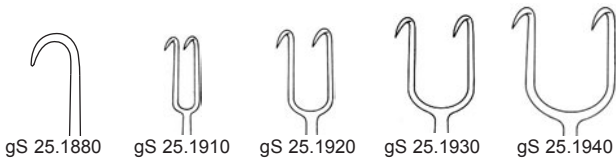
gS 25.1362 6" sharp
Barsky Skin Hook
2 prongs
2.0mm



gS 25.2595 sharp
gS 25.2596 blunt

Rollet Retractor
5 1/2", 4 prongs
2.0mm

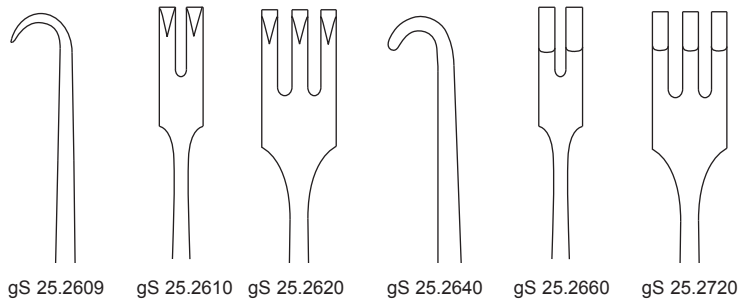




		depth	apart
gS 25.1880	1 prong	5.0mm	
gS 25.1910	2 prongs	3.5mm	2.0mm
gS 25.1920	2 prongs	3.5mm	5.0mm
gS 25.1930	2 prongs	3.5mm	7.0mm
gS 25.1940	2 prongs	3.5mm	10.0mm

Joseph Hook

6 1/4"
sharp



	sharp	depth
gS 25.2609	1 prong	4.0mm
gS 25.2610	2 prongs	6.0mm
gS 25.2620	3 prongs	7.0mm

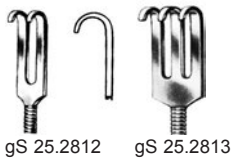
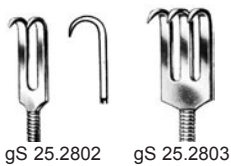
	blunt	depth
gS 25.2640	1 prong	4.0mm
gS 25.2660	2 prongs	6.0mm
gS 25.2720	3 prongs	7.0mm

Rigid Retractor

6 1/2"



25/6 - skin and nerve hooks



	sharp	depth
gS 25.2801	1 prong	4.0mm
gS 25.2802	2 prongs	5.0mm
gS 25.2803	3 prongs	5.0mm
gS 25.2804	4 prongs	5.0mm

	blunt	depth
gS 25.2811	1 prong	4.0mm
gS 25.2812	2 prongs	5.0mm
gS 25.2813	3 prongs	5.0mm
gS 25.2814	4 prongs	5.0mm

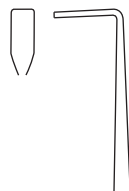
Flexible Retractor
6 1/4"
flexible shaft



gS 25.2580 6"
Hoen Dural Separator
blunt, 90°
3.0mm

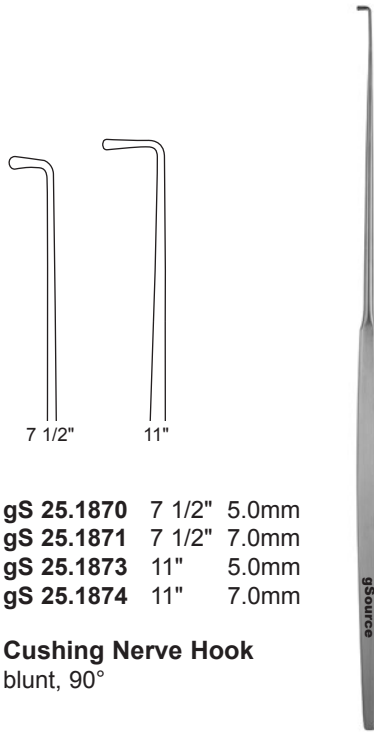


gS 25.2581 6 1/2"
Hoen Dural Separator
blunt, 45°
3.0mm



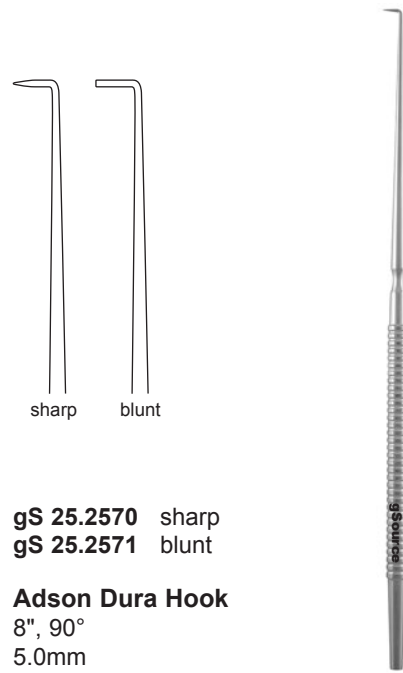
gS 25.2200 8 1/4"
gSeparator, Penelope
blunt, 90°
3.2mm





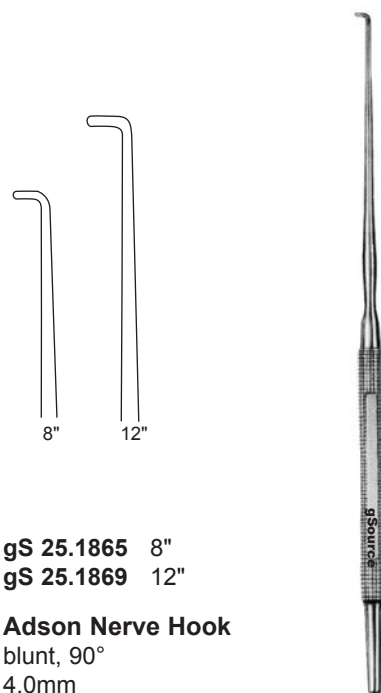
gS 25.1870 7 1/2" 5.0mm
 gS 25.1871 7 1/2" 7.0mm
 gS 25.1873 11" 5.0mm
 gS 25.1874 11" 7.0mm

Cushing Nerve Hook
 blunt, 90°



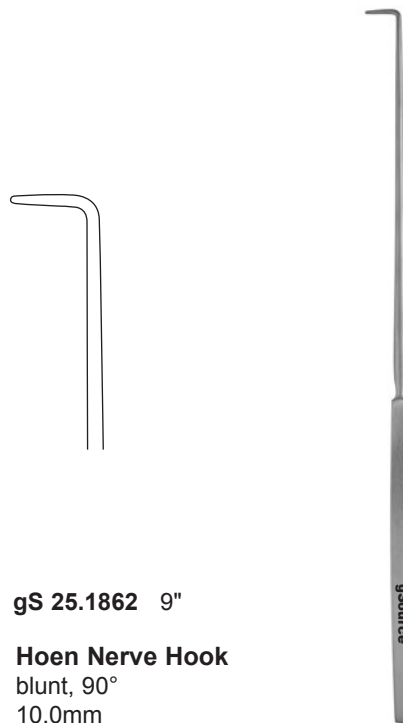
gS 25.2570 sharp
 gS 25.2571 blunt

Adson Dura Hook
 8", 90°
 5.0mm



gS 25.1865 8"
 gS 25.1869 12"

Adson Nerve Hook
 blunt, 90°
 4.0mm



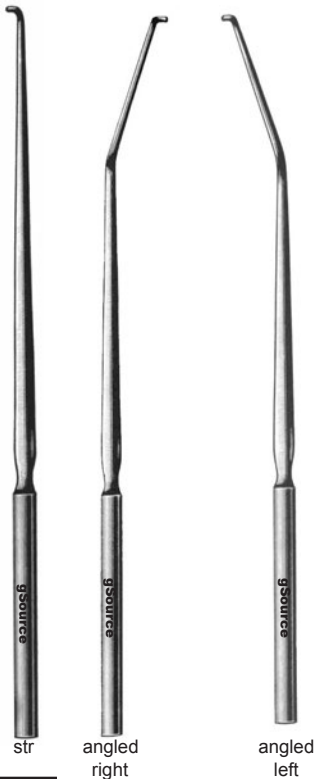
gS 25.1862 9"

Hoen Nerve Hook
 blunt, 90°
 10.0mm

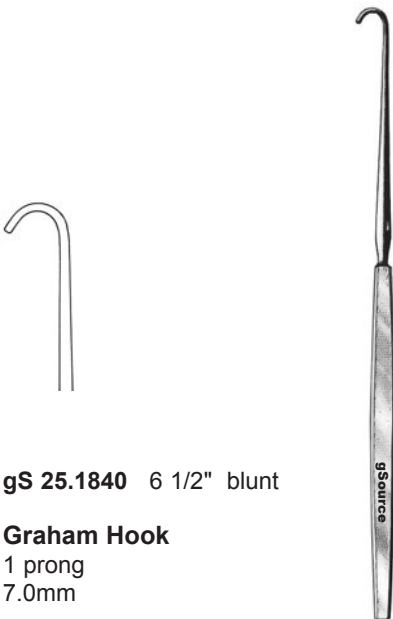
25/8 - skin and nerve hooks

- gS 25.1851 straight
- gS 25.1852 angled right
- gS 25.1850 angled left

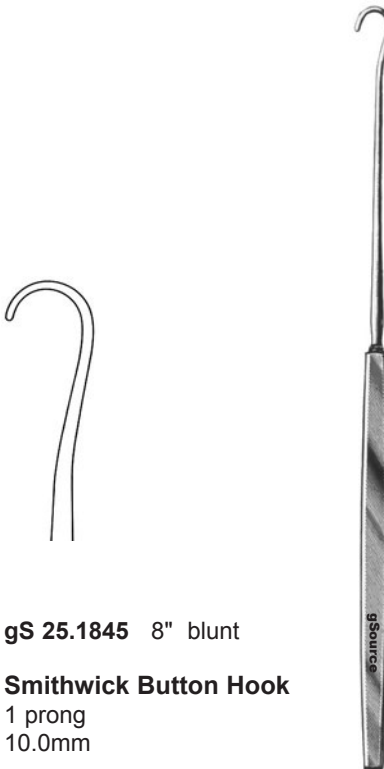
Dandy Nerve Hook
9", blunt
90°, 4.0mm



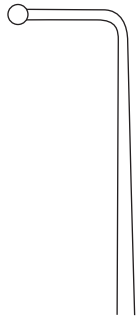
gS 25.1840 6 1/2" blunt
Graham Hook
1 prong
7.0mm



gS 25.1845 8" blunt
Smithwick Button Hook
1 prong
10.0mm

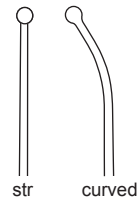


OD = Outside Diameter



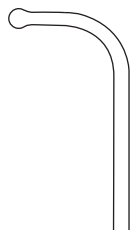
gS 25.2000 9 1/2"

Ball Probe
90°
15.0mm, ball OD 2.6mm



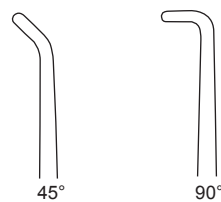
gS 25.2020 straight
gS 25.2025 curved

gProbe, Ball
10 1/2", ball OD 2.3mm
with graduation lines



gS 25.2030 12"

gProbe, Ball
90°
ball OD 2.6mm



gS 25.2045 45°
gS 25.2050 90°

gProbe, Nerve
15", blunt



did you know... ?

Sir Harold Delf Gillies was born in 1882 in New Zealand, and later became a London based otolaryngologist who is considered by many as the father of plastic surgery.

In World War I, Dr. Gillies developed many of the techniques of modern plastic surgery from caring for soldiers suffering from disfiguring facial injuries. Dr. Gillies volunteered in France with the Red Cross, and during that time he learned about plastic surgery. His work was expanded upon during World War II by his cousin and a former student, who pioneered treatments for members of the Royal Air Force crew who suffered from severe burns. In 1946, Dr. Gillies carried out the first female-to-male sex reassignment surgery and in 1951 the first male-to-female sex reassignment surgery. He passed away in 1960.

Walter Edward Dandy was an American neurosurgeon and scientist. He is widely considered as one of the founding fathers of neurosurgery, and is credited with numerous neurosurgical discoveries and innovations, including:

- Description of the circulation of cerebrospinal fluid in the brain.
- Surgical treatment of hydrocephalus, a condition in which fluid accumulates in the brain.
- Invention of air ventriculography, a method of taking x-ray pictures of the ventricles of the brain after air has been introduced to replace the cerebrospinal fluid. By introducing ventriculography in 1918, and later encephalography, he made the accurate diagnosis and localization of tumors of the brain and intracranial tissues possible.
- Introduction of pneumoencephalography, a radiographic visualization of the cerebral ventricles and subarachnoid spaces after the injection of air or gas. It has been largely replaced by CT (computed tomography) and MRI (magnetic resonance imaging) techniques.
- Description of brain endoscopy.
- Establishment of the first intensive care unit.
- First clipping of an intracranial aneurysm.

Born in 1886, Dr. Dandy graduated in 1907 from the University of Missouri and enrolled in the Johns Hopkins University School of Medicine, graduating in 1910 at the age of 24. He became the sixth

appointee to the Hunterian Laboratory of Experimental Medicine under Harvey W. Cushing from 1910-1911. In 1911, he earned a Master of Arts degree for his work in the Hunterian Laboratory, and went on to join the Johns Hopkins Hospital surgical staff for one year as Dr. Cushing's Assistant Resident. Dr. Dandy completed his general surgical residency at the Johns Hopkins Hospital under William S. Halsted in 1918.

While Dr. Dandy was introduced to the field of neurosurgery by Dr. Cushing, it was George J. Heuer who completed Dr. Dandy's neurosurgical training following Dr. Cushing's departure in 1912. Dr. Heuer had graduated from the Johns Hopkins University School of Medicine in 1908, worked as Dr. Cushing's first Assistant Resident from 1908-1909, and served as Dr. Halsted's Chief Resident from 1911 to 1914. When Dr. Heuer left Hopkins in 1922 to become the head of surgery at the University of Cincinnati, Dr. Dandy remained as the only neurosurgeon at the Johns Hopkins Hospital until his death in 1946.

During his 40-year medical career his contributions to the field of neurosurgery include 159 articles and 5 books, among them a classic text on neurosurgery, "Surgery of the Brain". The discovery of ventriculography was considered his greatest contribution. Dr. Dandy also devised new instruments, including the Dandy Nerve Hook on page 8 of this section, and performed over 2,000 operations, among them operations for hydrocephalus, brain abscesses, subdural hematoma, trifacial neuralgia, and intervertebral discs.

The Department of Neurosurgery at New York University was established with the recruitment of Thomas I. Hoen in 1951. Dr. Hoen's academic credentials included medical school at Johns Hopkins in Baltimore, Maryland; a Halsted fellowship in surgery at Johns Hopkins; general surgery and then neurosurgical training at the Peter Bent Brigham Hospital in Boston, Massachusetts, under Dr. Harvey Cushing; and further neurosurgical training under Dr. Wilder Penfield at the Royal Victoria Hospital in Montreal, Canada. After training, Dr. Hoen accepted academic posts in Montreal and then was professor of neurology and neurosurgery at New York Medical College, Flower and Fifth Avenue Hospitals from 1931 to 1951. The Hoen Dural Separators are shown on page 6 in this section.



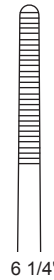
gS 26.0150 4 3/4"

Wilde Ear Dressing Forceps

angled, delicate, serrated



5 1/2"



6 1/4"

gS 26.0175 5 1/2"

gS 26.0177 6 1/4"

Lucae Ear Dressing Forceps

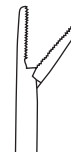
bayonet handle, serrated



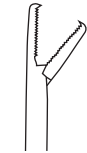
gS 26.0220 8"

Jansen Ear Dressing Forceps (Gruenwald)

bayonet handle, serrated



serrated



serrated 1x2 teeth



gS 26.7652 3 1/2" serr

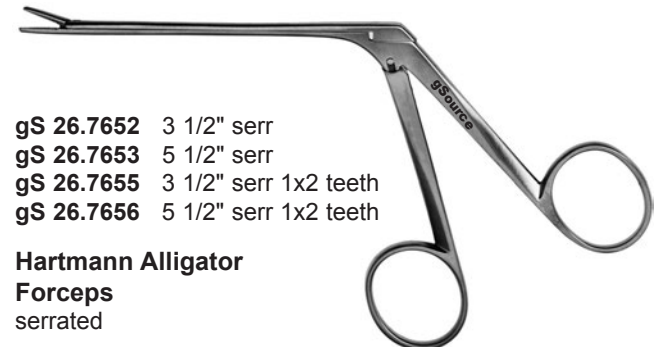
gS 26.7653 5 1/2" serr

gS 26.7655 3 1/2" serr 1x2 teeth

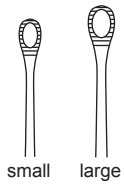
gS 26.7656 5 1/2" serr 1x2 teeth

Hartmann Alligator Forceps

serrated

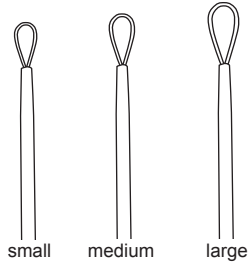


26/2 - ear, nose and throat



gS 26.0480 small
gS 26.0482 large

Shapleigh Ear Curette
6"
straight

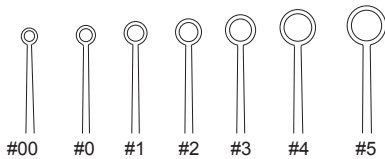


gS 26.1960 small
gS 26.1980 medium
gS 26.2000 large

Billeau Ear Loop
6 1/2"
straight



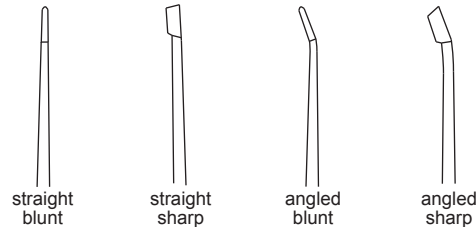
26



straight
blunt
gS 26.0590 #00
gS 26.0610 #0
gS 26.0630 #1
gS 26.0650 #2
gS 26.0670 #3
gS 26.0680 #4
gS 26.0690 #5

Buck Ear Curette
6 1/2"

straight
sharp, one side
gS 26.0701 #00
gS 26.0702 #0
gS 26.0703 #1
gS 26.0704 #2
gS 26.0705 #3
gS 26.0706 #4
gS 26.0707 #5



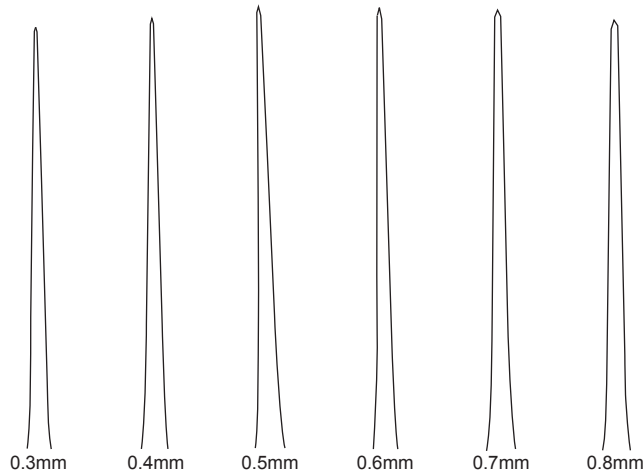
angled
blunt
gS 26.0740 #00
gS 26.0760 #0
gS 26.0780 #1
gS 26.0800 #2
gS 26.0820 #3
gS 26.0840 #4
gS 26.0860 #5

angled
sharp, one side
gS 26.0910 #00
gS 26.0920 #0
gS 26.0930 #1
gS 26.0940 #2
gS 26.0950 #3
gS 26.0960 #4
gS 26.0970 #5

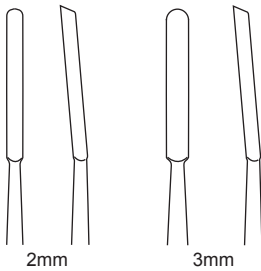


Useful for middle ear surgery, tympanoplasty and stapedotomy.

gS 26.0303 0.3mm
gS 26.0304 0.4mm
gS 26.0305 0.5mm
gS 26.0306 0.6mm
gS 26.0307 0.7mm
gS 26.0308 0.8mm



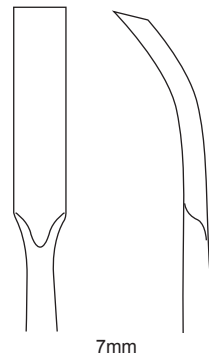
Fisch Perforator
 6 1/4" straight
 sharp point



Useful for endaural procedures.

gS 26.0332 2mm
gS 26.0333 3mm

Lempert Elevator
 6 3/4"
 slightly angled, sharp



Commonly used in ear, nose and throat procedures.

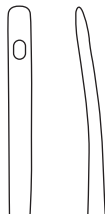
gS 26.0337 7" 7 mm

Lempert Elevator
 curved
 sharp



26/4 - ear, nose and throat

Useful in nasal septum procedures.



gS 26.0423 8" 3mm

Gorney Suction Elevator
blunt



26

Useful in ear, nose and throat procedures.



gS 26.1000 6 1/2" 3mm

Duckbill Shambaugh Derlacki Raspatory
curved
sharp

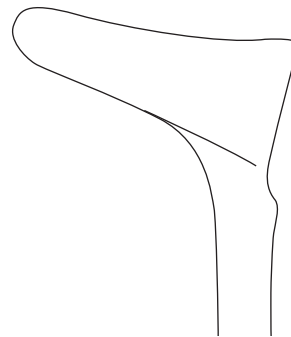


Prepares cartilage implant material.



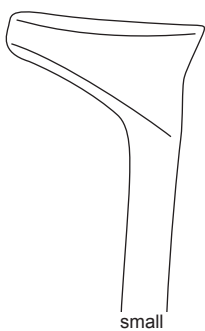
gS 26.9010 5/8" x 2 3/4" x 1 1/4" x 1 1/4", crusher
gS 26.9011 3 1/2", 15mm, slide

Cottle Cartilage Crusher

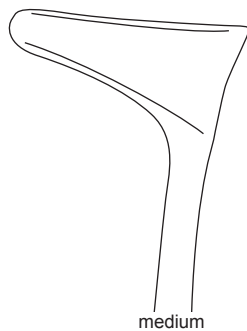


gS 26.2160 5 3/4" light, adult

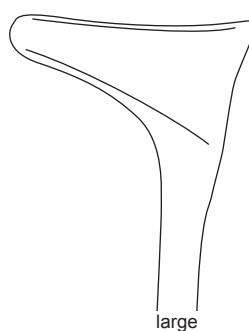
Vienna Speculum



small



medium



large

gS 26.2100 small
gS 26.2120 medium
gS 26.2140 large

Vienna Speculum
 5 3/4"
 with spring



26/6 - ear, nose and throat

gS 26.8095 4 3/4"
gS 26.8097 5 1/2"

**Sluder-Jansen
Mouth Gag (Molt)**
with silicone tip protectors

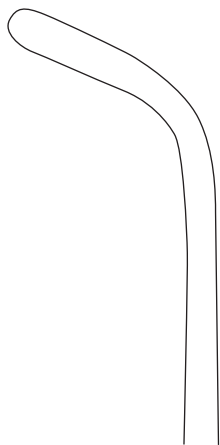


gS 26.2910 6"

Laborde Tracheal Dilator
3 blades



26



gS 26.2930 5" child
gS 26.2932 5 1/2" adult

Trousseau Dilator
bi-valve



did you know... ?

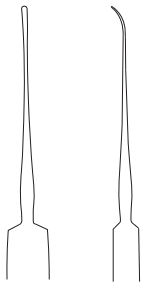
Armand Trousseau was a French internist who was born in Tours in 1801, and received his doctorate in Paris in 1825. He made his early reputation on yellow fever and laryngeal phthisis, a disease characterized by the wasting away or atrophy of the larynx. He was the first to undertake a tracheotomy in 1831 and popularized this intervention in the treatment of croup, usually due to diphtheria. He was also the first to aspirate the pleural cavity in 1843 and gave the first description of haemochromatosis, a disease in which too much iron builds up in your body.

In 1839 Dr. Trousseau was appointed physician to the Hospital Ste Antoine in Paris, and later moved to physician-in-chief at the Hotel-Dieu in 1850. In 1861 he published a two volume text, Clinique Medicale de l'Hotel-Dieu which contained many accurate descriptions of common childhood diseases, such as scarlet fever, measles, rubella, mumps, diphtheria, whooping cough, cholera infantum and neonatal syphilis. He passed away in 1867.

Useful in oculoplastic procedures for the lacrimal duct.

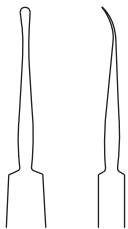
- gS 27.9700** 0000/000
- gS 27.9702** 00/0
- gS 27.9704** 0/1
- gS 27.9706** 1/2
- gS 27.9708** 2/3
- gS 27.9710** 3/4
- gS 27.9712** 4/5
- gS 27.9714** 5/6
- gS 27.9716** 6/7
- gS 27.9718** 7/8

Bowman Probe
5"
double ended



Useful in removing a corneal foreign body.

gS 27.7325 4 3/4"
Davis Foreign Body Spud
0.8mm blade



Useful in removing a corneal foreign body.

gS 27.7331 4 3/4"
Ellis Foreign Body Spud
1.2mm blade



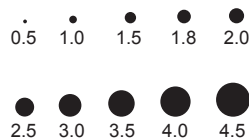
Useful to remove debris from cornea or sclera.

Reversible screw handle allows the spud and needle to be placed on either end and inverted inside handle when not in use.

gS 27.7546 4 3/4"
Dix Spud and Needle
double ended
invertable



27/2 - eye instruments



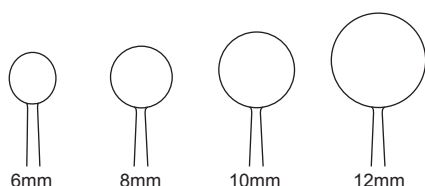
gS 27.7605	0.5mm
gS 27.7610	1.0mm
gS 27.7615	1.5mm
gS 27.7618	1.8mm
gS 27.7620	2.0mm
gS 27.7625	2.5mm
gS 27.7630	3.0mm
gS 27.7635	3.5mm
gS 27.7640	4.0mm
gS 27.7645	4.5mm

Meyerhoefer Curette
5"



did you know... ?

The Meyerhoefer Curette shown on this page is also referred to as the Meyerhoefer Chalazion Curette. A chalazion, also known as a meibomian gland lipogranuloma, is a cyst in the eyelid that is caused by inflammation of a blocked meibomian gland, usually on the upper eyelid. Chalazia differ from styes in that they are subacute and usually painless nodules. They may become acutely inflamed, but usually point inside the lid rather than on the lid margin. Depending on the chalazion's texture, the excision procedure varies. While fluid matter can be removed in a minimally invasive manner, hardened matter can require the need for a larger incision to be made so the matter can be scraped out.



Useful for an evisceration to remove contents of the eye from the orbit, while leaving the scleral shell and extraocular muscles intact.

gS 27.7706	#0, 6mm
gS 27.7707	#1, 7mm
gS 27.7708	#2, 8mm
gS 27.7710	#3, 10mm
gS 27.7711	#4, 11mm
gS 27.7712	#5, 12mm

Bunge Evisceration Spoon
5"



Useful in exposing a chalazion or other cysts of the eyelid. Ring blade surrounds the cyst and helps to evert eyelid when tightened.

gS 27.7000 3 3/4"

Hunt Chalazion Forceps
12mm ring ID
set screw





half cvd



full cvd

gS 27.5280 str
gS 27.5282 half cvd
gS 27.5284 full cvd

Eye Dressing Forceps
 4"
 delicate, serrated



half cvd



full cvd

gS 27.5290 str
gS 27.5292 half cvd
gS 27.5294 full cvd

Iris Forceps
 4"
 1x2 teeth



gS 27.1501 0.12mm
gS 27.1503 0.3mm
gS 27.1505 0.5mm
gS 27.1507 1.0mm
gS 27.1509 1.5mm

Castroviejo Suture Forceps
 4"
 with tying platform, 1x2 teeth



gS 27.5260 serr 0.5mm
gS 27.5262 serr 0.8mm
gS 27.5264 1x2 0.5mm
gS 27.5266 1x2 0.8mm

Bishop Harmon Forceps
 3 1/2"



27/4 - eye instruments

gS 27.6640 3 1/4"

Littauer Cilia Forceps
straight blade
smooth



gS 27.6600 3 1/2"

Douglas Cilia Forceps
straight blade
serrated



gS 27.6680 3 1/2"

Bergh Cilia Forceps
angled blade
serrated



gS 27.6690 4 1/2"

Barraquer Cilia and Suture Forceps
angled, smooth



gS 29.0022 4 3/4"
Vasectomy Forceps



gS 29.0020 5 1/2"
Vasectomy Forceps
3mm curved end



gS 29.4650 4 1/4"
Umbilical Scissors



gS 29.0050 7 3/4"
Adair Breast Clamp
curved



Useful for vets
when spaying a
female dog.

gS 29.4310 8"

Snook Hook



gS 29.0675 6 3/4"

**Doyen Myoma Screw
with T-handle**



did you know... ?

OB/GYN is an abbreviation for obstetrics/gynecology.

An obstetrician is a physician who has successfully completed specialized education and training in the management of pregnancy, labor, and puerperium (the time-period directly following childbirth).

A gynecologist is a physician who has a successfully completed specialized education and training in the health of the female reproductive system, including the diagnosis and treatment of disorders and diseases. Typically, the education and training for both fields occurs concurrently.

An obstetrician/gynecologist is a physician specialist who provides medical and surgical care to women and has particular expertise in pregnancy, childbirth, and disorders of the reproductive system. This includes preventative care, prenatal care, detection of sexually transmitted diseases, Pap test screening, and family planning.

There are four recognized subspecialties in this field:

1. Gynecologic Oncology

Concerned with consultation and comprehensive management of patients with gynecologic cancer. Requires knowledge of major cancer treatments, diagnosis, and complications of oncology.

2. Maternal/Fetal Medicine

Concerned with the care and consultation of patients with complications of pregnancy. Requires knowledge of obstetrics, medical and surgical complications of mother and fetus, current approaches to diagnosis and treatment, and newborn adaptation.

3. Reproductive Endocrinology and Infertility

Concerned with the management of complex problems relating to reproductive endocrinology and infertility. Requires knowledge of diagnosis and treatment of endocrinology and infertility disorders.

4. Urogynecology/Reconstructive Pelvic Surgery

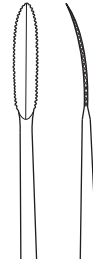
Concerned with the health of the female urinary tract and surgery as a treatment. Requires knowledge of complex benign pelvic conditions, lower urinary tract disorders, pelvic floor dysfunction, and reconstructive pelvic.



gS 30.0145
Retrograde Knife
5mm,
45° angle



gS 30.0200
Bayonet Knife



gS 30.0300
Banana Knife
serrated
cutting edges



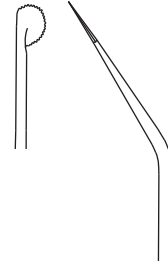
gS 30.0310
Banana Knife
smooth
cutting edges



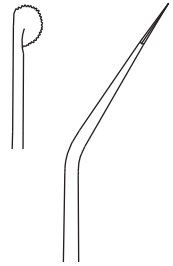
gS 30.0400
Scalpel Knife



gS 30.0503
Rosetta Knife
3mm
serrated, straight



gS 30.0513
Rosetta Knife
3mm
serrated, 30°
left angle



gS 30.0523
Rosetta Knife
3mm
serrated, 30°
right angle



gS 30.0600
Sickle Knife



gS 30.0703
Hook Knife
3mm
90° curved



gS 30.0803
Smillie Meniscotome
3mm straight



gS 30.0805
Smillie Meniscotome
5mm straight

Triangular handle instruments
9 1/2"

30/2 - arthroscopy

Ø = diameter



gS 30.0807
Smilie Meniscotome
7mm straight



gS 30.0900
Cartilage File
fine
cross serrated



gS 30.0910
Cartilage File
coarse
cross serrated



gS 30.1000
Hook Probe
fine
pointed tip



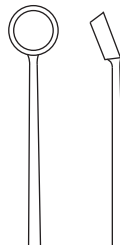
gS 30.1013
Hook Probe
3mm blunt,
5mm grad lines



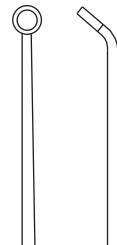
gS 30.1015
Hook Probe
5mm blunt,
5mm grad lines



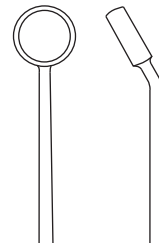
gS 30.2033
Curette
3mm,
30° angle



gS 30.2105
Ring Curette
Ø 5mm,
15° angle



gS 30.2303
Ring Curette
Ø 3mm,
30° angle



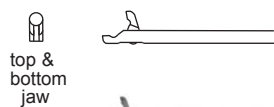
gS 30.2307
Ring Curette
Ø 7mm,
30° angle

Ø = diameter



gS 30.3102

Mini Basket Forceps
4" shaft, Ø 2mm
1mm bite

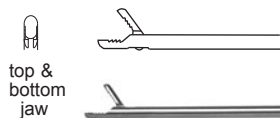


gS 30.3202

Mini Biopsy Forceps
4" shaft, Ø 2mm
2mm bite

30/4 - arthroscopy

Ø = diameter

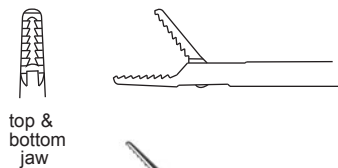


gS 30.3212

Mini Biopsy Forceps

4" shaft, Ø 2mm

2mm cup, serrated



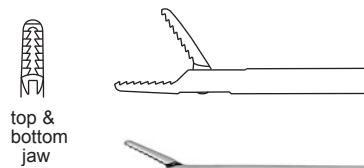
gS 30.3334

Grasping Forceps

5" shaft, Ø 3.4mm

3.4mm alligator jaw

Ø = diameter

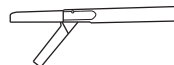


gS 30.3335

Grasping Forceps

5 1/4" shaft, Ø 3.4mm

3.4mm alligator jaw, ratchet



gS 30.4000

Mini Scissors

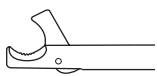
4" shaft, Ø 2mm

downward cutting



30/6 - arthroscopy

Ø = diameter

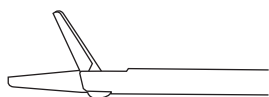


gS 30.4234

Hook Scissors

5" shaft, Ø 3.4mm

lower blade serrated



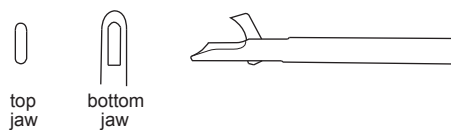
gS 30.4034

Standard Scissors

5 1/4" shaft, Ø 3.4mm

upward cutting, blunt tips

Ø = diameter



gS 30.5134

Hook Punch

5" shaft, Ø 3.4mm

scoop jaw, 1.6mm bite



gS 30.3336

Aggressor Forceps

5 1/4" shaft, Ø 3.4mm

3.4mm jaw, 15° up

did you know... ?

The word arthroscopy comes from two Greek words, "arthro" (joint) and "skopein" (to look). The term literally means "to look within the joint."

Arthroscopy was pioneered in the early 1950s by Dr. Masaki Watanabe of Japan to perform minimally invasive cartilage surgery and reconstructions of torn ligaments. It is a minimally invasive surgical procedure in which an examination and sometimes treatment of damage of the interior of a joint is performed using an arthroscope, a type of endoscope that is inserted into the joint through a small incision. Arthroscopic procedures can be performed either to evaluate or to treat many orthopedic conditions. The surgical instruments used are smaller than traditional instruments. Surgeons view the joint area on a video monitor, and can diagnose and repair torn joint tissue, such as ligaments and menisci or cartilage.

The advantage of arthroscopy over traditional open surgery is that the joint does not have to be opened up fully. Instead, for knee arthroscopy for example, only two small incisions are made — one for the arthroscope and one for the surgical instruments to be used in the knee cavity to fully remove the knee cap. This reduces recovery time and may increase the rate of surgical success due to less trauma to the connective tissue. There is also less scarring because of the smaller incisions. Irrigation fluid is used to distend the joint and make a surgical space. Sometimes this fluid leaks into the surrounding soft tissue causing extravasation and edema.

The joints that are most commonly treated by arthroscopy are the knee, shoulder, elbow, wrist, ankle, foot, and hip. Some uses include:

Knee: treating meniscus injury, reconstruction of the anterior cruciate ligament and for cartilage microfracturing.

Shoulder: treating various diseases of the shoulder including subacromial impingement, acromioclavicular osteoarthritis, rotator cuff tears, frozen shoulder (adhesive capsulitis), chronic tendonitis and partial tears of the long biceps tendon, SLAP lesions (superior labral tear from anterior to posterior) and shoulder instability.

Elbow: treating painful symptoms of many problems that damage the cartilage surfaces and other soft tissues surrounding the joint. Elbow arthroscopy may also be recommended to remove loose pieces of bone and cartilage, or release scar tissue that is blocking motion. Common procedures include:

- Treatment of tennis elbow (lateral epicondylitis)
- Removal of loose bodies (loose cartilage and bone fragments)
- Release of scar tissue to improve range of motion
- Treatment of osteoarthritis (wear and tear arthritis)
- Treatment of rheumatoid arthritis (inflammatory arthritis)
- Treatment of osteochondritis dissecans (activity related damage to the capitellum portion of the humerus seen in throwers or gymnasts)

Wrist: treating symptoms of repetitive strain injury, fractures of the wrist and torn or damaged ligaments. It can also be used to ascertain joint damage caused by arthritis.

Arthroscopic spinal procedures allow a surgeon to access and treat a variety of spinal conditions with minimal damage to surrounding tissues, including spinal disc herniation and degenerative discs, spinal deformity, tumors, and general spine trauma.



gS 33.0201
gS 33.0202
gS 33.0203



gS 33.0210



gS 33.0211



gS 33.0216
gS 33.0217
gS 33.0218



gS 33.0220



gS 33.0221



gS 33.0222



gS 33.0225



gS 33.0227
gS 33.0228



gS 33.0230



gS 33.0233
gS 33.0235



gS 33.0237
gS 33.0238

Note: Tip details
not to scale.

Round Dissectors, angled

gS 33.0201 1mm

gS 33.0202 2mm

gS 33.0203 3mm

Elevators

gS 33.0210 curved

gS 33.0211 angled

Spatula Dissectors, angled

#

gS 33.0216 6 small

gS 33.0217 7 medium

gS 33.0218 8 large

Hooks, angled

gS 33.0220 90° sharp

gS 33.0221 90° blunt

gS 33.0222 45° sharp

Needle

gS 33.0225 straight sharp

Currettes, 1mm

gS 33.0227 straight

gS 33.0228 angled

Ball Dissectors

gS 33.0230 straight 0.8mm

gS 33.0233 90° 3mm

gS 33.0235 90° 5mm

gS 33.0237 40° 4mm

gS 33.0238 40° 8mm

Rhoton-Style Micro Dissector Instruments

7 1/2"












33/2 - micro

33

Black aluminum offset handle is designed to provide increased field visualization while providing greater precision and control during microdissection surgery. Rounded corners and flat sides allow for easy rotation with control, stable power and leverage to help reduce unwanted torque.

Each instrument is marked on front of handle for easy identification.

See side view picture of gS 33.4103 on right for tip orientation.

								
forward straight (FS)	forward angled (FA)	backward straight (BS)	backward angled (BA)	0	00	000	0000	cortical bone cutter
FS	FA	BS	BA	#				
gS 33.4101	gS 33.4111	gS 33.4121	gS 33.4131	Curette 0				
gS 33.4102	gS 33.4112	gS 33.4122	gS 33.4132	Curette 00				
gS 33.4103	gS 33.4113	gS 33.4123	gS 33.4133	Curette 000				
gS 33.4104	gS 33.4114	gS 33.4124	gS 33.4134	Curette 0000				
gS 33.4105	gS 33.4115	gS 33.4125	gS 33.4135	Cortical bone cutter				

Microdissection Cervical Curette and Cortical Bone Cutter

8 1/2"

offset aluminum handle, black



- gS 33.4136** Micro nerve hook, 1.8mm
- gS 33.4137** Ultra micro nerve hook, 1.5mm
- gS 33.4139** Bone waxer, 2.0mm

Microdissection Cervical Instruments








8 1/2"

offset aluminum handle, black



Anodized aluminum offset handle is designed to provide increased field visualization while providing greater precision and control during microdissection surgery. Round handle has fingertip indentations to help allow for easy rotation with control.

See side view picture of gS 33.5003 on right for tip orientation.

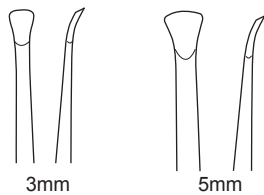
						
forward angled (FA)	backward angled (BA)	1	2	3	4	5
FA	BA	#				
gS 33.5001	gS 33.5011	1				
gS 33.5002	gS 33.5012	2				
gS 33.5003	gS 33.5013	3				
gS 33.5004	gS 33.5014	4				
gS 33.5005	gS 33.5015	5				

Microdissection Cervical Curette

10"
offset aluminum handle



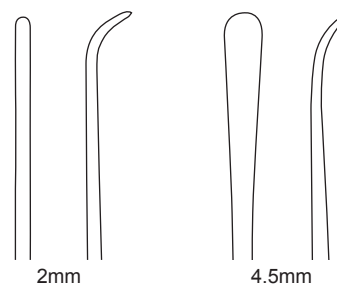
gS 33.5003



gS 33.5023 3mm
gS 33.5025 5mm

Microdissection Cervical Dissector

10", straight
offset aluminum handle



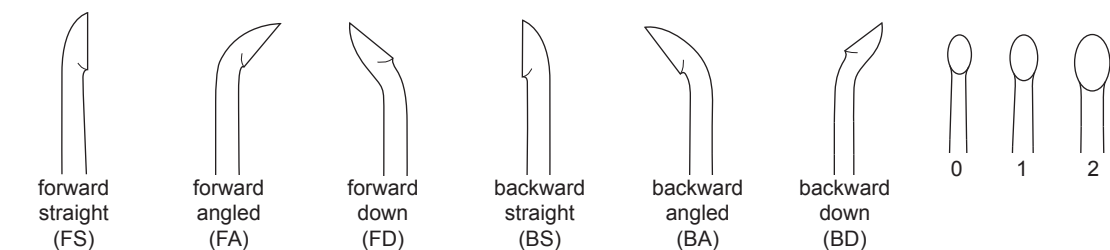
gS 33.4520 2mm
gS 33.4545 4.5mm

Caspar Bayonet Micro Dissector

9", curved
knurled handle



See side view picture of gS 33.4202 on right for tip orientation.



FS	FA	FD	BS	BA	BD	#
gS 33.4200	gS 33.4210	gS 33.4220	gS 33.4230	gS 33.4240	gS 33.4250	0
gS 33.4201	gS 33.4211	gS 33.4221	gS 33.4231	gS 33.4241	gS 33.4251	1
gS 33.4202	gS 33.4212	gS 33.4222	gS 33.4232	gS 33.4242	gS 33.4252	2

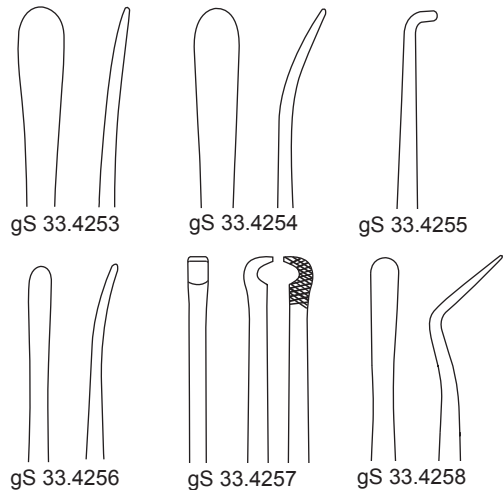
Microdiscectomy Lumbar Curette

9 1/2"

offset aluminum handle, black



gS 33.4202



- gS 33.4253** Penfield dissector #1, 6mm slightly curved
- gS 33.4254** Penfield dissector #2, 6mm curved
- gS 33.4255** Nerve hook, 1.3mm
- gS 33.4256** Penfield dissector #4, 3mm slightly curved
- gS 33.4257** Bone waxer, 2.8mm
- gS 33.4258** Spine probe, 3.8mm

Microdiscectomy Lumbar Instruments

9 1/2"

offset aluminum handle, black

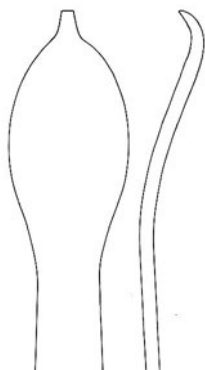


gS 33.4254

gS 33.4255

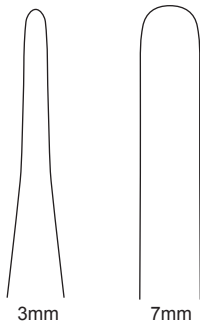
gS 33.4257

gS 33.4258



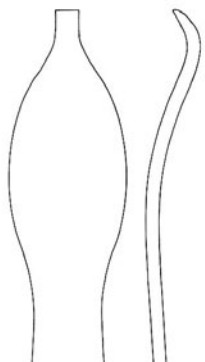
gS 34.9260 4 3/4"

Hohmann Retractor
with finger ring
15mm



gS 34.9230 5 1/2" 3mm
gS 34.9240 6" 7mm

Hayes Hand Retractor



gS 36.9270 6"

Hohmann Retractor
15mm



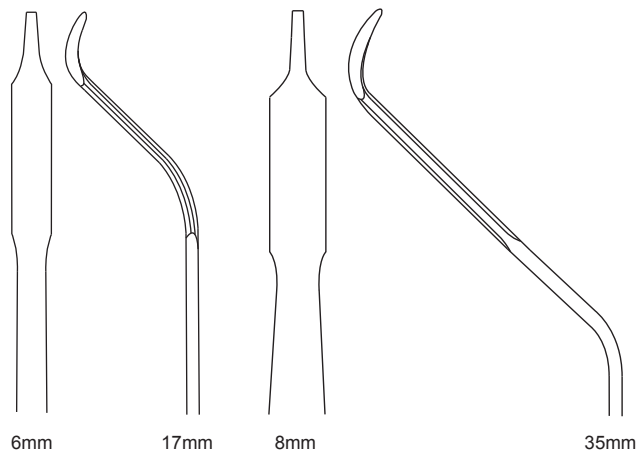
gS 36.9300 6mm
gS 36.9320 8mm

Hohmann Retractor Mini
6 1/2"



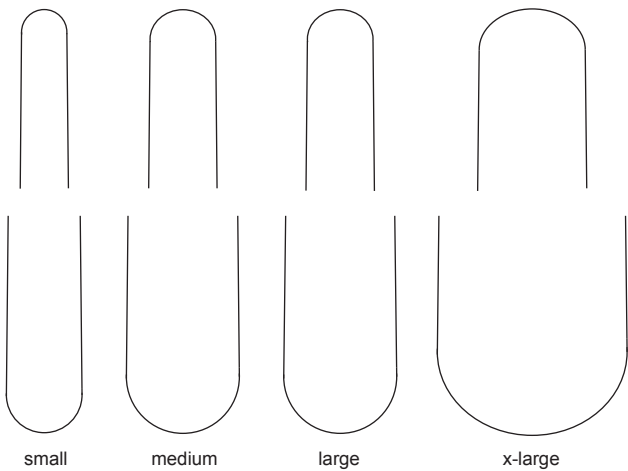
34-37/2 - hand-held retractors

34-37



			45° drop
gS 36.9340	6"	6mm	17mm
gS 36.9345	5 1/2"	6mm	35mm
gS 36.9350	6"	8mm	17mm
gS 36.9355	5 1/2"	8mm	35mm

gRetractor, Hohmann Mini
bent handle



Rounded edges help to reduce the risk of lacerations.

gS 37.1006	small	6mm and 10mm
gS 37.1009	medium	9mm and 15mm
gS 37.1011	large	11mm and 20mm
gS 37.1014	x-large	14mm and 25mm

gSilicone Brain Spatula
7"
malleable copper, silicone coated, black



- gS 37.0042 1/4"
- gS 37.0043 3/8"
- gS 37.0044 1/2"
- gS 37.0045 5/8"
- gS 37.0046 3/4"
- gS 37.0047 1"
- gS 37.0048 1 1/4"
- gS 37.0049 1 1/2"

Davis Brain Spatula
7"
malleable, stainless steel



- | | | |
|------------|--------|--------|
| gS 36.8518 | 6" | 1/4" |
| gS 36.8520 | 6" | 1/2" |
| gS 36.8522 | 6" | 3/4" |
| gS 36.8524 | 6 3/4" | 5/8" |
| gS 36.8550 | 7 1/2" | 1" |
| gS 36.8560 | 8" | 1/4" |
| gS 36.8561 | 8" | 3/8" |
| gS 36.8563 | 8" | 1/2" |
| gS 36.8564 | 8" | 5/8" |
| gS 36.8565 | 8" | 3/4" |
| gS 36.8660 | 13" | 3/4" |
| gS 36.8680 | 13" | 1" |
| gS 36.8700 | 13" | 1 1/4" |
| gS 36.8720 | 13" | 1 1/2" |
| gS 36.8722 | 13" | 1 3/4" |
| gS 36.8760 | 13" | 2" |
| gS 36.8762 | 13" | 2 1/2" |
| gS 36.8764 | 13" | 3" |

Ribbon Retractor
malleable
stainless steel



gS 34.1960 5 1/4"

Jackson Tracheal Hook
one sharp hook



- | | width x depth |
|------------|---------------|
| gS 34.1934 | 4mm x 14mm |
| | 7mm x 22mm |
| gS 34.1935 | 5mm x 19mm |
| | 8mm x 22mm |

Crile Retractor
4"
double ended



34-37/4 - hand-held retractors

34-37

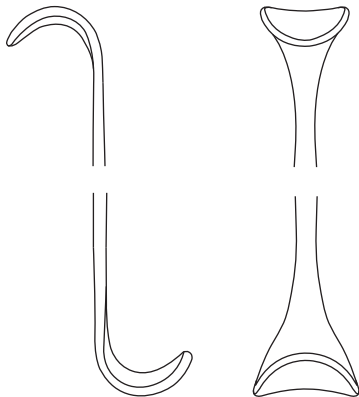
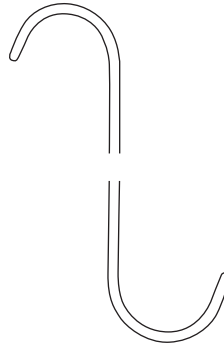
gS 36.6140 5 1/4"

"S" Retractor
double ended
5mm and 13mm



gS 36.6150 4 1/4" 8mm and 11mm
gS 36.6160 5 3/4" 6mm and 9mm

Luer "S" Retractor
double ended



gS 34.1950 5 1/2"

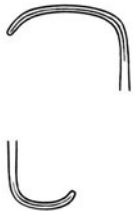
Rose Retractor
11.5mm width x 12mm depth
10mm width x 14.5mm depth



gS 34.1760 6"

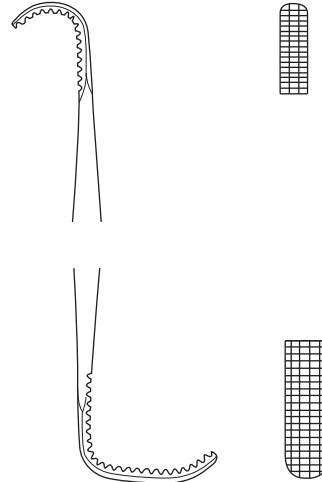
Davis Retractor
6mm width x 17mm depth
9mm width x 20mm depth





gS 34.1940 5 3/4"

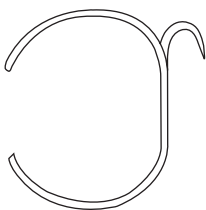
Ragnell Retractor
4mm width x 8mm depth
6mm width x 15mm depth



Fine cross serrations on inside blades help prevent slippage.

gS 34.1942 5 3/4"

Ragnell-Linde Retractor
4mm width x 8mm depth
6mm width x 15mm depth



gS 34.2405

gS 34.2405 1 prong 5mm
gS 34.2417 2 prongs 17mm

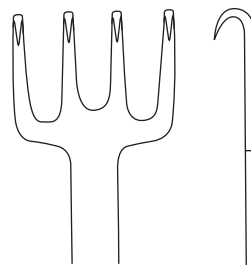
Millard Thumb Hook
1"
sharp prongs



gS 34.2405



gS 34.2417



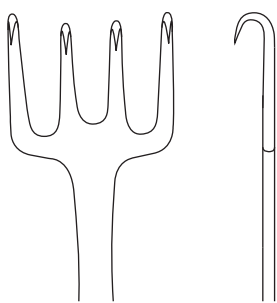
gS 34.2420 3 1/2" 20mm

Freeman Face Lift Retractor
4 sharp prongs, in-line

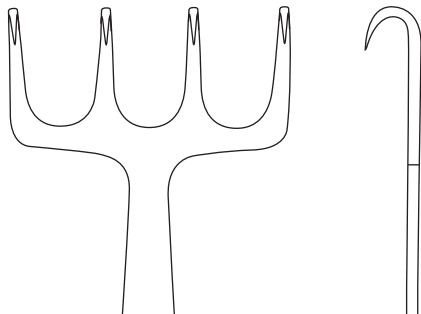


34-37/6 - hand-held retractors

34-37



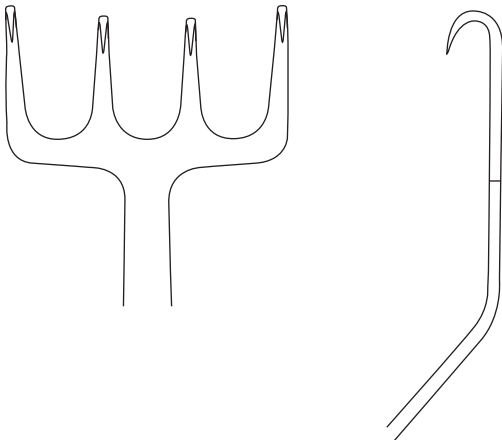
gS 34.2422



gS 34.2436

		prongs
gS 34.2422	22mm	offset
gS 34.2423	22mm	in-line
gS 34.2435	36mm	offset
gS 34.2436	36mm	in-line

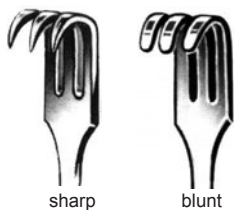
Freeman Face Lift Retractor
7" straight
4 sharp prongs



gS 34.3437 37mm offset prongs

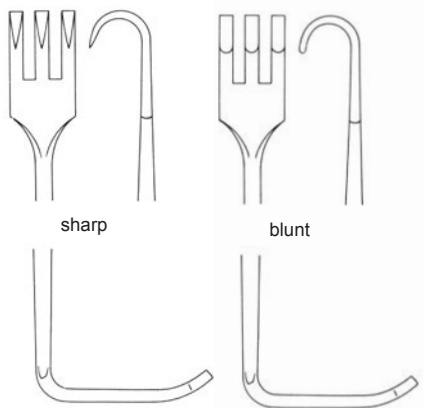
Freeman Face Lift Retractor
7" curved backward
4 sharp prongs





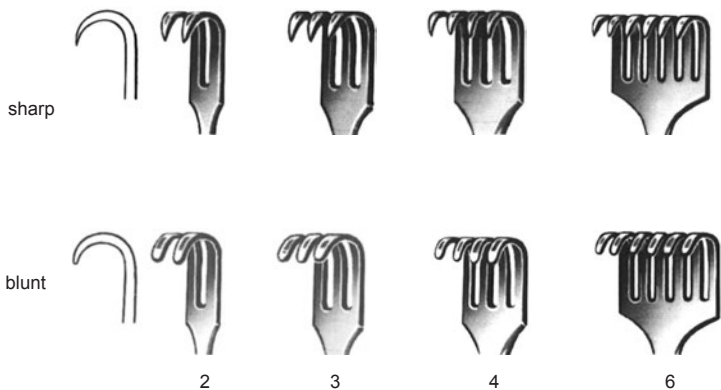
gS 34.1920 sharp
gS 34.1930 blunt

Mathieu Retractor
6 1/4"
3 prongs



gS 34.1845 3 prongs sharp
gS 34.1855 3 prongs blunt
gS 34.1865 2 blunt prongs and
1 sharp middle prong

Senn Retractor
6 1/4"



	sharp prongs
gS 34.2980	2
gS 34.3020	3
gS 34.3040	4
gS 34.3060	6

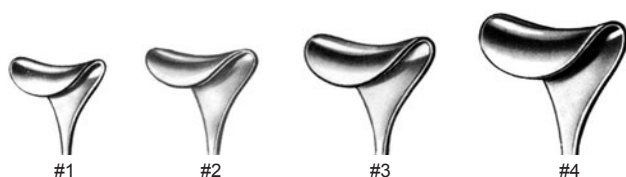
	blunt prongs
gS 34.3080	2
gS 34.3120	3
gS 34.3140	4
gS 34.3160	6

Volkmann Retractor
4 1/2"
ring handle



34-37/8 - hand-held retractors

34-37

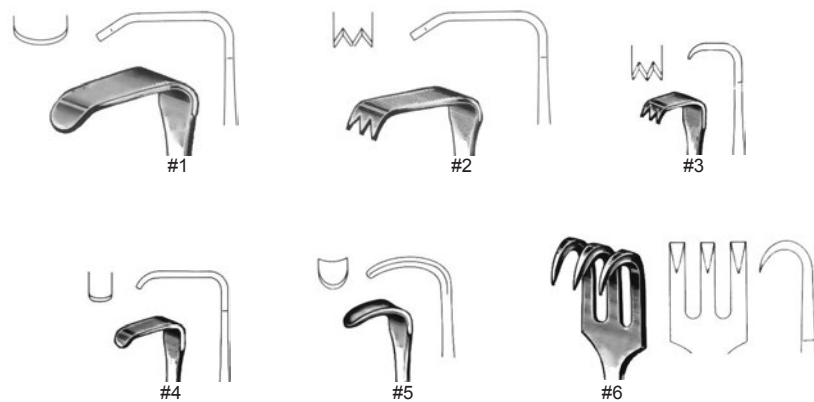


	#
gS 34.4580	1 12mm
gS 34.4600	2 13mm
gS 34.4620	3 15mm
gS 34.4640	4 17mm

Desmarres Lid Retractor

5 1/2"

all blades 10mm depth



	#	width x depth
gS 34.2160	1	7mm x 18mm
gS 34.2180	2	6mm x 17mm
gS 34.2220	3	4mm x 8mm
gS 34.2240	4	4mm x 10mm
gS 34.2280	5	4mm x 7mm
gS 34.2300	6	8mm x 7mm

Meyerding Finger Retractor

7"

with single finger ring



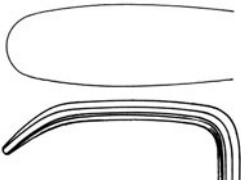
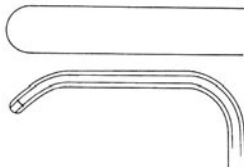
gS 36.6200 7 3/4"

Little Retractor
13mm



gS 36.6280 7 3/4"

Lahey Retractor
6mm width x 26mm depth



gS 36.2000

gS 36.2000 3/8" x 1 1/4"
gS 36.2040 3/8" x 1 1/2"
gS 36.2080 1/2" x 1 1/2"
gS 36.2120 5/8" x 1 1/2"

Langenbeck Retractor
8 1/2"
hollow handle



gS 36.2128 1/4" x 1"
gS 36.2130 3/8" x 1 1/8"
gS 36.2132 1/2" x 1 1/8"
gS 36.2134 5/8" x 1 1/8"
gS 36.2136 1/2" x 1 5/8"
gS 36.2138 5/8" x 1 5/8"

Langenbeck Retractor
8 1/2"
ring handle



34-37/10 - hand-held retractors

34-37



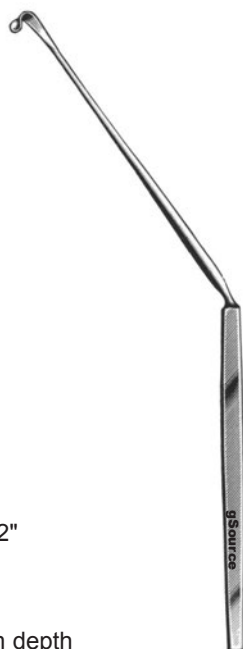
gS 36.6380 8 1/2"

Nerve Root Retractor
bayonet handle
4mm



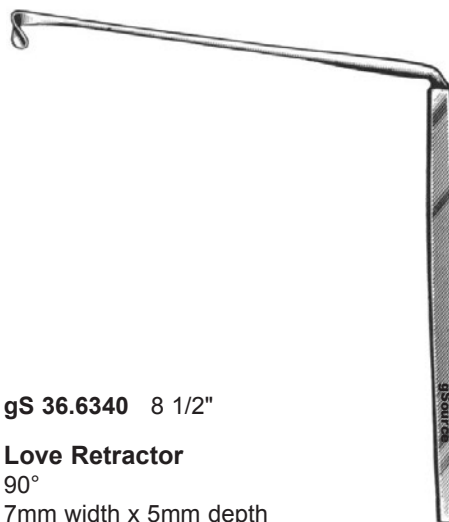
gS 36.6300 8 1/2"

Love Retractor
straight
7mm width x 5mm depth



gS 36.6320 8 1/2"

Love Retractor
45°
7mm width x 5mm depth



gS 36.6340 8 1/2"

Love Retractor
90°
7mm width x 5mm depth



gS 36.6360 8mm
gS 36.6362 13mm

Scoville Nerve Retractor
8"
angled



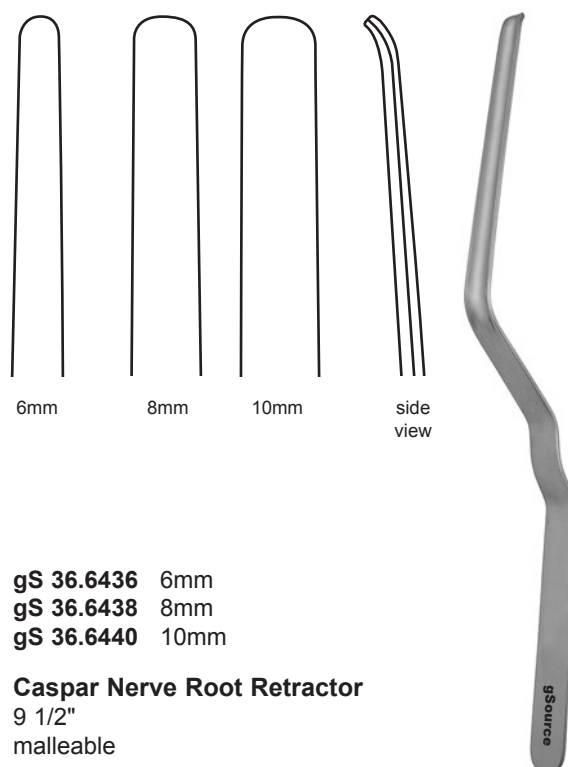
gS 36.6507 7mm
gS 36.6509 9mm
gS 36.6513 13mm

Holscher Retractor
9 1/2"
fenestrated handle



gS 36.6410 8 1/2"

Campbell Nerve Root Retractor
10mm

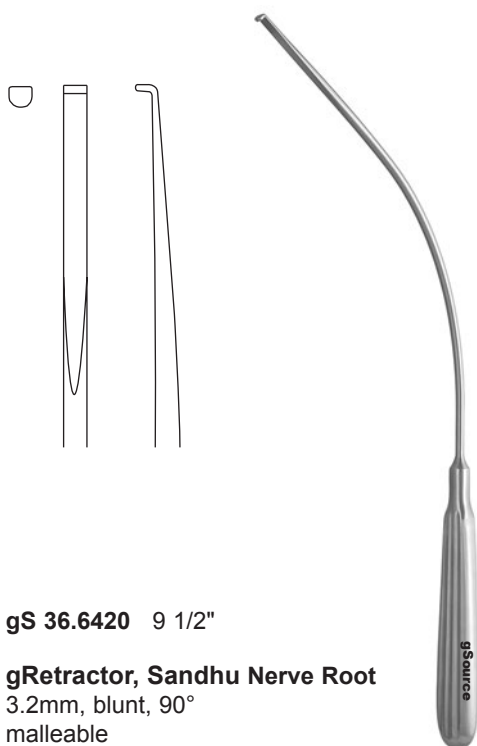


gS 36.6436 6mm
gS 36.6438 8mm
gS 36.6440 10mm

Caspar Nerve Root Retractor
9 1/2"
malleable

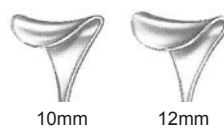
34-37/12 - hand-held retractors

34-37



gS 36.6420 9 1/2"

gRetractor, Sandhu Nerve Root
3.2mm, blunt, 90°
malleable



gS 36.6230 10mm
gS 36.6232 12mm

Cushing Vein Retractor
8"



gS 36.6210 9"

Cushing Vein Retractor
13mm
fenestrated handle



gS 36.6238 8 1/2"

Cushing Decompression Retractor
fenestrated handle and blade



gS 36.6240 8 1/2"

Green Retractor

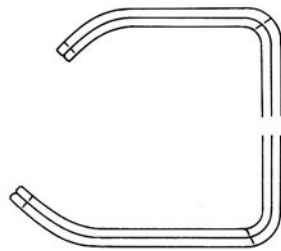
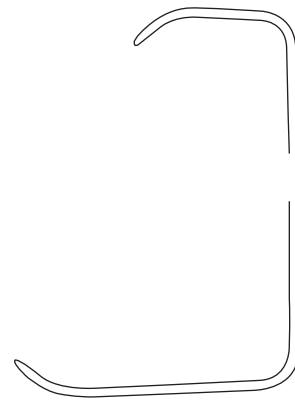
fenestrated handle and blade
20mm width x 23mm depth



gS 36.5735 5 1/2"

Children's Hospital Retractor

11mm width x 22mm depth
14mm width x 35mm depth



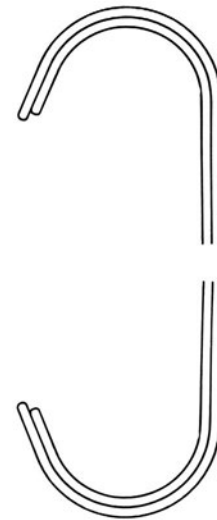
4 3/4"

gS 36.6030 4 3/4"

gS 36.6035 6"

Farabeuf Retractor

double ended
set of 2



gS 36.5800 5"

Parker Retractor

double ended
set of 2



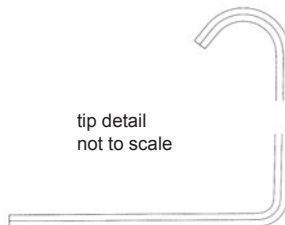
34-37/14 - hand-held retractors

34-37



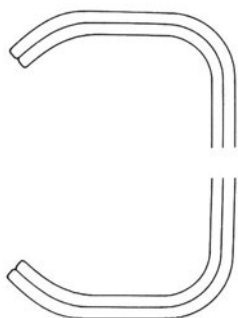
gS 36.5820 7 1/4"

Parker Retractor
double ended
set of 2



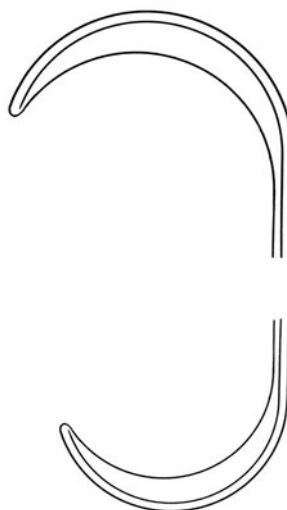
gS 36.5940 6"

Parker-Mott Retractor
double ended
set of 2



gS 36.4880 6"

Mayo-Collins Retractor
double ended
set of 2



gS 36.4760 7 1/2"

Goelet Retractor
double ended

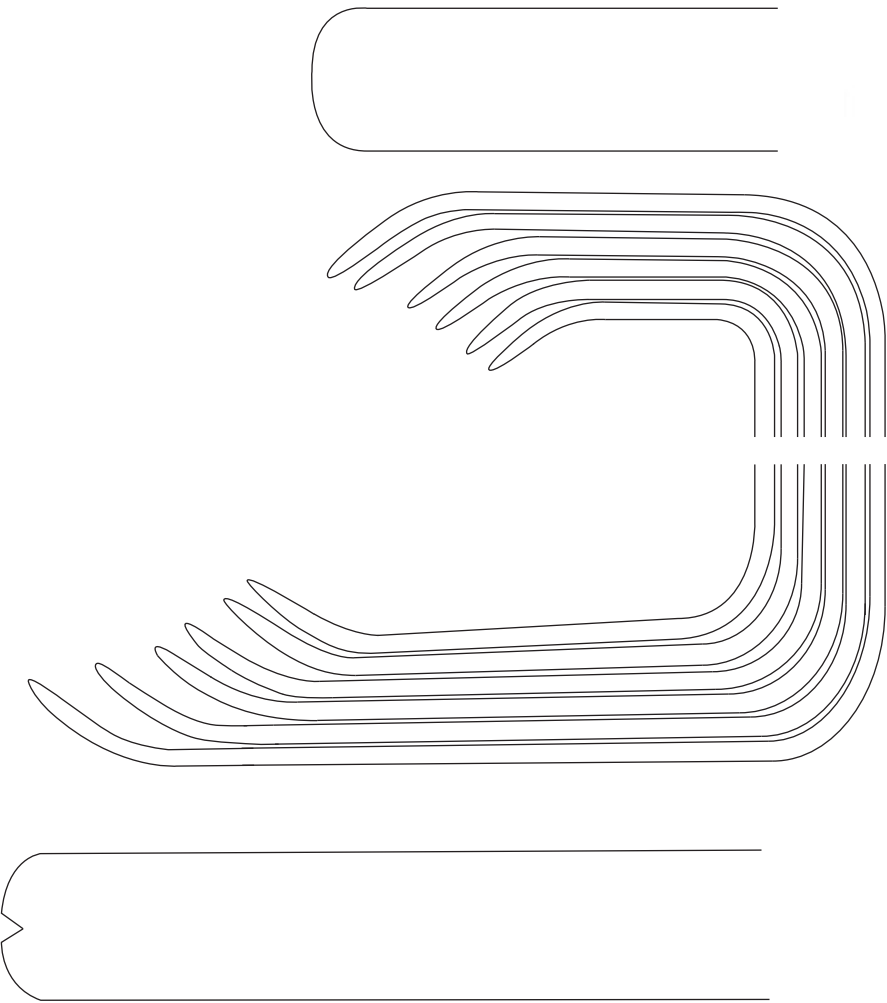


OAL = Overall Length

Set includes 6 retractors, one each
of the following sizes:

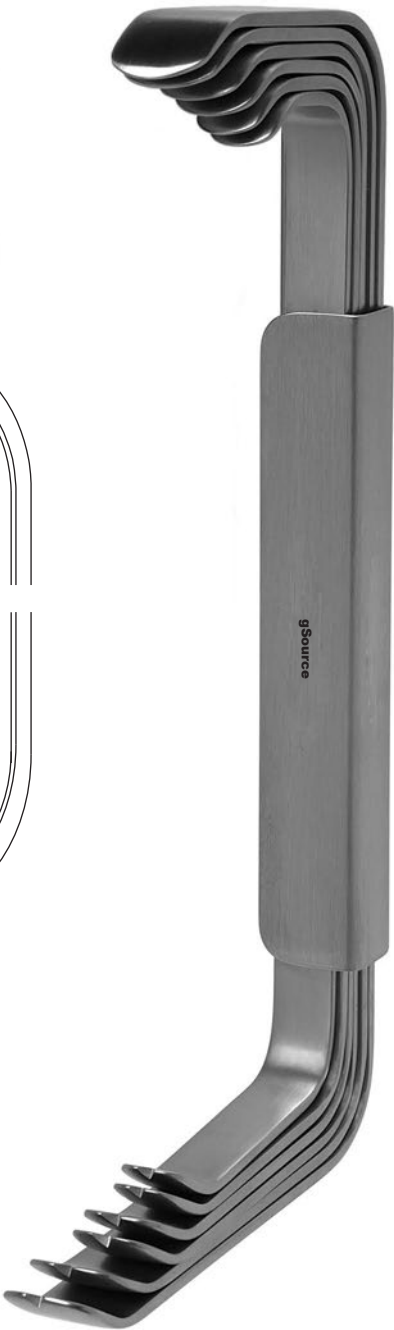
OAL	Blade Depth	Blade Width
9"	114mm and 71mm	19mm
8 3/4"	102mm and 65mm	19mm
8 1/2"	91mm and 56mm	16mm
8 1/4"	83mm and 48mm	16mm
8"	75mm and 42mm	13mm
7 3/4"	68mm and 35mm	13mm

5" clip (holds retractors)



gS 36.6100 9"

Sofield Retractor
double ended
set of 6 with clip



34-37/16 - hand-held retractors

34-37

gS 36.4720 8 1/2"

US Army Navy Retractor
double ended
set of 2



gS 36.3120 9 1/2" small
gS 36.3140 10 1/2" large

Richardson Eastman Retractor



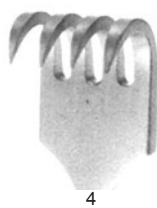
sharp



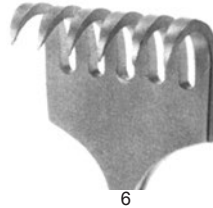
2



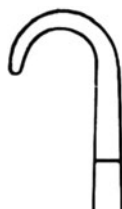
3



4



6



blunt



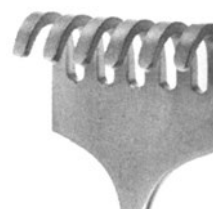
2



3



4



6

sharp
prongs
gS 35.3121 2
gS 35.3131 3
gS 35.3141 4
gS 35.3161 6

blunt
prongs
gS 35.3122 2
gS 35.3132 3
gS 35.3142 4
gS 35.3162 6

Murphy Retractor
7 3/4"
with side wings



gS 36.1724 7 1/2"

Israel Retractor
4 blunt prongs
with side wings



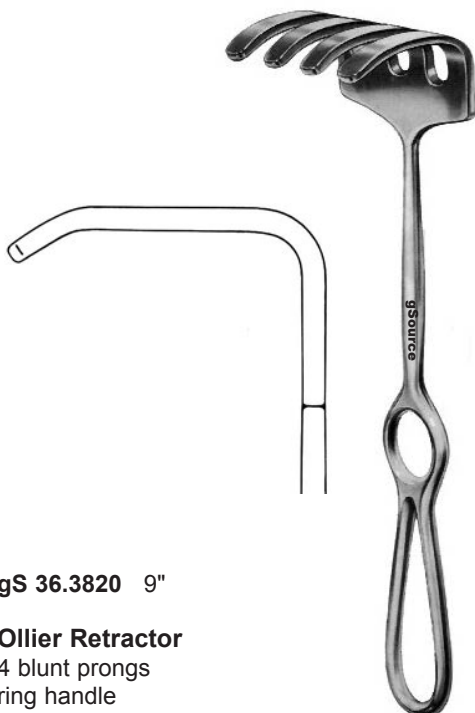
	prongs
gS 36.1780	3
gS 36.1800	4
gS 36.1802	5
gS 36.1804	6

Israel Retractor
9 1/2", blunt prongs
ring handle



gS 36.3820 9"

Ollier Retractor
4 blunt prongs
ring handle



gS 36.4061 9"

Volkman Retractor
6 sharp prongs
ring handle



34-37/18 - hand-held retractors

34-37

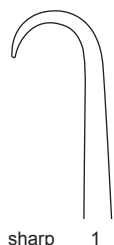
gS 34.4380 10" 38mm

Mueller Rake Retractor
8 sharp prongs
ring handle

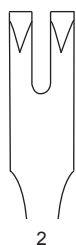


	width x depth
gS 36.3842	2 1/4" x 1 1/2"
gS 36.3844	2 1/4" x 2"
gS 36.3846	2 1/4" x 2 1/2"
gS 36.3848	2 1/4" x 3"

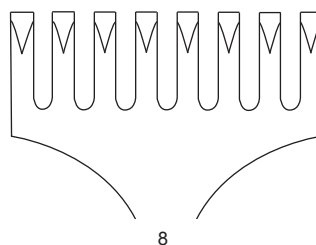
Deep Rake Retractor
11"
4 blunt prongs



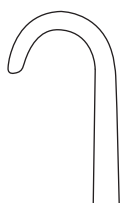
sharp 1



2



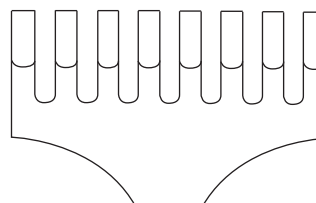
8



blunt 1



2



8

	sharp prongs
gS 36.3540	1
gS 36.3580	2
gS 36.3620	3
gS 36.3640	4
gS 36.3660	6
gS 36.3670	8

	blunt prongs
gS 36.3676	1
gS 36.3680	2
gS 36.3720	3
gS 36.3740	4
gS 36.3760	6
gS 36.3780	8

Volkman Retractor
8 1/2"
ring handle



hand-held retractors - 34-37/19

34-37



gS 36.2240

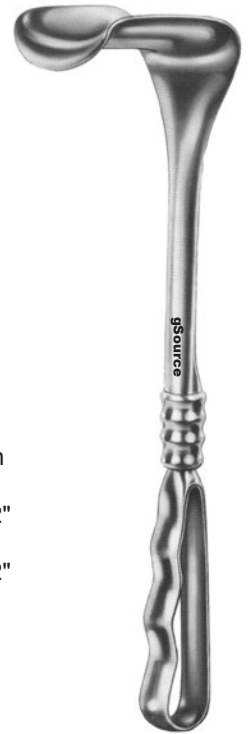
	width x depth
gS 36.2240	5/8" x 1 3/4"
gS 36.2241	7/8" x 2 1/2"
gS 36.2242	3/4" x 2 7/8"

Sauerbruch Retractor
9"



		width x depth
gS 36.3160	9 1/2"	1 1/2" x 2"
gS 36.3180	9 1/2"	2" x 2 1/2"
gS 36.3200	10"	2 1/2" x 3"
gS 36.3220	10 1/2"	3" x 3 1/2"

Kelly Retractor
loop handle



	width x depth
gS 36.3070	3/4" x 1"
gS 36.3072	1" x 1 1/4"
gS 36.3074	1 1/2" x 1 1/2"
gS 36.3076	3/4" x 2"

Richardson Retractor
9 1/2"
loop handle



		width x depth
gS 36.3000	9 1/2"	3/4" x 1"
gS 36.3020	9 1/2"	1" x 1 1/4"
gS 36.3040	9 1/2"	1 1/2" x 1 1/2"
gS 36.3060	9 1/2"	3/4" x 2"
gS 36.3050	10"	1 3/4" x 2 5/8"

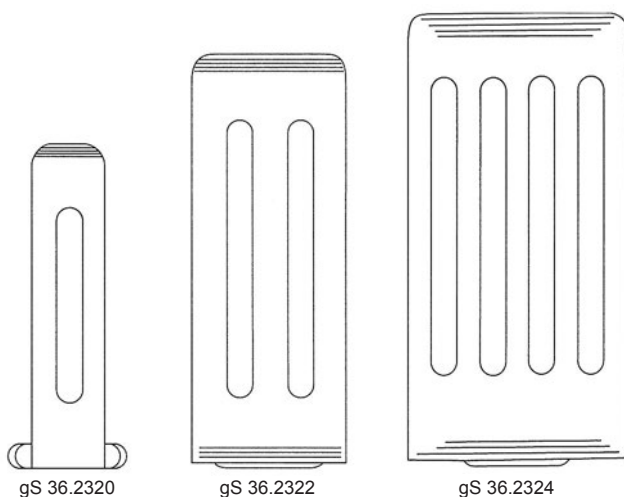
Richardson Retractor
grip handle



34-37/20 - hand-held retractors

34-37

tip details
not to scale



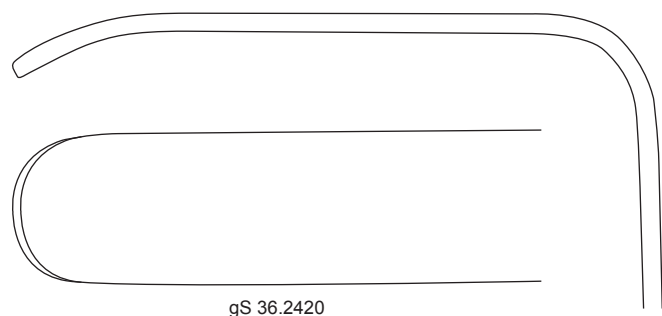
gS 36.2320

gS 36.2322

gS 36.2324

		width x depth
gS 36.2320	9 1/2"	22mm x 82mm
gS 36.2322	10"	43mm x 108mm
gS 36.2324	10"	65mm x 115mm

Coryllos Retractor
ring handle



gS 36.2420

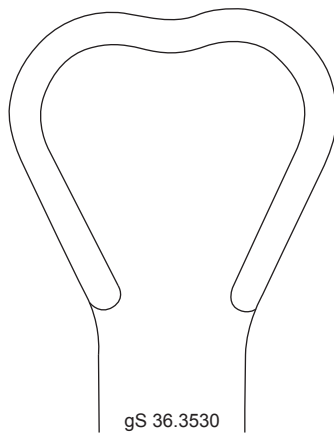
	width x depth
gS 36.2420	20mm x 82mm
gS 36.2422	20mm x 102mm
gS 36.2424	25mm x 122mm
gS 36.2426	25mm x 140mm
gS 36.2428	30mm x 162mm
gS 36.2430	30mm x 182mm

Brunner Retractor
10"
ring handle



hand-held retractors - 34-37/21

WL = Working Length



Biocompatible silicone handle helps to prevent slippage and provide a secure grip.

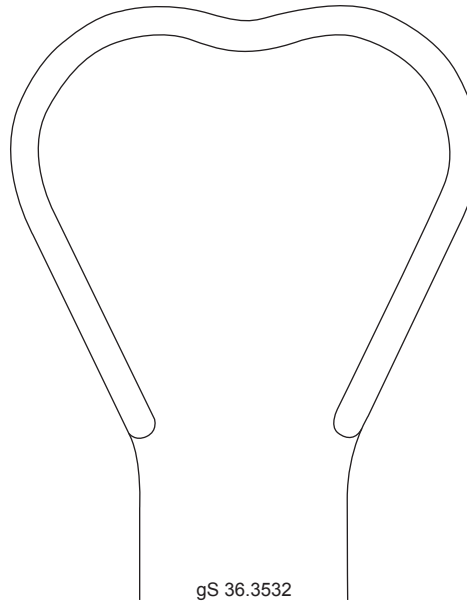
gS 36.3530 40mm

gS 36.3532 62mm

gRetractor, Harrington

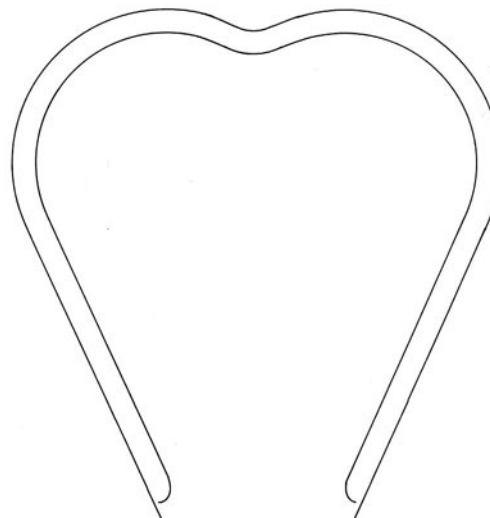
12 1/2", 5" WL

5" blue silicone grip handle



34-37

Commonly referred to as a "sweetheart" retractor due to shape of the working end. Useful in abdominal cavity.



gS 36.3518

		width x depth	
gS 36.3512	9"	1"	x 3"
gS 36.3514	13"	1 1/2"	x 5"
gS 36.3516	13"	2 1/2"	x 5"
gS 36.3518	13"	2 1/2"	x 7"

Harrington Retractor

grip handle



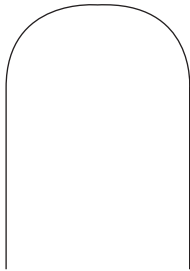
34-37/22 - hand-held retractors

34-37

Designed to retract the left renal vein during procedures on abdominal aorta or renal arteries. Gently curved distal tip for atraumatic control.

		width x depth
gS 36.3504	12"	1" x 4"
gS 36.3507	12 1/2"	1" x 7"

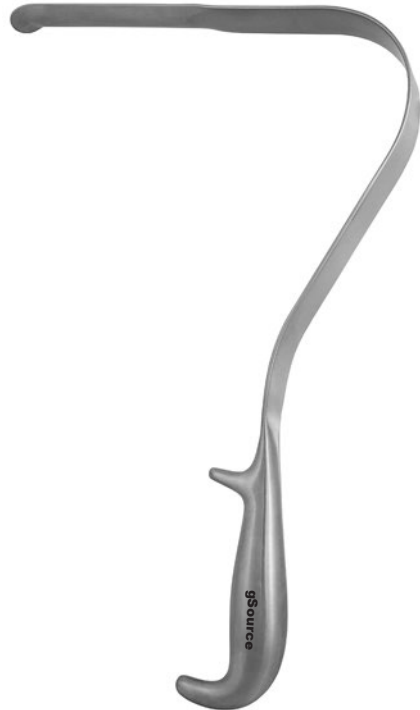
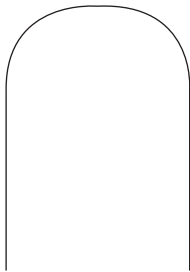
Wylie Renal Vein Retractor
grip handle



Designed to retract the left renal vein during procedures on abdominal aorta or renal arteries. Gently curved distal tip for atraumatic control.

	width x depth
gS 36.3470	1" x 7"
gS 36.3480	1" x 10"

Wylie Renal Vein Retractor
13"
grip handle with horn



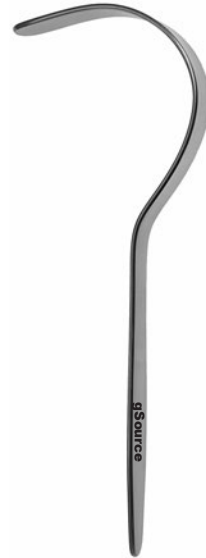
gS 36.3236 8"

Deaver Pediatric Retractor
5/8"



gS 36.3248 7"

Deaver Retractor
3/4"



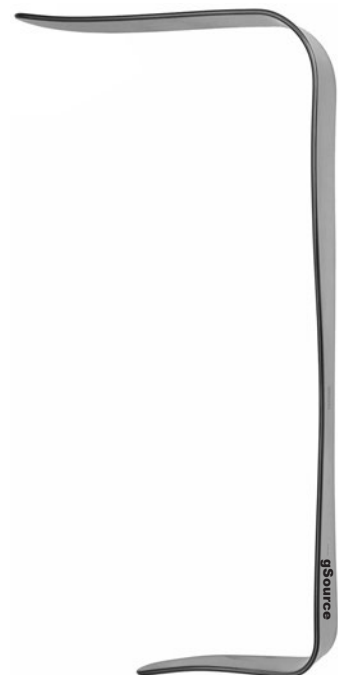
gS 36.3250 8 1/2"

Deaver Retractor
7/8"



gS 36.3285 9"

Deaver Retractor
1"



34-37/24 - hand-held retractors

34-37

gS 36.3291 10 1/2"
Deaver Retractor
1"



gS 36.3292 12"
Deaver Retractor
1"



gS 36.3293 12"
Deaver Retractor
1 1/2"



gS 36.3294 13"
Deaver Retractor
1"



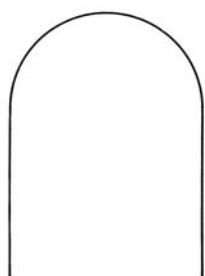
gS 36.3298 12"

Deaver Retractor
2"



gS 36.3296 12"

Deaver Retractor
3"

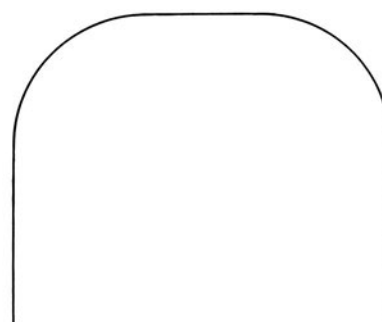


gS 36.3300 10"

gS 36.3320 12"

gS 36.3340 13"

Deaver Retractor
1"
grip handle



gS 36.3400

gS 36.3350 12" 1 1/2"

gS 36.3400 12" 2"

gS 36.3410 14 1/2" 2 1/2"

gS 36.3420 12" 3"

gS 36.3430 12" 4"

Deaver Retractor
grip handle



34-37/26 - hand-held retractors

34-37



Useful in total shoulder arthroplasty and open rotator cuff procedures for retracting the deltoid muscle.

gS 36.9362 8"

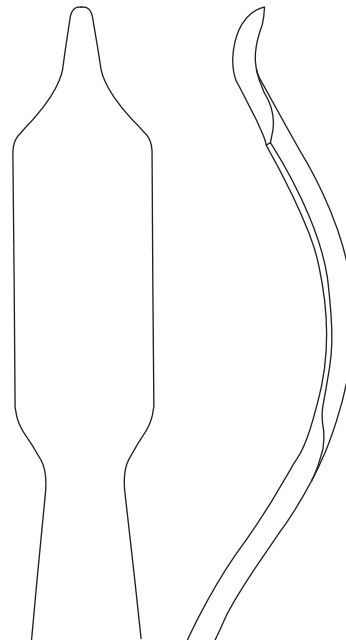
gRetractor
18mm, blunt
60°

Useful to gain exposure when placed between the glenoid and humeral head.

The two prongs wrap around the posterior rim to help distribute force to the glenoid neck.

gS 36.9750 7"

Humeral Head Retractor
2 blunt prongs
strong curve



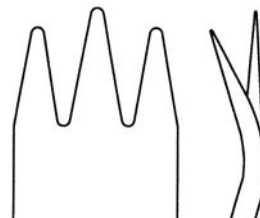
gS 36.9760 8 3/4"

Humeral Head Retractor
18mm
rounded end



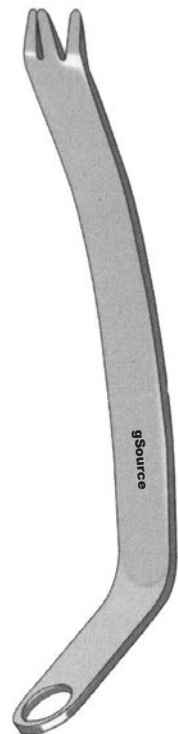
gS 36.9700 7"

Bristow/Bankart Humeral Retractor
2 blunt prongs



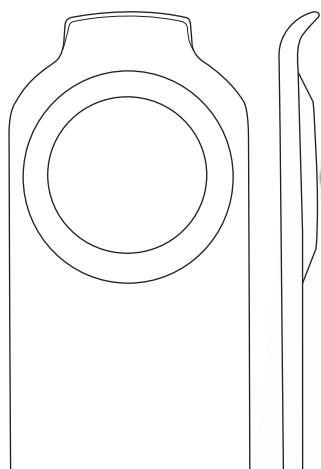
gS 36.9720 7 1/2"

Bristow/Bankart Soft Tissue Retractor
22mm, 3 blunt prongs



34-37/28 - hand-held retractors

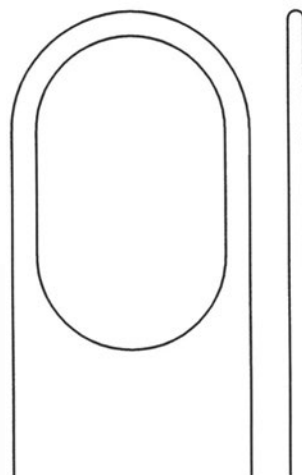
34-37



32mm

width x depth
gS 35.3932 32mm x 81mm
gS 35.3940 40mm x 94mm

Fukuda Style Retractor
 6 1/2"
 with lip, T-handle



32mm

Useful for retracting the humeral head while exposing the glenoid.

width x depth
gS 36.0000 32mm x 81mm
gS 36.0001 38mm x 81mm

Fukuda Style Retractor
 7 1/2"
 T-handle



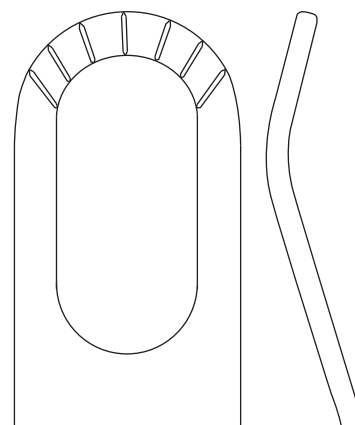
Useful for retracting the humeral head while exposing the glenoid.

Once seated in the gleno-humeral joint, the oval ring retracts the humeral head to allow exposure of the glenoid rim and its articular surface.

Serrations around ring help to improve traction.

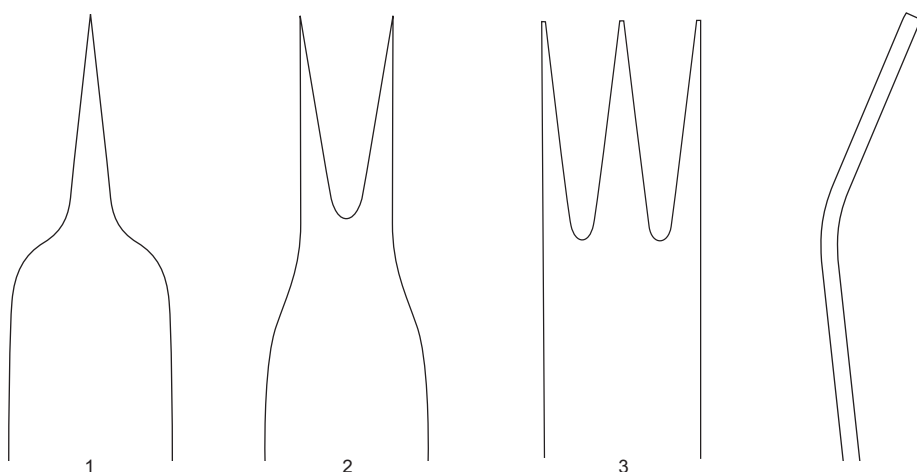
gS 36.0030 30mm
gS 36.0035 35mm

Fukuda-Kujat Style Humeral Head Retractor
 9", with T-handle



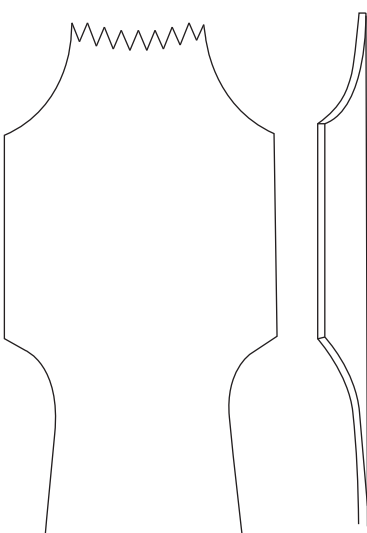
30mm





prongs
gS 36.9729 1
gS 36.9730 2
gS 36.9731 3

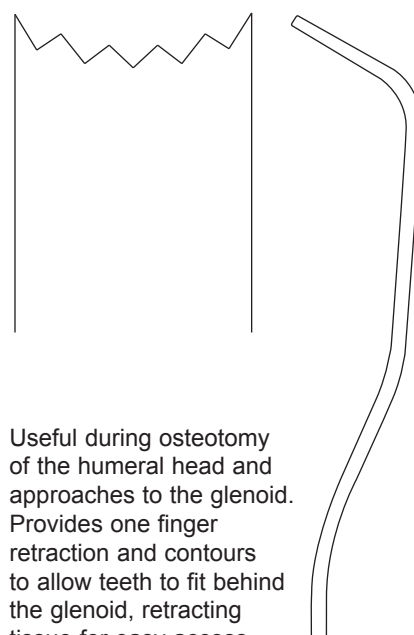
Capsule Retractor
 10", sharp prongs
 22mm



Convex teeth are seated in the glenoid rim while the curve helps to provide optimal visibility to the site.

gS 36.9790 8 1/2"

Glenoid Neck Retractor
 18mm
 sharp teeth



Useful during osteotomy of the humeral head and approaches to the glenoid. Provides one finger retraction and contours to allow teeth to fit behind the glenoid, retracting tissue for easy access to the glenoid.

gS 36.9793 10"

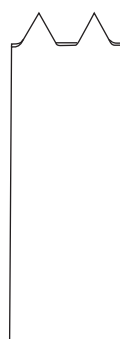
Posterior Glenoid Neck Retractor
 30mm, sharp teeth



34-37/30 - hand-held retractors

34-37

Useful to medially retract the subscapularis when prongs are securely seated in the glenoid neck. Also useful in securing the medial flap during capsule repair.



15mm



23mm



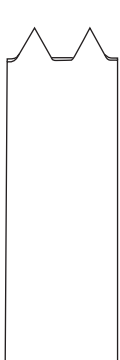
gS 36.9946 10" 23mm

gS 36.9952 11" 15mm

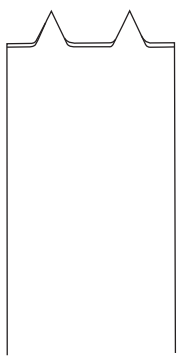
Kolbel Glenoid Retractor

2 sharp prongs

Useful to medially retract the subscapularis when prongs are securely seated in the glenoid neck. Also useful in securing the medial flap during capsule repair.



15mm



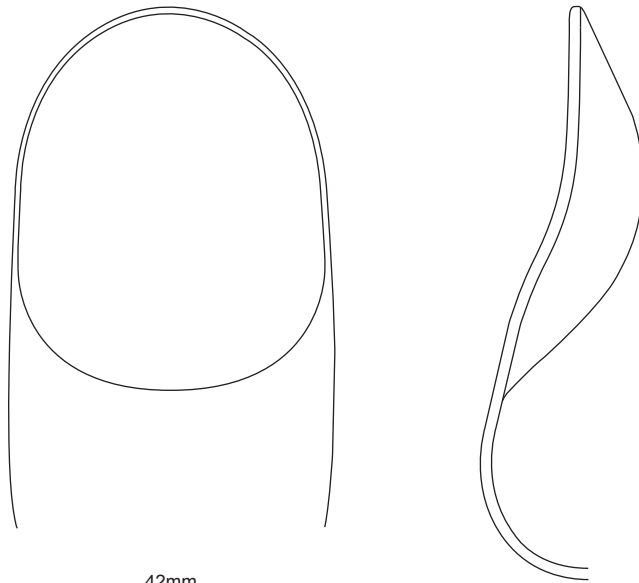
23mm



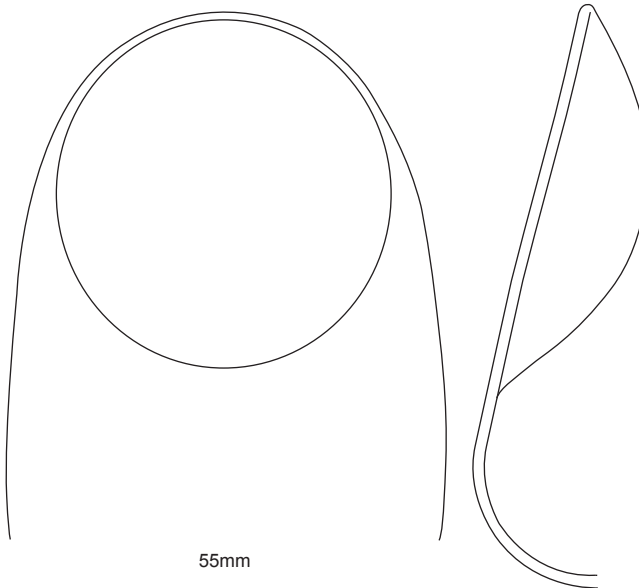
			prongs
gS 36.9950	11"	15mm	1
gS 36.9956	11"	23mm	1
gS 36.9962	11 1/2"	15mm	2
gS 36.9973	11 1/2"	23mm	2

Kolbel Glenoid Retractor

sharp prongs



42mm



55mm

Useful for retracting the deltoid and exposing the humeral head.

gS 36.9738 42mm

gS 36.9740 55mm

Browne-Deltoid Retractor

11"

T-handle with ring

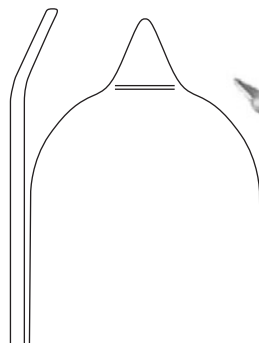


34-37/32 - hand-held retractors

34-37

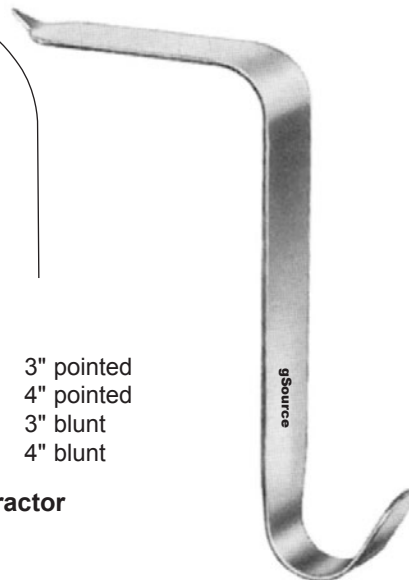
gS 36.4788 13mm
gS 36.4790 18mm
gS 36.4791 20mm
gS 36.4792 23mm

Blade Retractor
7 1/2"
angled



gS 36.5580 7 1/2" 3" pointed
gS 36.5600 8" 4" pointed
gS 36.5550 7 1/2" 3" blunt
gS 36.5560 8" 4" blunt

Taylor Spinal Retractor



gS 35.3000 5"

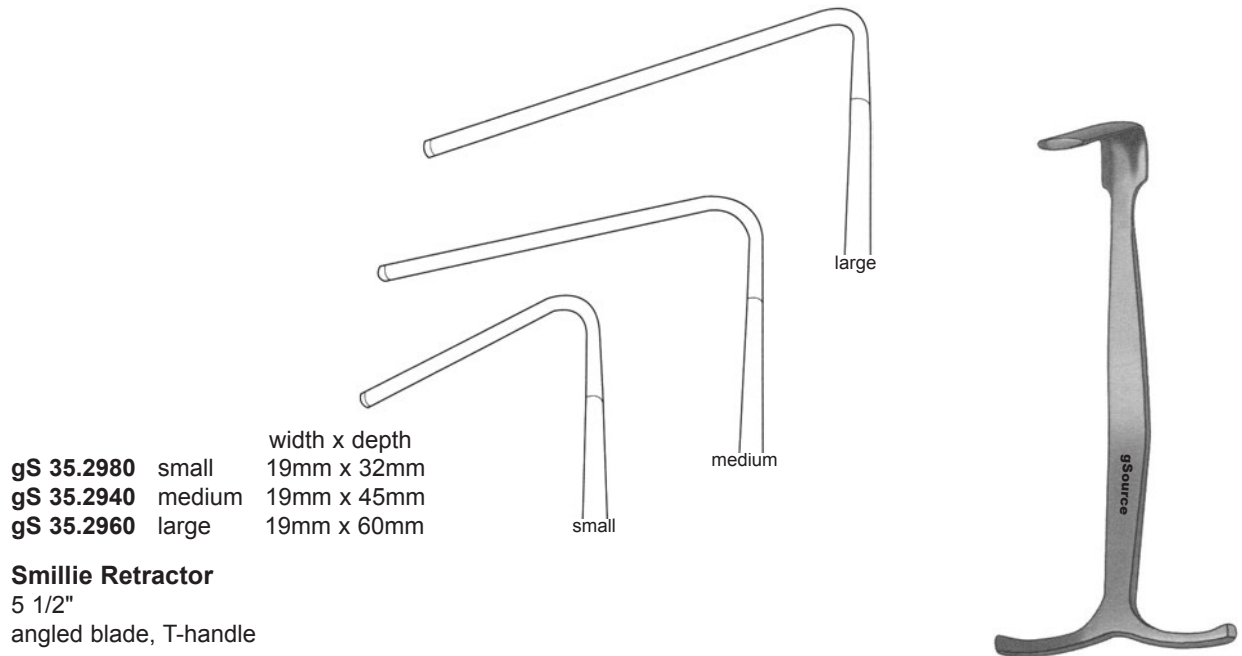
Smillie Retractor
13mm width x 18mm depth
down curved, T-handle



gS 35.2920 5 1/2"

Smillie Retractor
13mm width x 55mm depth
up curved, T-handle





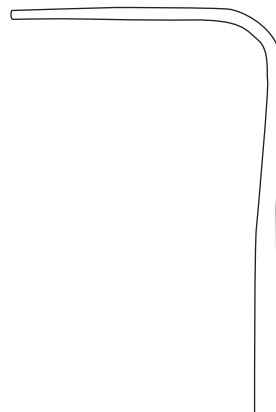
Z Knee Retractor
(Doane Retractor)
6"

34-37/34 - hand-held retractors

34-37

gS 37.3060 7"

Blount Knee Retractor
7mm



gS 37.3064 8 1/2"

Knee Retractor
9mm width x 38mm depth
ring handle



gS 37.3020 10 1/2"

Blount Retractor
37mm



gS 37.3040 10 1/2"

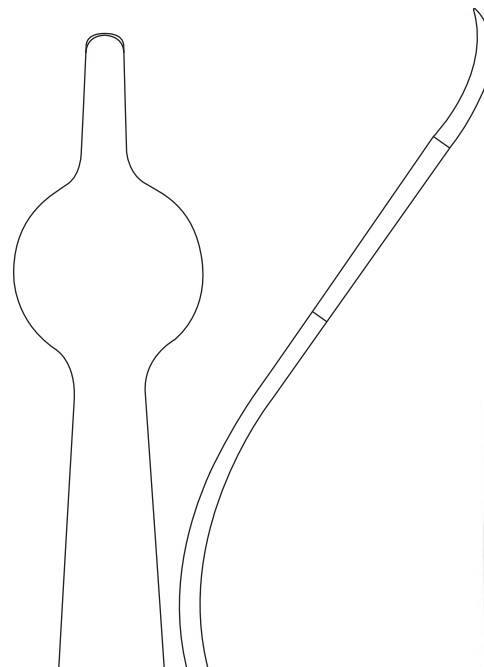
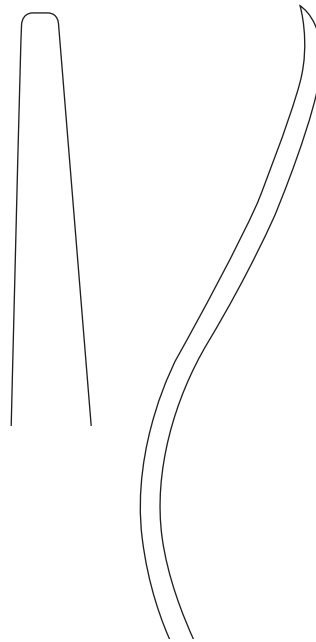
Blount Retractor
44mm
double prong



Useful in knee
procedures.

gS 36.9127 7 3/4"

Tibial Retractor
5mm
rounded end



gS 36.9108 8 1/2"

Collateral Retractor
25mm
rounded end



34-37/36 - hand-held retractors

34-37

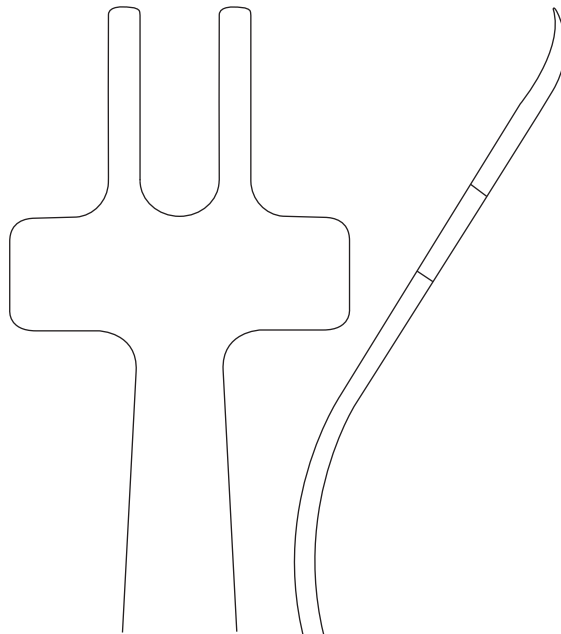
Useful in protecting the lateral collateral ligament and exposing the proximal tibia.

gS 36.9110 9 1/2"

Collateral Soft Tissue Retractor

45mm

11mm 2 prongs blunt



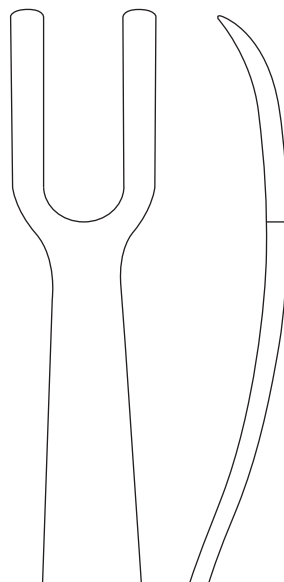
Useful in retracting the tibia away from the femur.

gS 36.9119 10 1/2"

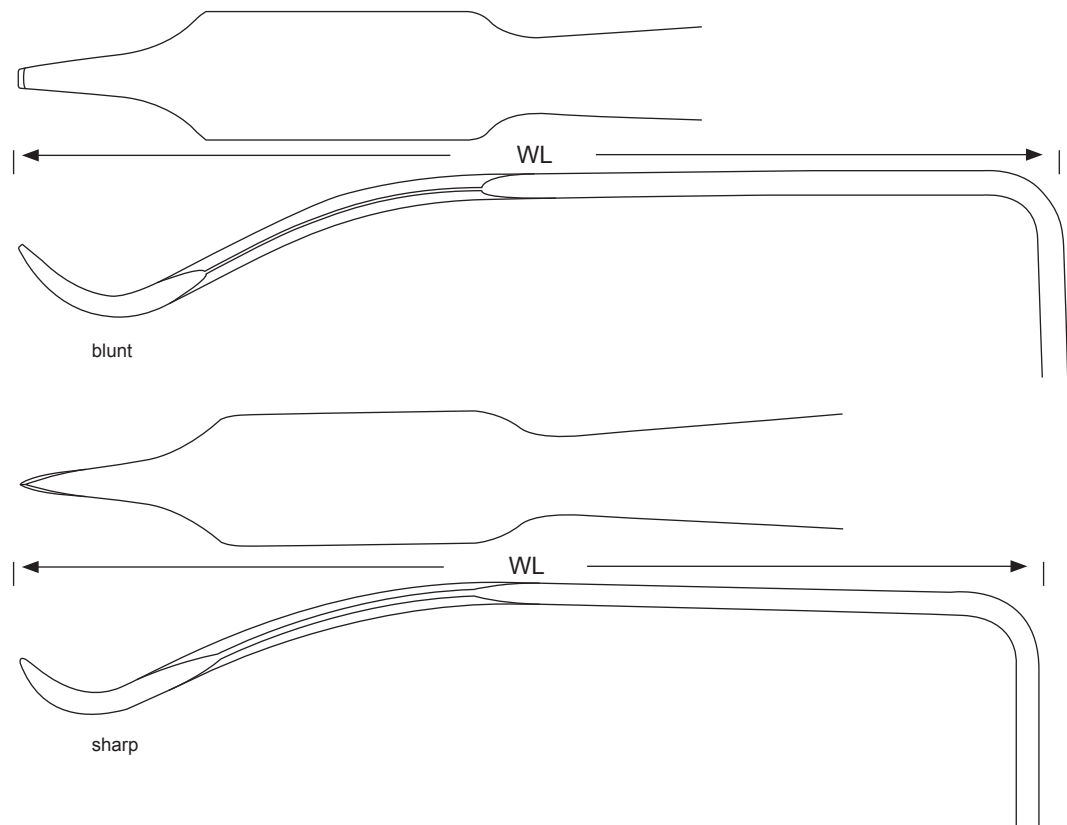
PCL (Posterior Cruciate Ligament) Retractor

19mm

11mm 2 prongs blunt



WL = Working Length



34-37



gS 37.3010 blunt
gS 37.3011 sharp

Ranawat Knee Retractor
9 1/2"
17mm, 5 1/4" WL, 90°

34-37/38 - hand-held retractors

34-37

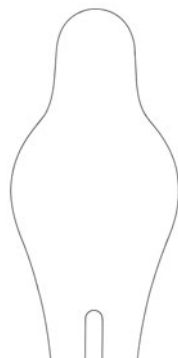


gS 36.1590

	width x depth
gS 36.1580	3/4" x 2"
gS 36.1590	1" x 2"
gS 36.1600	1" x 3"
gS 36.1610	1" x 4"

Hibbs Retractor

9 1/2"
sharp teeth

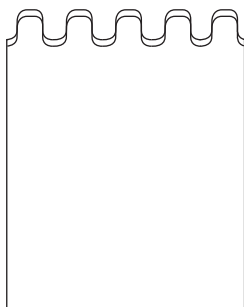


Tip detail
not to scale

gS 36.9800	1 3/4"
gS 36.9840	2 1/2"

Bennett Retractor

10"
grip handle



gS 36.2508	8"
gS 36.2511	11"
gS 36.2514	14"

T-Handle Retractor

32mm width x 110mm depth
angled blade, blunt teeth



		width x depth
gS 36.2580	9"	5/8" x 2 1/4"
gS 36.2620	9"	1" x 2 3/4"
gS 36.2640	9 1/2"	2" x 3 3/4"

Meyerding Retractor
with teeth, grip handle



gS 36.2680 10 1/2"

Meyerding Retractor
3/4" width x 6" depth
with teeth



34-37/40 - hand-held retractors

34-37



gS 37.3072 9" pointed smooth

Aufranc Cobra Retractor

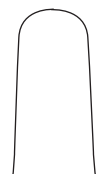
30mm
grip handle



gS 37.3150 11" blunt smooth

Aufranc Cobra Retractor

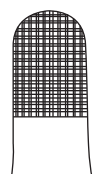
32mm
grip handle



gS 37.3120



gS 37.3140



gS 37.3100



gS 37.3080

gS 37.3120 blunt smooth

gS 37.3140 pointed smooth

gS 37.3100 blunt serrated

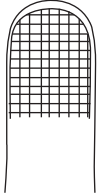
gS 37.3080 pointed serrated

Aufranc Cobra Retractor

11 1/2", 32mm
grip handle



gS 37.3100

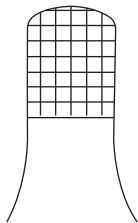


gS 37.3160 11 1/2" blunt cross serrated

Aufranc Cobra Retractor

38mm

grip handle



gS 37.3180 12" blunt cross serrated

gRetractor, Aufranc Cobra

40mm

grip handle



34-37/42 - hand-held retractors

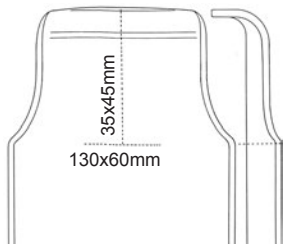
34-37



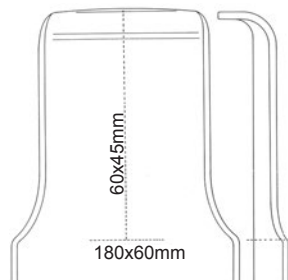
gS 37.2100 10 1/2"
Pelvic Retractor
1" blunt



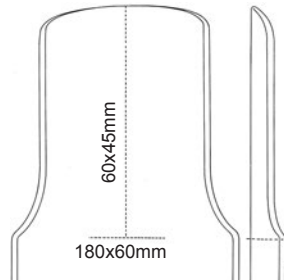
gS 36.9920 12"
Murphy Bone Skid



gS 37.2210



gS 37.2212



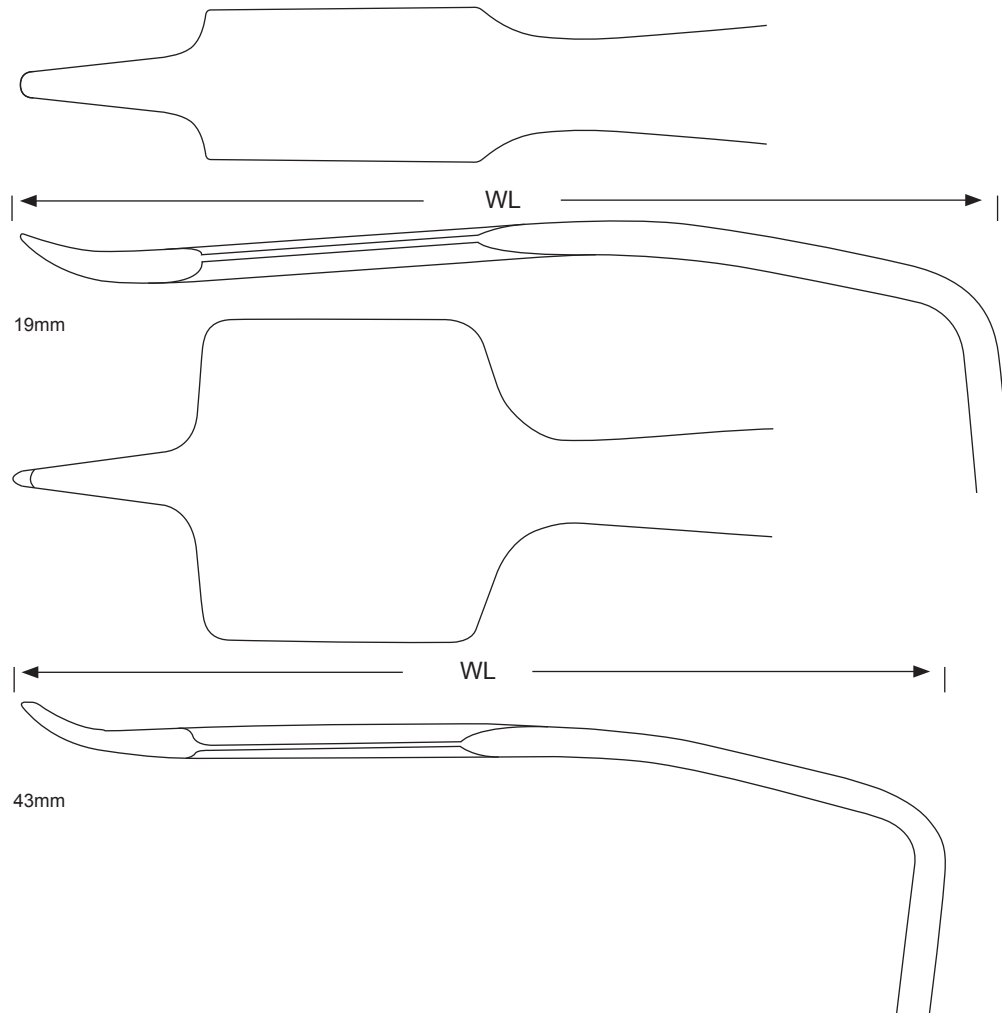
gS 37.2214

gS 37.2210 11 1/2" with lip
gS 37.2212 13" with lip
gS 37.2214 13" without lip

St. Mark's Pelvic Retractor
angled blade
grip handle



WL = Working Length



gS 36.9387 is useful for knee retraction due to narrow design.

gS 36.3990 is useful for retracting tissue at the margins of the joint in knee and hip arthroplasty. For optimal exposure, placement is made over the margins of the joint.

gS 36.9387 19mm

gS 36.9390 43mm

gRetractor, Bent Hohmann

6 3/4"

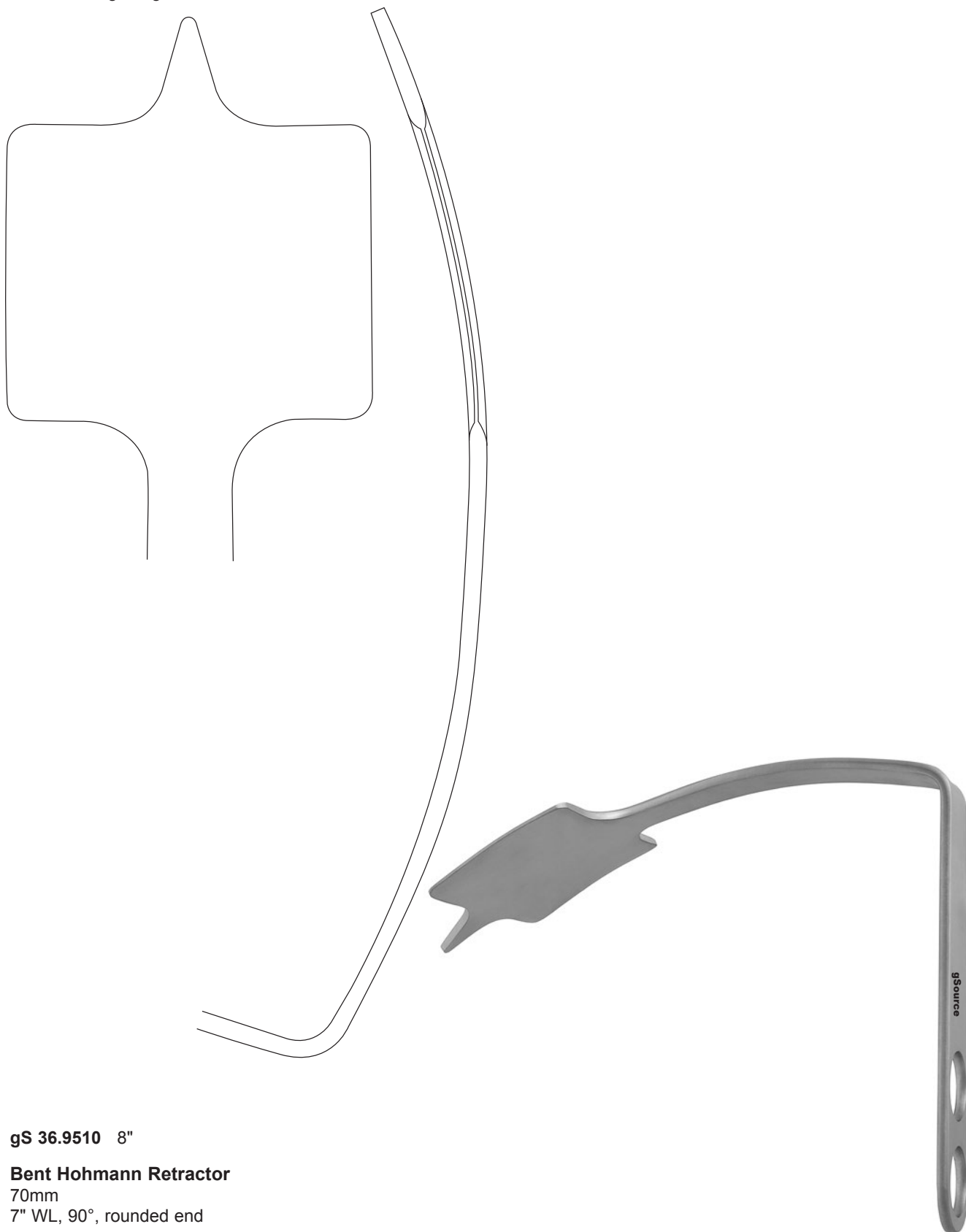
4 3/4" WL, 90°, rounded end



34-37/44 - hand-held retractors

WL = Working Length

34-37

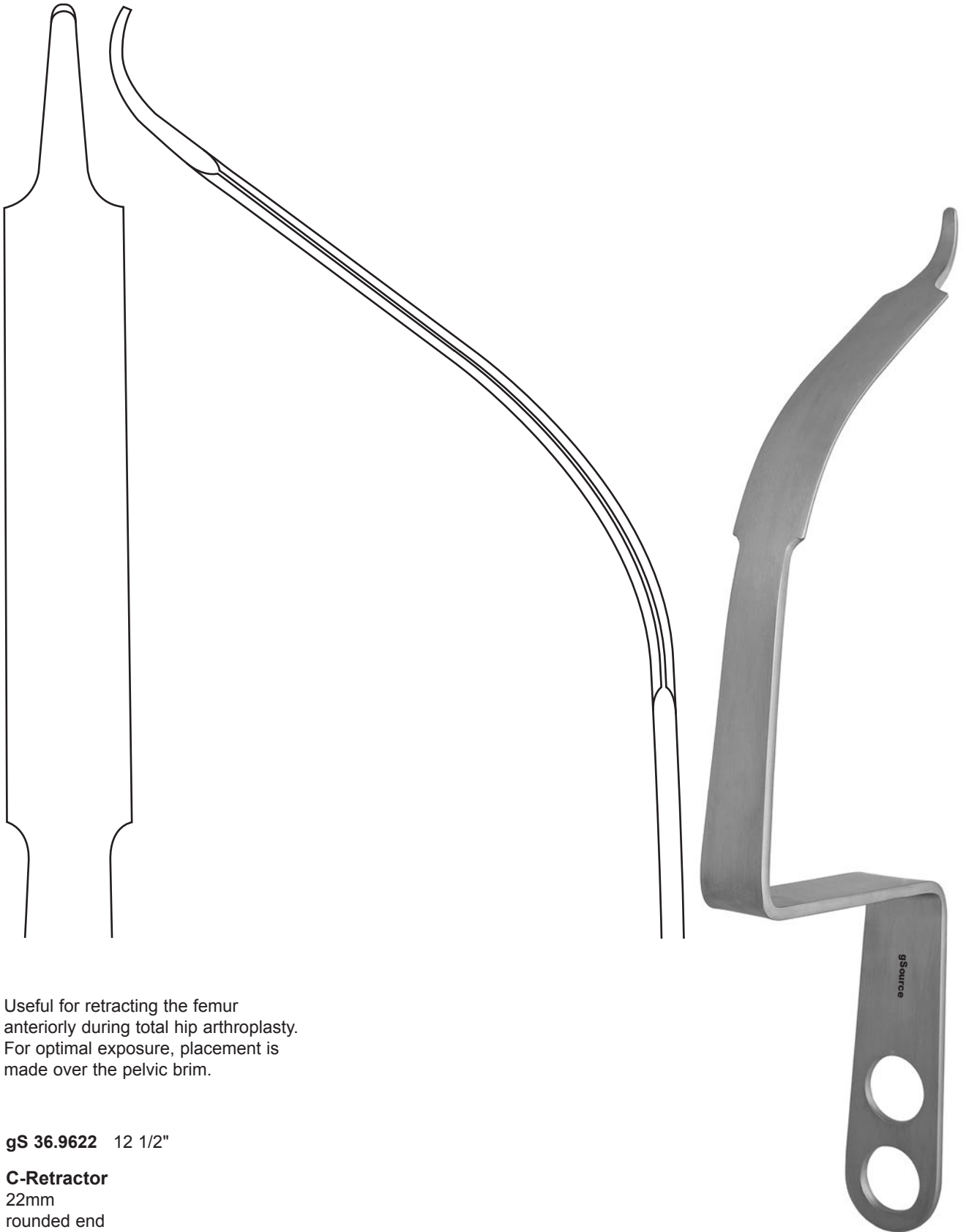


gS 36.9510 8"

Bent Hohmann Retractor

70mm

7" WL, 90°, rounded end



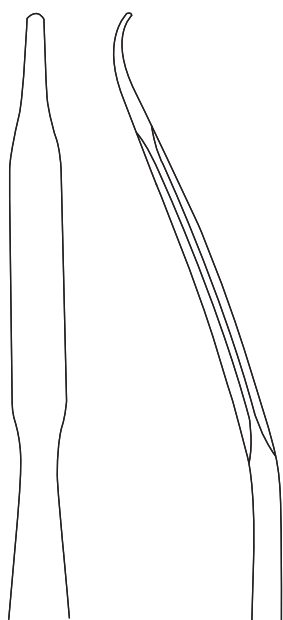
Useful for retracting the femur anteriorly during total hip arthroplasty. For optimal exposure, placement is made over the pelvic brim.

gS 36.9622 12 1/2"

C-Retractor
22mm
rounded end

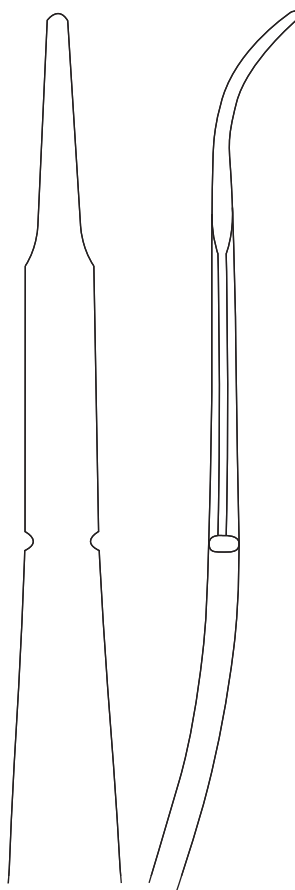
34-37/46 - hand-held retractors

34-37



gS 36.9365 8 1/2"

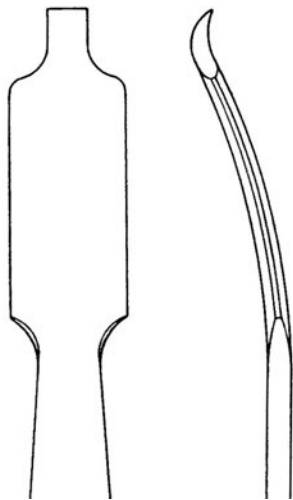
Hohmann Retractor
8mm
rounded end



gS 36.9370 9 1/2"

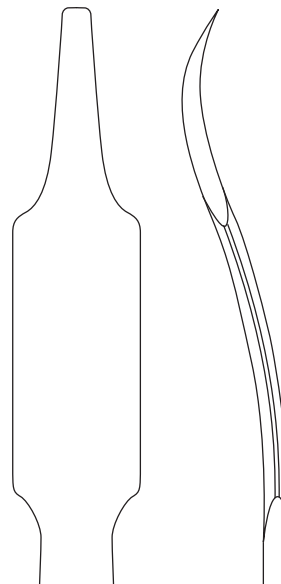
Hohmann Retractor
10mm
rounded end





gS 36.9378 8 1/2"

Hohmann Retractor (Wagner)
17mm, short tip
straight end



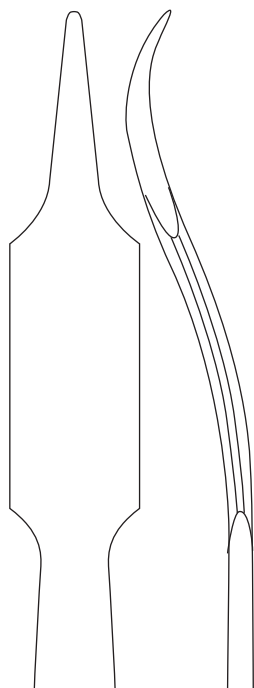
gS 36.9380 9 1/2"

Hohmann Retractor
17mm, long tip
straight end



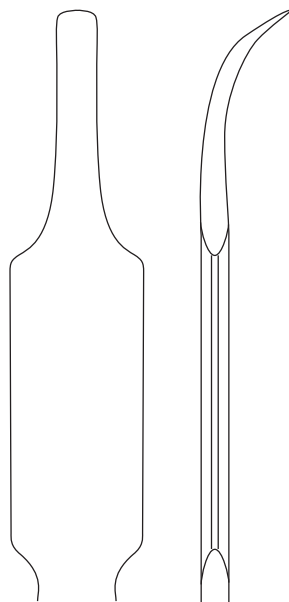
34-37/48 - hand-held retractors

34-37



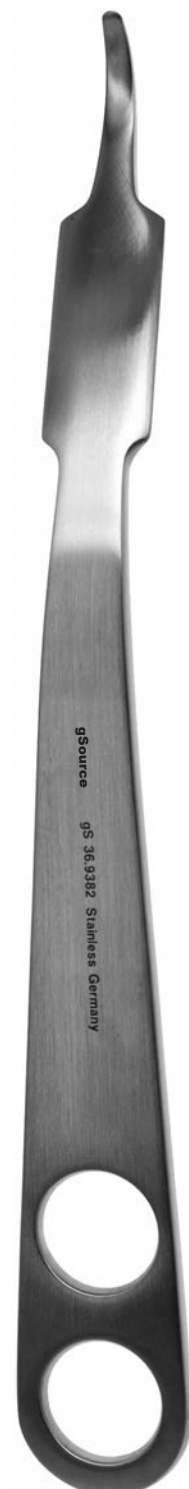
gS 36.9384 9 1/2"

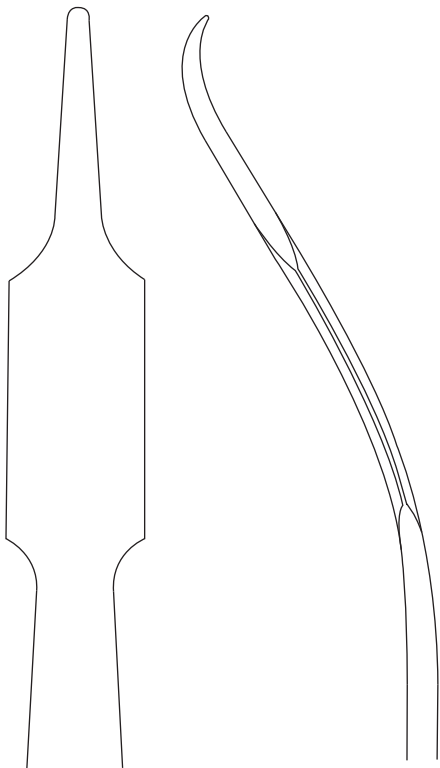
Hohmann Retractor
17mm
rounded end



gS 36.9382 9 1/2"

Hohmann Retractor
18mm
rounded end





gS 36.9442 9 1/2"

Hohmann Retractor

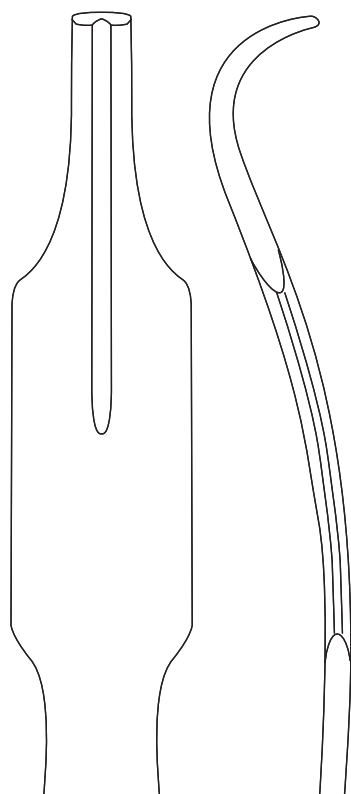
18mm

rounded end



34-37/50 - hand-held retractors

34-37



gS 36.9488 9 1/2"

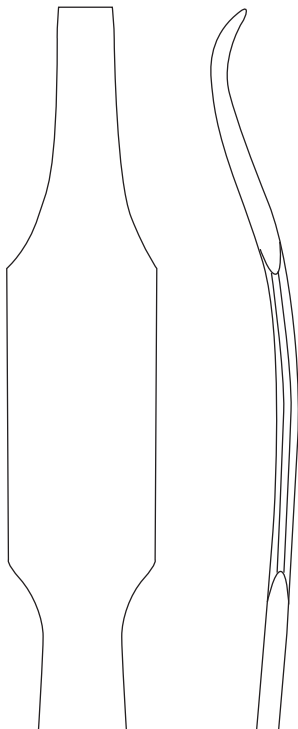
Hohmann Retractor (Lange)
24mm, grooved
straight end



gS 36.9482 10 1/2"

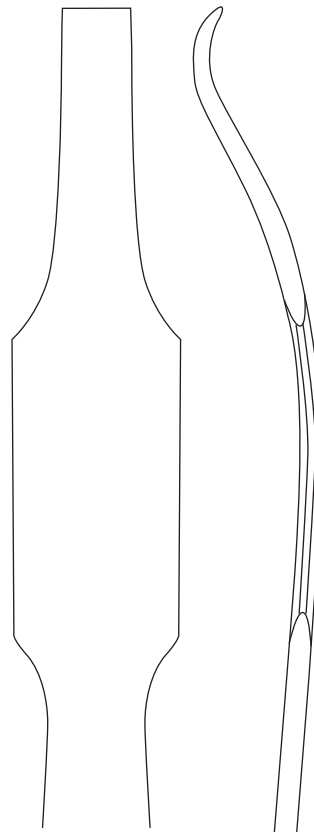
Hohmann Retractor
22mm
rounded end





gS 36.9480 10"

Hohmann Retractor
22mm
straight end



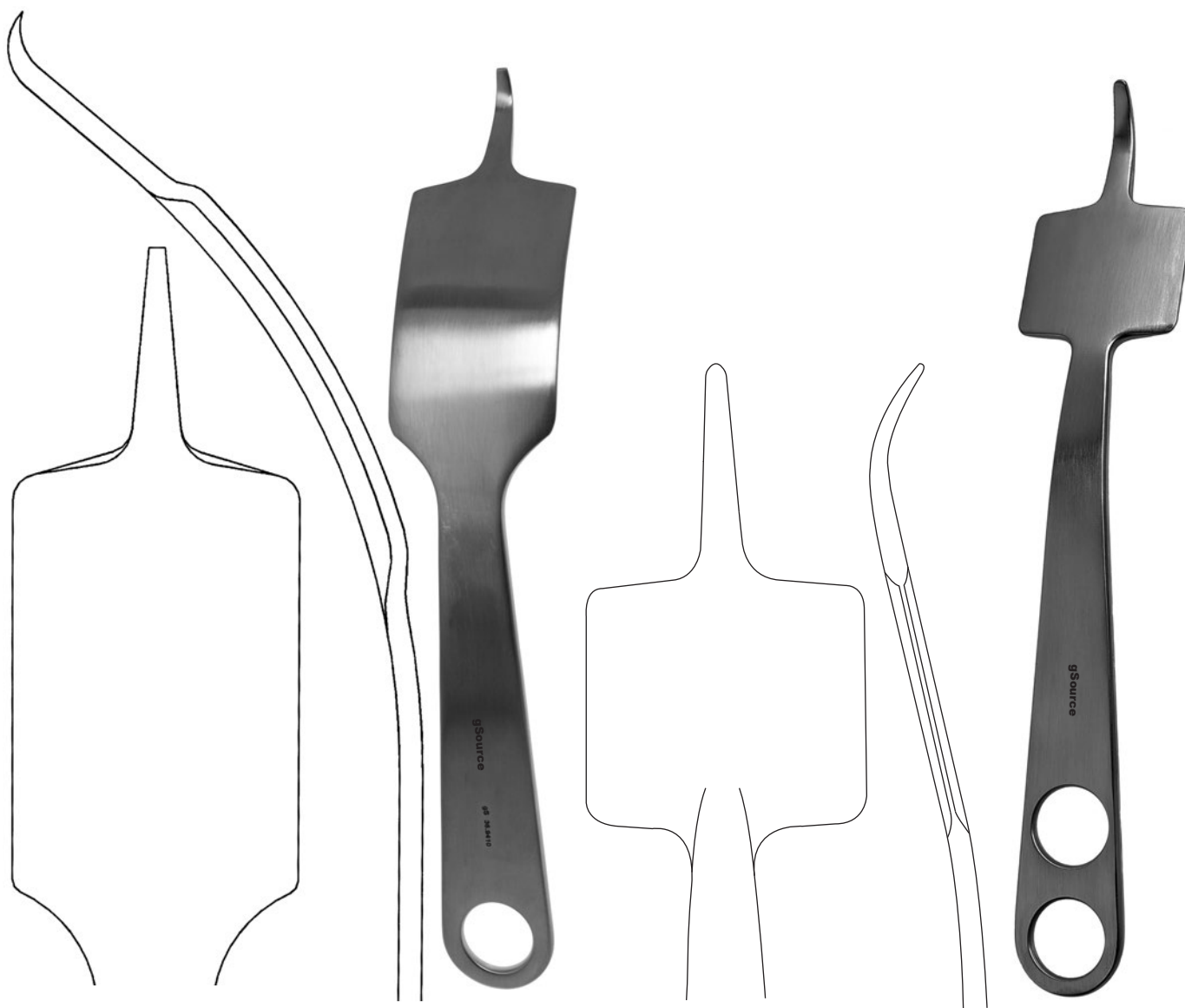
gS 36.9407 10"

Hohmann Retractor
25mm
straight end



34-37/52 - hand-held retractors

34-37

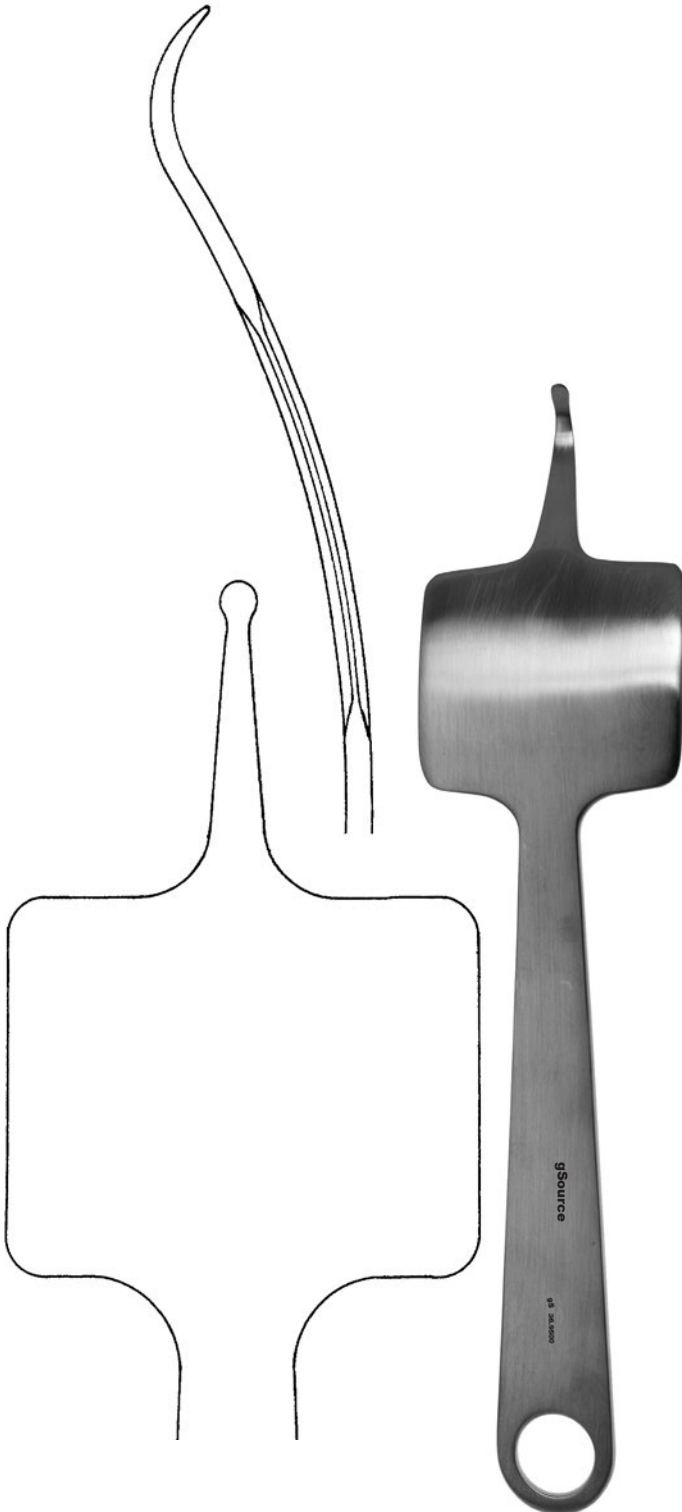


gS 36.9410 9 1/2"

Hohmann Retractor
43mm
straight end

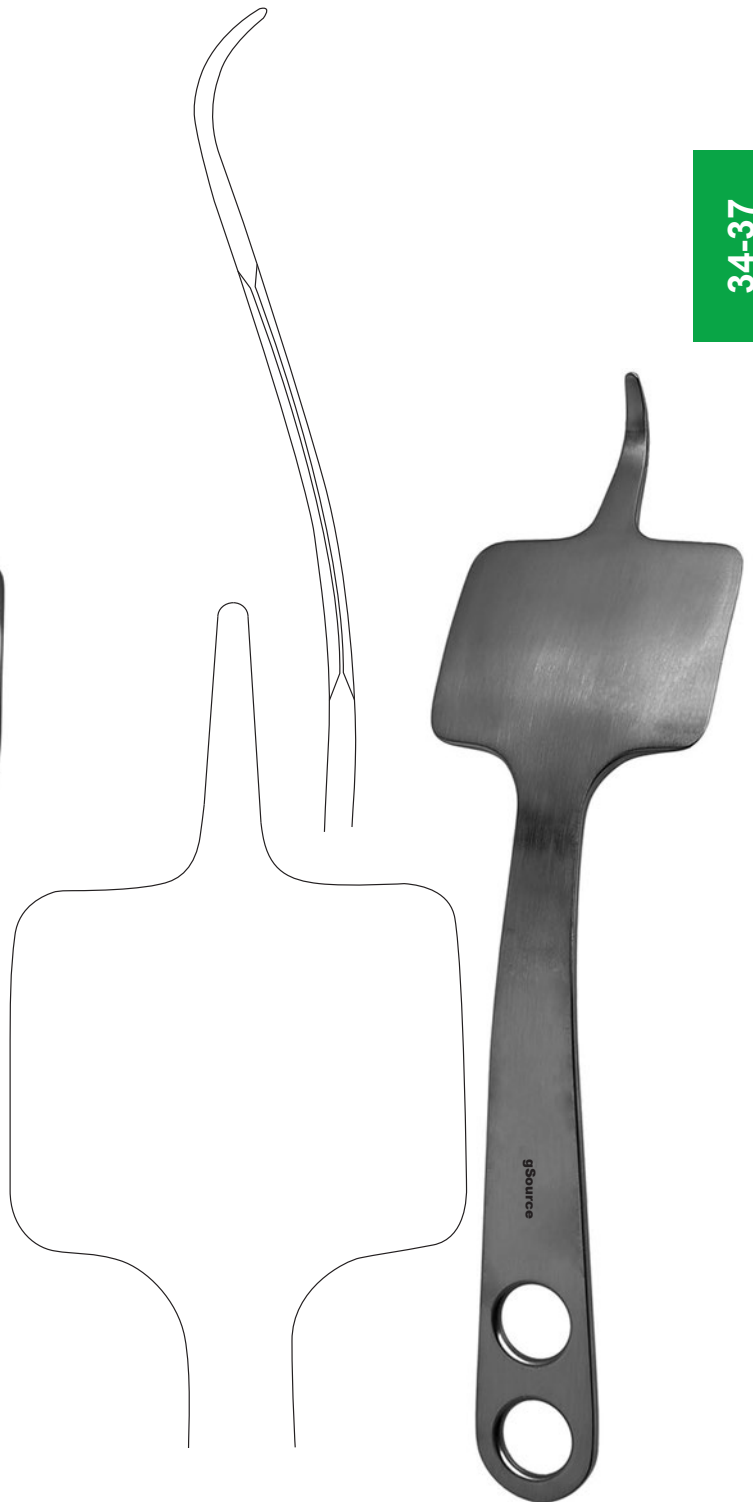
gS 36.9430 9 1/2"

Hohmann Retractor
43mm
rounded end



gS 36.9500 10 1/2"

Hohmann Retractor
65mm
tear drop end

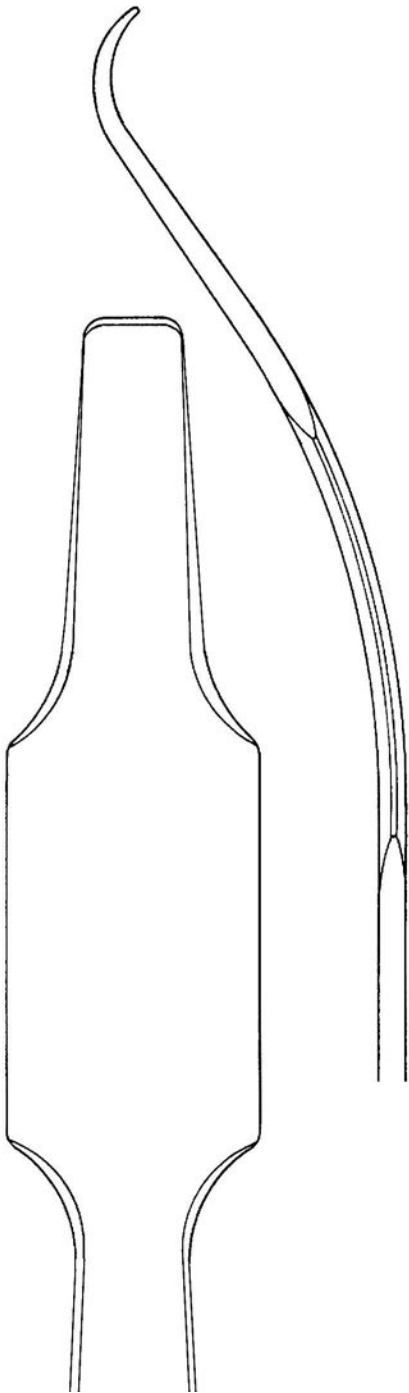


gS 36.9505 10 1/2"

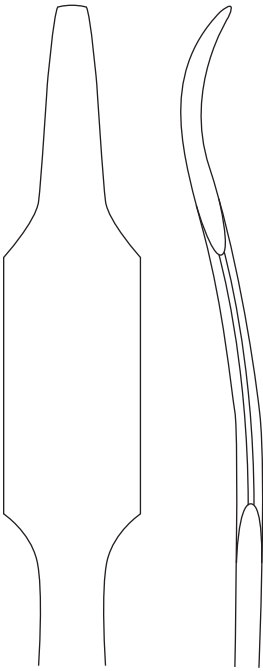
Hohmann Retractor
70mm
rounded end

34-37/54 - hand-held retractors

34-37

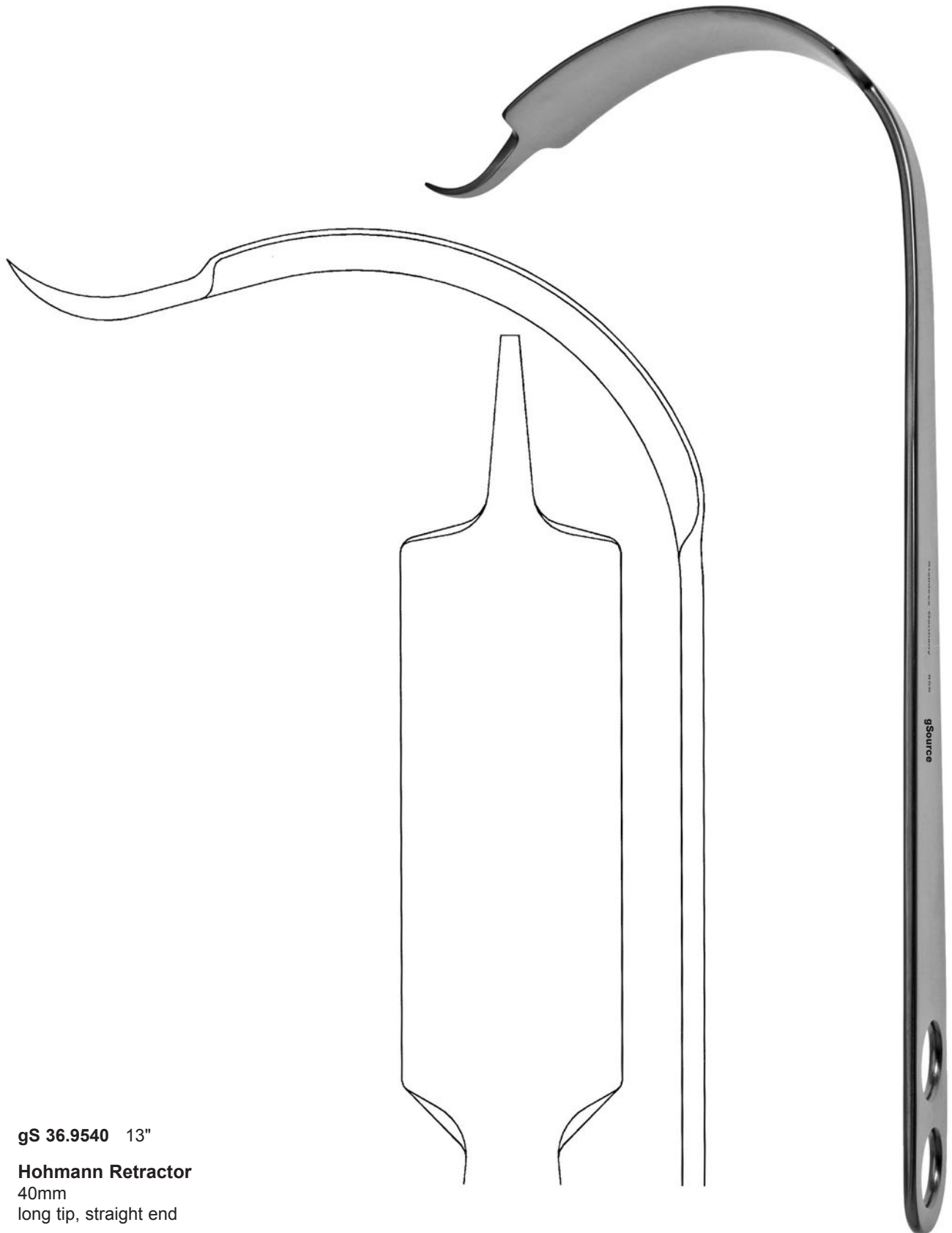


gS 36.9490 11"
Hohmann Retractor
35mm
straight end



gS 36.9475 12"
Hohmann Retractor
17mm
straight end





gS 36.9540 13"

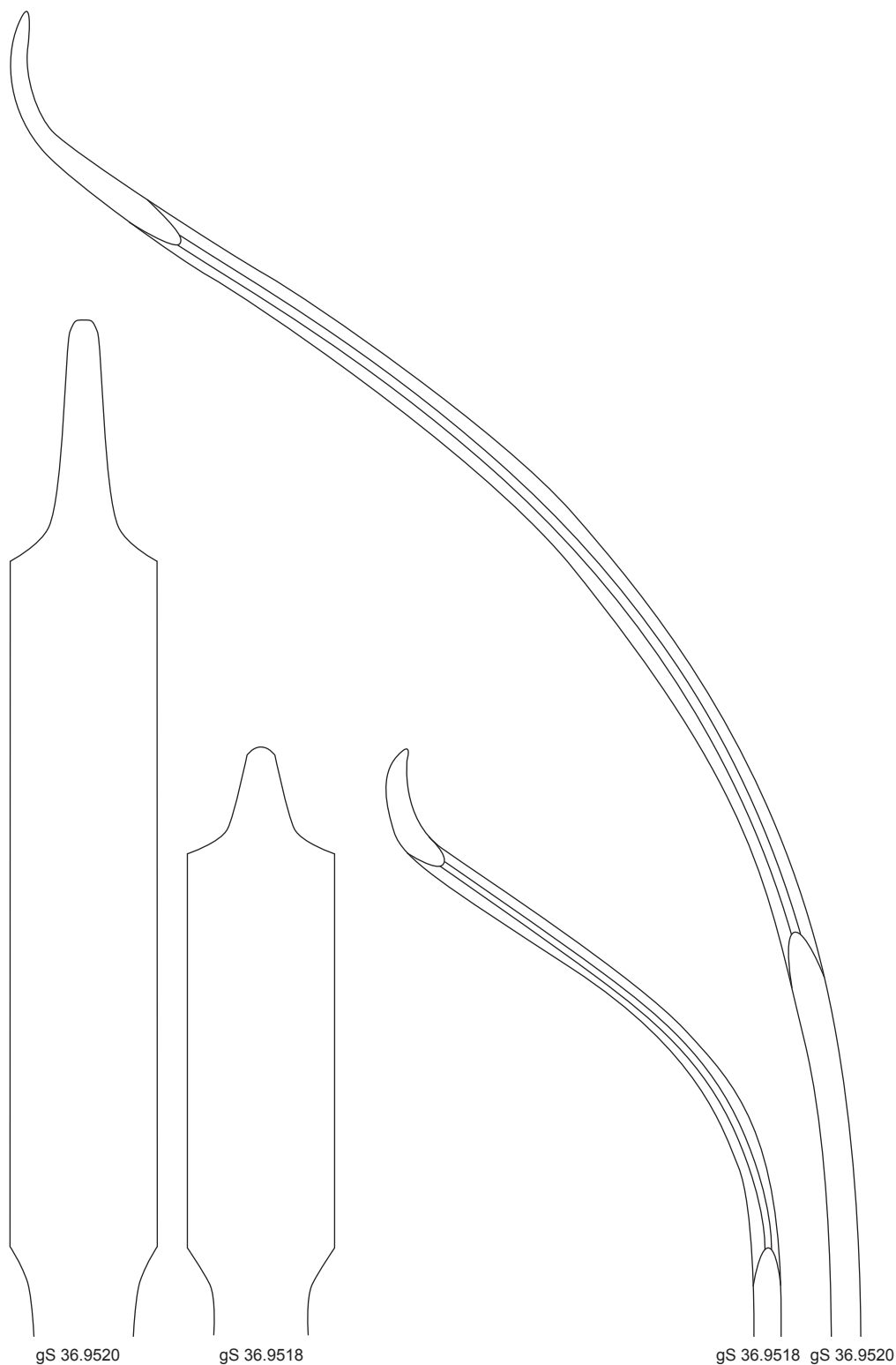
Hohmann Retractor

40mm

long tip, straight end

34-37/56 - hand-held retractors

34-37



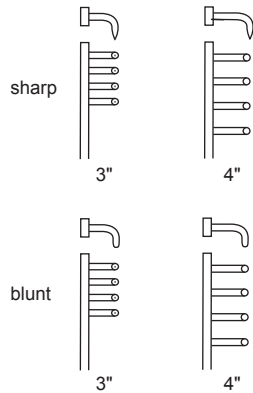
gS 36.9518 one finger ring, short rounded end
gS 36.9520 two finger rings, long rounded end

Hohmann Retractor

16"
22mm

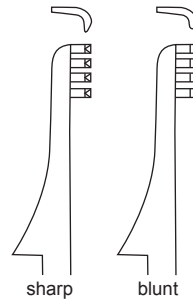


self-retaining retractors - 38-40/1



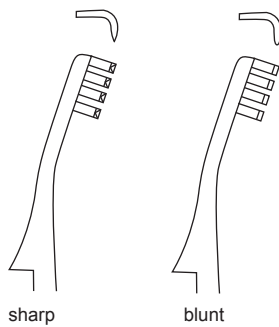
gS 38.5150 3" sharp
gS 38.5165 4" sharp
gS 38.5140 3" blunt
gS 38.5160 4" blunt

Alm Retractor
 4x4 prongs



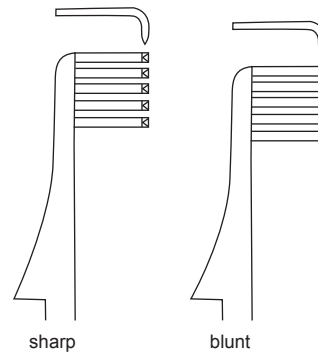
gS 38.5170 sharp
gS 38.5180 blunt

Self Retaining Retractor
 (Heiss) 4", straight
 4x4 prongs



gS 38.5185 sharp
gS 38.5186 blunt

Self Retaining Retractor
 (Heiss) 4", angled
 4x4 prongs



gS 38.5190 sharp
gS 38.5191 blunt

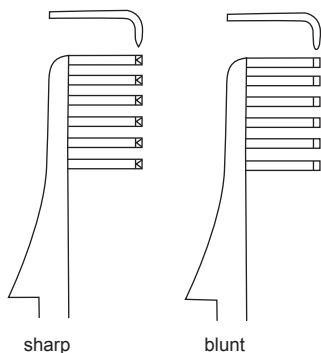
Self Retaining Retractor
 (Heiss) 4 1/4", straight
 5x5 prongs



38-40

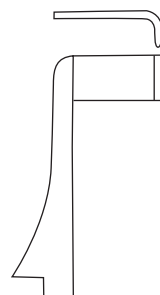
38-40/2 - self-retaining retractors

38-40



gS 38.5192 sharp
gS 38.5193 blunt

Self Retaining Retractor
 4 1/4", straight
 6x6 prongs



gS 38.5195 4" blunt

Self Retaining Retractor
 straight
 6mm width x 12mm depth blade



Helps to provide increased visibility of the tendon sheath in trigger finger procedures. Also useful in other small incision procedures.

gS 38.5500 4 1/4" blunt

gRetractor, Trigger Finger
 6.5mm width x 12mm depth blade

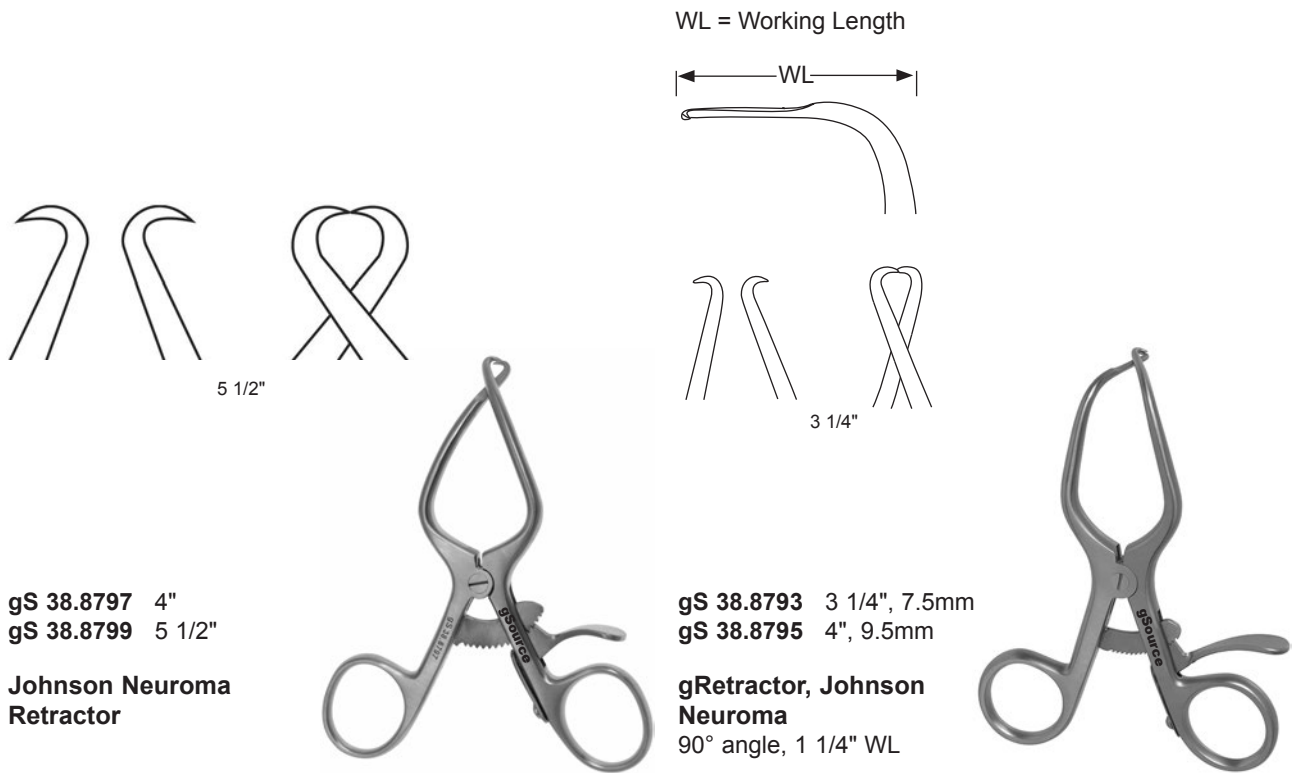


gS 38.5219 sharp
gS 38.5220 blunt

Jansen Retractor
 (Mastoid) 4"
 3x3 prongs



self-retaining retractors - 38-40/3



38-40



Useful in facilitating lateral column lengthening of the calcaneus.

Thru hole on blades allows for passing of 1.3mm K-wire.

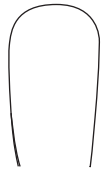
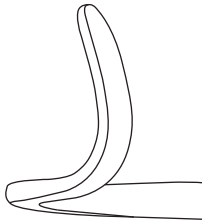
gS 40.3490 3 3/4"

gSpreader, Calcaneal
 6mm outside serrated blades with thru hole
 1 1/4" opening



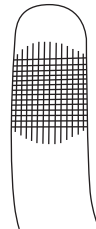
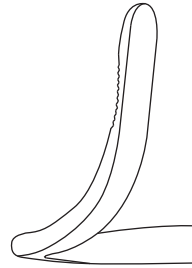
38-40/4 - self-retaining retractors

38-40



gS 38.5300 4 1/2"

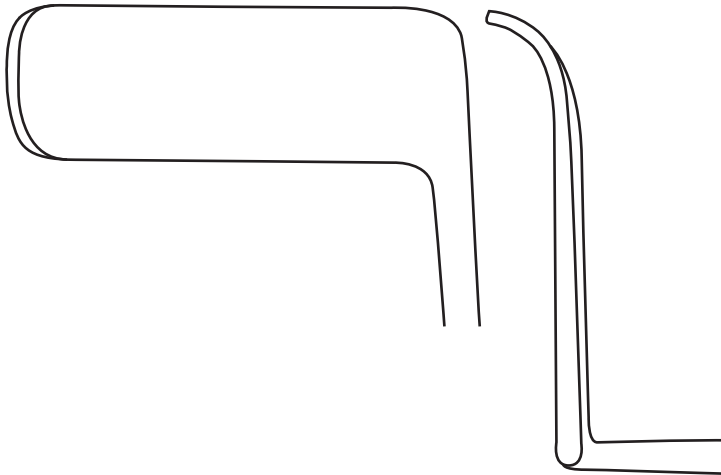
Schink Retractor
smooth blades



Outside serrated blades
provide a more secure
hold on metatarsals.

gS 38.5490 4 1/2"

Metatarsal Retractor
(Cox Metatarsal Spreader)
serrated blades



Deep blades are useful in
appendectomy procedures.

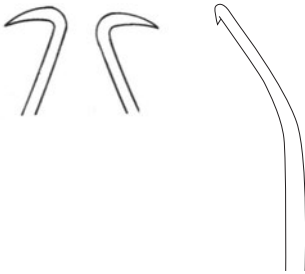
gS 38.5670 7"

Rigby Retractor
20mm width x 60mm depth
smooth blunt blades



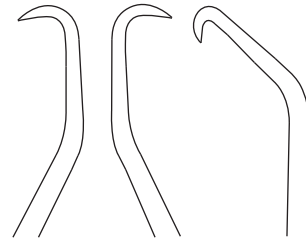
self-retaining retractors - 38-40/5

38-40



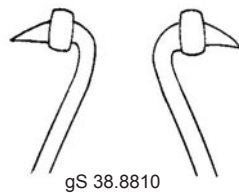
gS 38.8760 3 1/2"
gS 38.8790 4 3/4"
gS 38.8800 5 1/2"
gS 38.8820 7 1/2"

Gelpi Retractor
sharp points

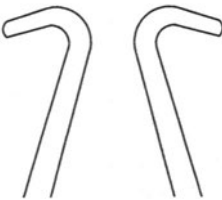


gS 38.8780 4 1/2"
gS 38.8804 6 1/2"

Gelpi Retractor
sharp points
angled, delicate



gS 38.8810



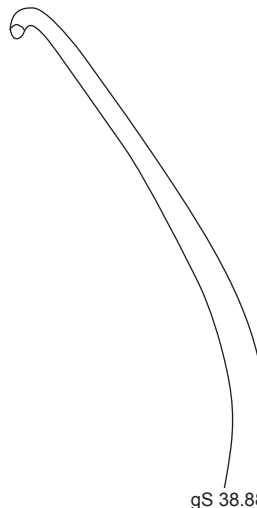
gS 38.8830

gS 38.8810 ball tip, sharp
gS 38.8830 blunt

Gelpi Retractor
7 1/2"



gS 38.8810



gS 38.8830



38-40/6 - self-retaining retractors

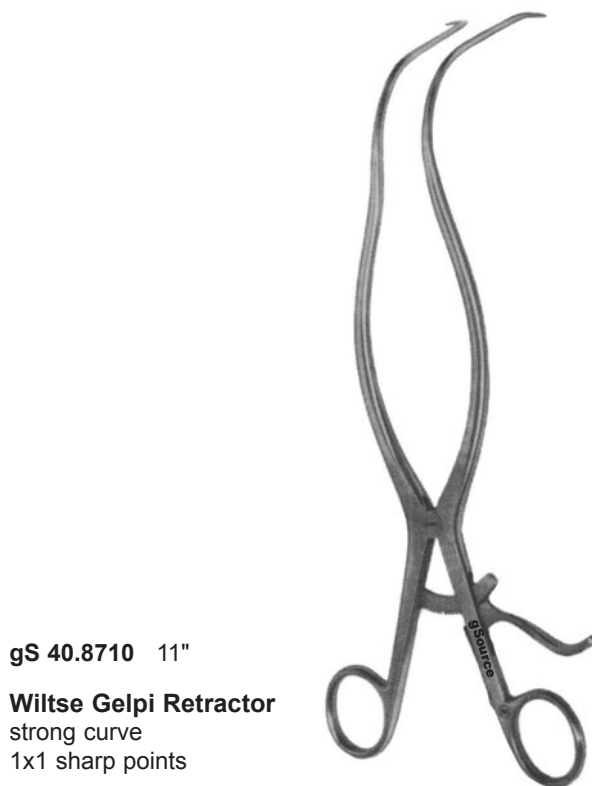
WL = Working Length

38-40



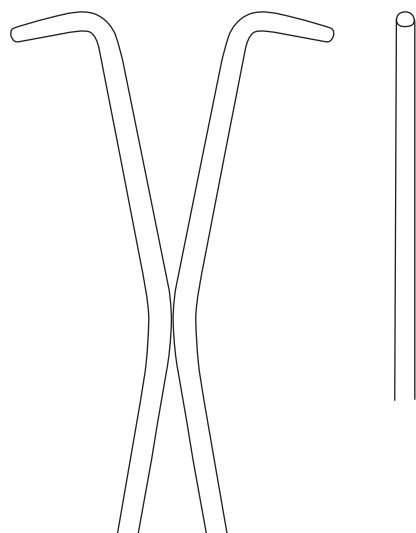
gS 38.8918 6 1/2"

Gelpi Seletz Retractor
1x1 sharp points



gS 40.8710 11"

Wiltse Gelpi Retractor
strong curve
1x1 sharp points



Useful in holding back
muscle while retracting
the hip capsule.

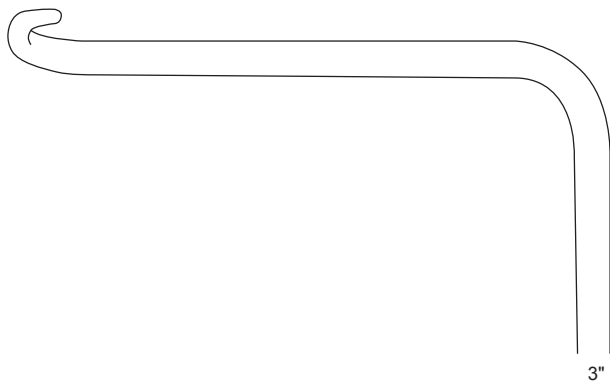
gS 40.8670 7 3/4"

gRetractor, Deep Gelpi
4 1/2" WL, 90° angle
1x1 blunt points



self-retaining retractors - 38-40/7

WL = Working Length

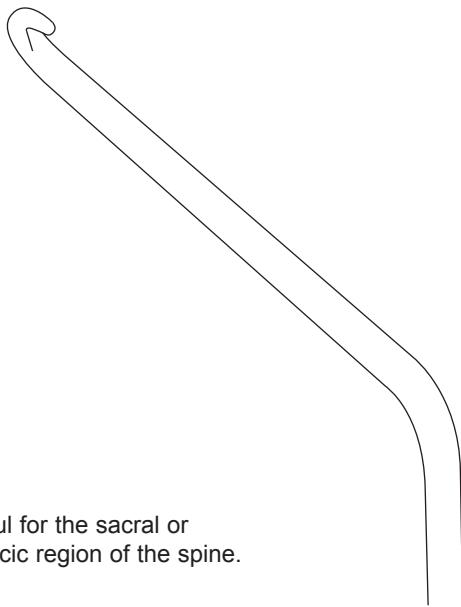


WL
gS 40.8608 3"
gS 40.8610 4"
gS 40.8612 5"

Deep Gelpi Retractor
10 1/2", 90° angle
1x1 blunt points, speedlock



38-40



Useful for the sacral or thoracic region of the spine.

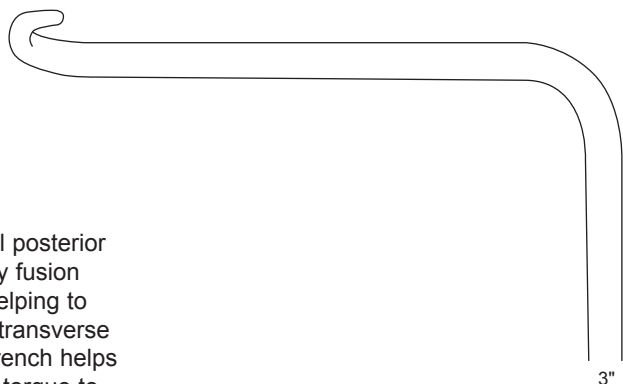
gS 40.8628 12"

Deep Gelpi Retractor
3" WL, 45° angle
1x1 blunt points, speedlock



38-40/8 - self-retaining retractors

WL = Working Length

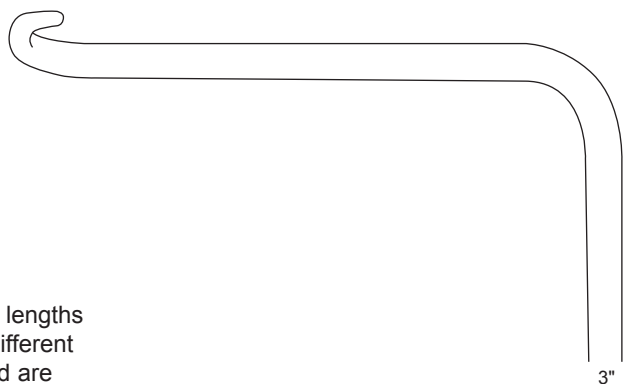


38-40

Useful for lateral posterior lumbar interbody fusion procedures in helping to retract past the transverse process. The wrench helps to provide extra torque to attain maximum exposure.

	WL
gS 40.8570	3"
gS 40.8572	4"

Deep Gelpi Lateral Retractor
10 1/2", 90° angle
1x1 blunt points, speedlock, wrench



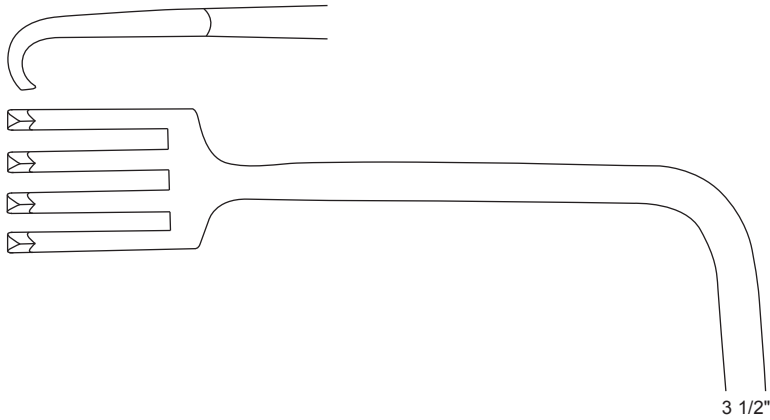
Varying working lengths accommodate different patient sizes and are designed to apply limited pressure on tissue and muscle, helping to reduce tissue necrosis.

	WL
gS 40.8618	3"
gS 40.8620	4"
gS 40.8622	5"

Deep Gelpi Retractor
10 1/2", 90° angle
1x1 blunt points, ratchet

self-retaining retractors - 38-40/9

WL = Working Length

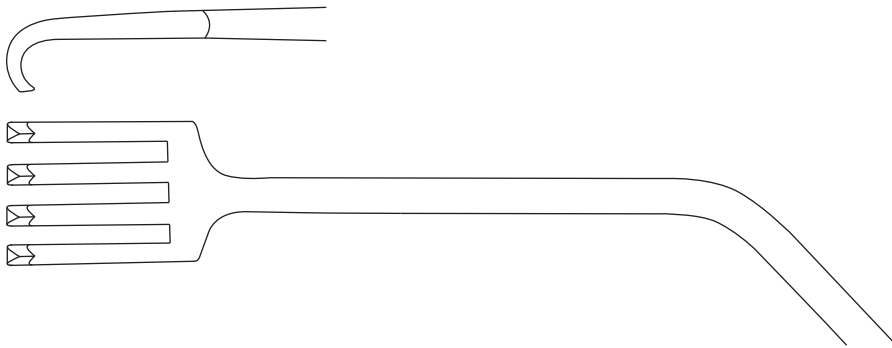


	WL
gS 40.8632	2"
gS 40.8638	3 1/2"
gS 40.8640	4"
gS 40.8642	5"

Deep Gelpi Retractor
10 1/2", 90° angle,
4 sharp prongs, speedlock



38-40



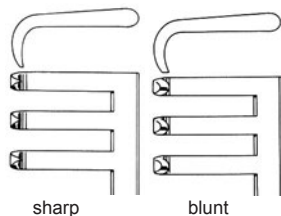
gS 40.8648 13"

Deep Gelpi Retractor
3 1/2" WL, 45° angle
4 sharp prongs, speedlock



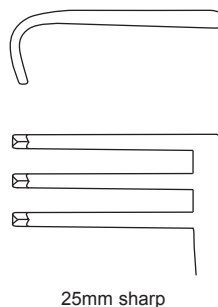
38-40/10 - self-retaining retractors

38-40



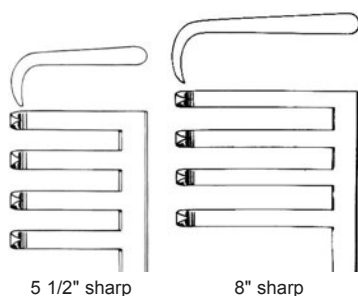
gS 38.5920 sharp
gS 38.5940 blunt

Weitlaner Retractor
4 1/2"
2x3 prongs



depth
gS 38.5825 25mm sharp
gS 38.5826 25mm blunt
gS 38.5830 30mm sharp
gS 38.5831 30mm blunt

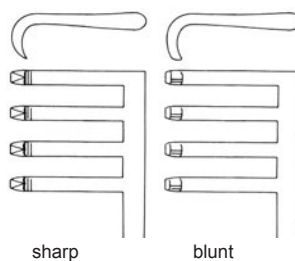
gRetractor, Weitlaner
4 1/2"
2x3 prongs



sharp
gS 38.5980 5 1/2"
gS 38.6020 6 1/2"
gS 38.6040 8"
gS 38.6060 9 1/2"

blunt
gS 38.6180 5 1/2"
gS 38.6220 6 1/2"
gS 38.6240 8"
gS 38.6260 9 1/2"

Weitlaner Retractor
3x4 prongs

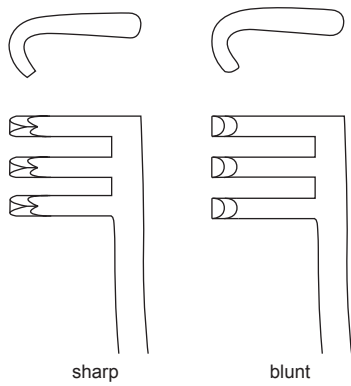


Handle is gently curved to conform to contour of skull. Non-obstructive design is also useful for hand and foot procedures.

gS 38.5816 sharp
gS 38.5814 blunt

Scalp Contour Retractor
5 1/2"
3x4 prongs





Helps to facilitate bilateral exposure of soft tissue.

gS 38.6350 5 1/4" sharp

gS 38.6360 6" sharp

gS 38.6362 6" blunt

Wullstein-Weitlaner Retractor

3x3 prongs



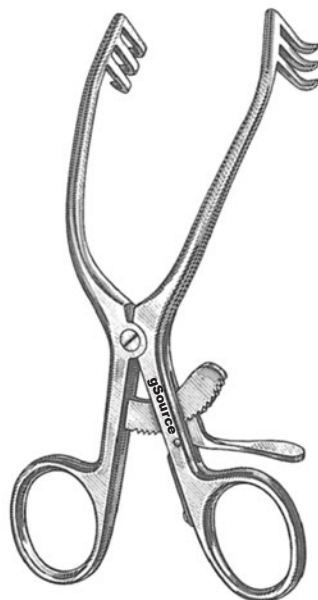
38-40

gS 38.7276 5"

Schuknecht Retractor

3x3 sharp prongs

3" max opening



gS 38.6280 6"

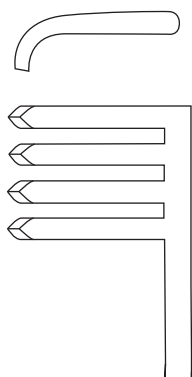
Mollison Retractor

4x4 sharp prongs



38-40/12 - self-retaining retractors

38-40



Useful for retraction of the cerebellum in neurological procedures.

gS 40.5430 6 1/2"

Adson Cerebellar Retractor
angled 80° arms
4x4 sharp prongs



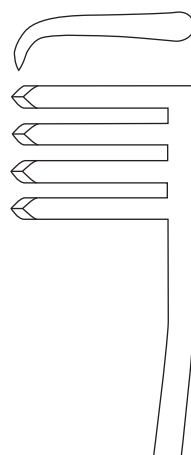
gS 40.5420 7 1/2"

Adson Retractor
straight arms
4x4 sharp prongs



gS 40.5440 7 1/2"

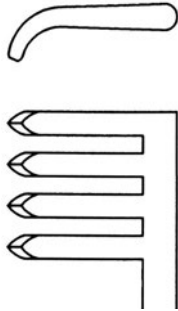
Adson Retractor
angled arms
4x4 sharp prongs



gS 40.5445 7 1/2"

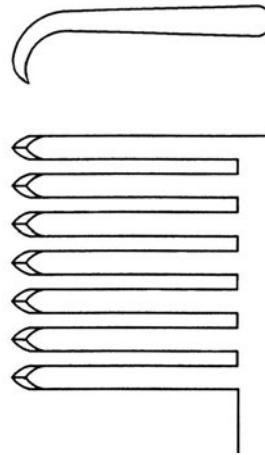
Adson Retractor
angled 35°/20° arms
4x4 sharp prongs





gS 40.5450 7 1/2"

D'Errico-Adson Retractor
angled arms
4x4 sharp prongs



gS 40.6990 7 1/2"

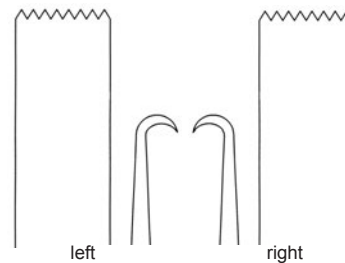
Miskimon Cereb. Retractor
angled arms
7x7 sharp prongs



width x depth
gS 40.7232 1" x 1 1/4"
gS 40.7234 1" x 1 5/8"
gS 40.7236 1" x 2"
gS 40.7238 1" x 2 1/4"

Meyerding Retractor
7"

tip detail not
to scale



gS 40.7180 left
gS 40.7181 right

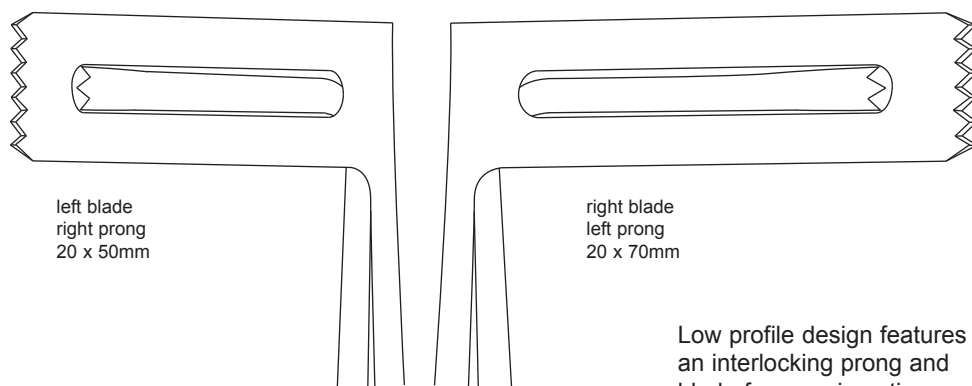
Markham Meyerding Retractor
7"
1" width x 2 1/4" depth blade



gS 40.7180

38-40/14 - self-retaining retractors

38-40



left blade
right prong
20 x 50mm

right blade
left prong
20 x 70mm

left blade width x depth
gS 40.8350 20mm x 50mm
gS 40.8360 20mm x 70mm

right blade width x depth
gS 40.8352 20mm x 50mm
gS 40.8362 20mm x 70mm

Discectomy Retractor
7"

Low profile design features an interlocking prong and blade for easy insertion.

Useful during posterior cervical procedures and micro lumbar discectomies.

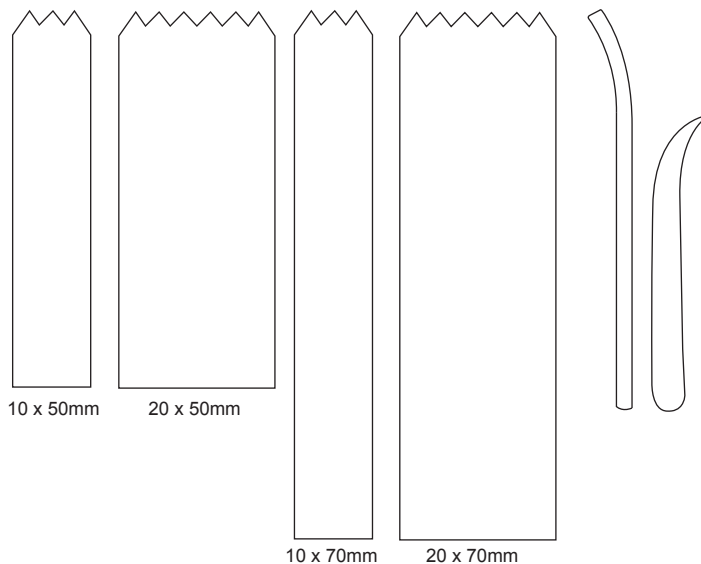
Toothed prong provides less trauma and helps to achieve a more stable hold.



left blade width x depth
gS 40.7350 10mm x 50mm
gS 40.7360 10mm x 70mm
gS 40.7370 20mm x 50mm
gS 40.7380 20mm x 70mm

right blade width x depth
gS 40.7352 10mm x 50mm
gS 40.7362 10mm x 70mm
gS 40.7372 20mm x 50mm
gS 40.7382 20mm x 70mm

Williams Discectomy Retractor
7"



10 x 50mm

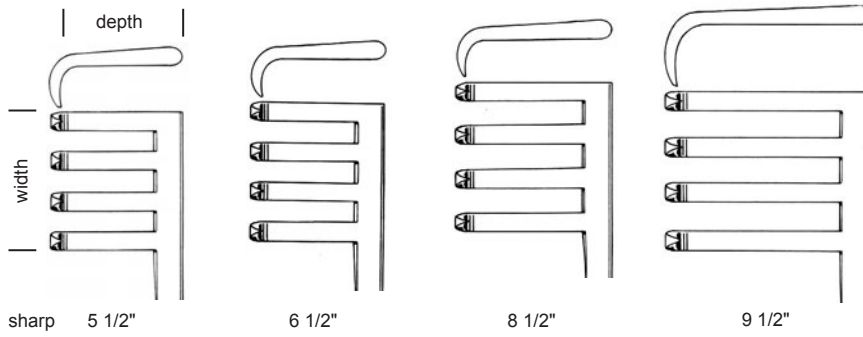
20 x 50mm

10 x 70mm

20 x 70mm



self-retaining retractors - 38-40/15

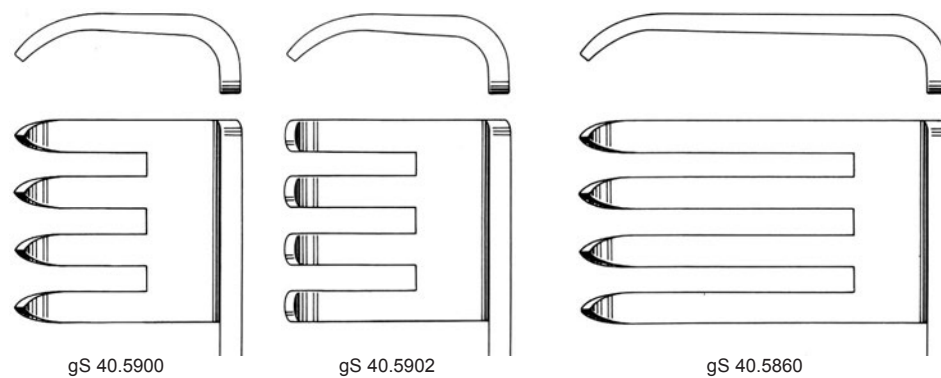


	sharp	width x depth
gS 40.6500	5 1/2"	20mm x 15mm
gS 40.6320	6 1/2"	20mm x 15mm
gS 40.6410	8 1/2"	22mm x 17mm
gS 40.6420	9 1/2"	22mm x 24mm

	blunt	width x depth
gS 40.6502	5 1/2"	20mm x 15mm
gS 40.6504	6 1/2"	20mm x 15mm
gS 40.6506	8 1/2"	22mm x 17mm
gS 40.6508	9 1/2"	22mm x 24mm

Beckman-Weitlaner Retractor

hinged arms
3x4 prongs



	sharp	width x depth
gS 40.5900	1" x 1"	
gS 40.5860	1" x 1 3/4"	

	blunt	width x depth
gS 40.5902	1" x 1"	
gS 40.5880	1" x 1 3/4"	

Beckman-Adson Retractor

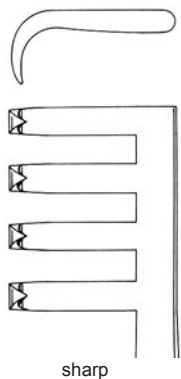
12" hinged arms
4x4 prongs



38-40

38-40/16 - self-retaining retractors

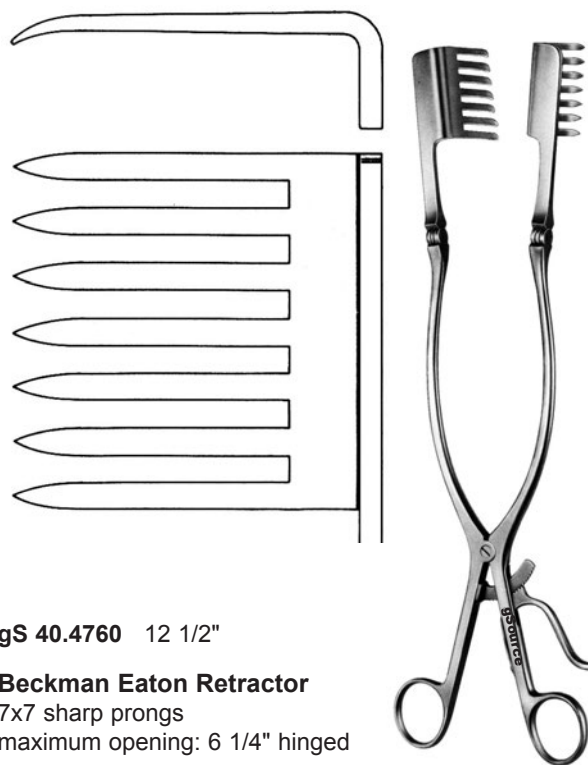
38-40



sharp

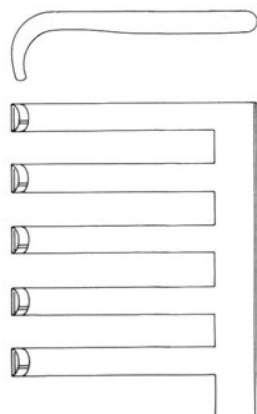
gS 40.5840 sharp
gS 40.5842 blunt

Beckman Retractor
12 1/2" hinged arms
4x4 prongs, 5/8" x 1 1/8"



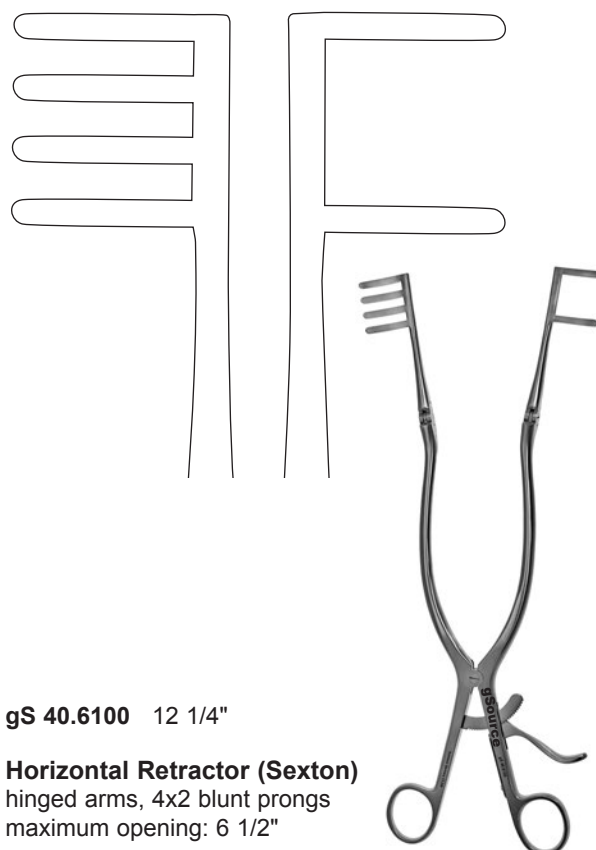
gS 40.4760 12 1/2"

Beckman Eaton Retractor
7x7 sharp prongs
maximum opening: 6 1/4" hinged



gS 40.5820 12 1/2"

Adson Retractor
hinged arms
4x5 blunt prongs



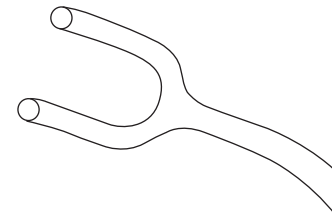
gS 40.6100 12 1/4"

Horizontal Retractor (Sexton)
hinged arms, 4x2 blunt prongs
maximum opening: 6 1/2"

Helps to facilitate the introduction of deep retractors necessary for visibility of the glenoid, acromion and rotator cuff.

gS 38.9018 7"

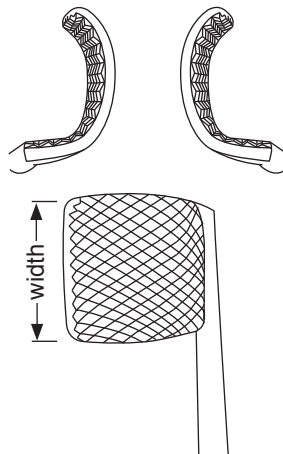
Kolbel Soft Tissue Retractor
angled 2x2 blunt prongs



Helps to retract soft tissue of the gleno-humeral joint.

gS 38.9020 7"

Kolbel Soft Tissue Retractor
curved 2x2 blunt prongs



Useful for gentle tissue retraction and retracting the deltoid muscle.

gS 40.3160 6"

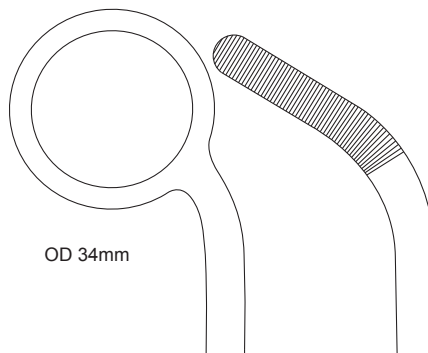
gRetractor, Rahner
20mm width
angled



38-40/18 - self-retaining retractors

38-40

OD = Outside Diameter



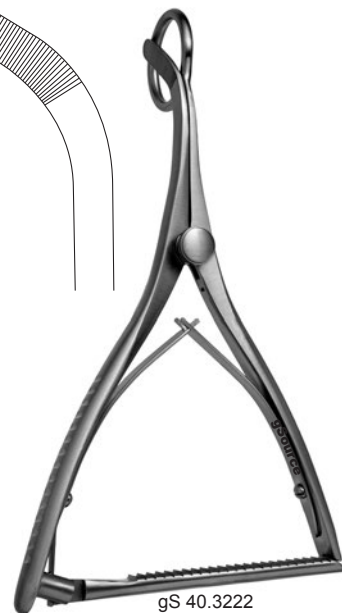
ring
gS 40.3210 left
gS 40.3212 right

Rotator Cuff Retractor
(Gerber)
7", outside serrated blade



ring
gS 40.3220 left
gS 40.3222 right

gRetractor, Rotator Cuff
7", 34mm OD
outside serrated blade



Useful for the spreading and stabilization of space between individual vertebrae.

Turn key is removable and can be placed on either side of the spreader eliminating the need for individual left and right distractors.



gS 40.2610 4"
gS 40.2611 replacement turn key

Vertebra Spreader
pivoting 180° arms
2 1/2" spread



gS 40.2590 5"
Vertebra Spreader #1
(Cloward Style)
with ratchet, 3/4" spread



gS 40.3120 6 1/2"

Cervical Spreader
angled
with teeth



gS 40.2412

Lumbar Lamina Spreader
arm length 2 3/4"
spread 3 1/8"



gS 40.2410

Lumbar Lamina Spreader #1
arm length: 3"
spread: 2 1/8"



gS 40.2414

Lumbar Lamina Spreader
arm length 4"
spread 2 3/4"

38-40/20 - self-retaining retractors

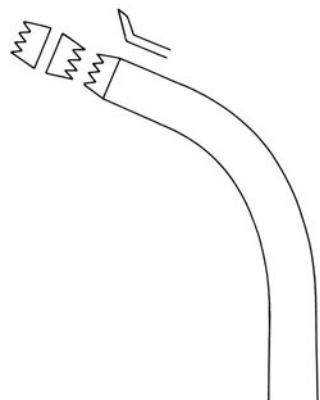
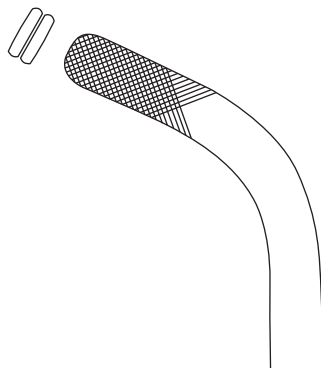
38-40

Useful in facilitating a lateral release during bunionectomy procedures.

3mm-30mm calibrations marked on bottom side of ratchet help to measure and assess the width needed for the lateral portion of the bone graft.

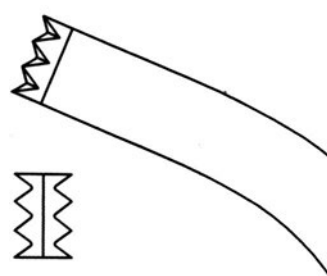
gS 40.3150 5 1/2"

gRetractor, Abramssohn
outside cross serrated blades
calibrated ratchet



gS 40.3170 with teeth
gS 40.3180 without teeth

Inge Retractor
6 1/2"

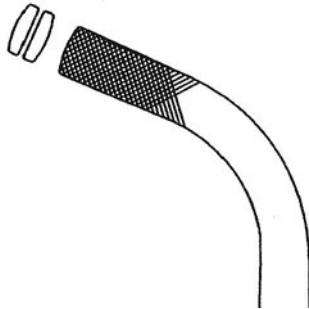


gS 40.3300 10"

Inge Retractor
with teeth

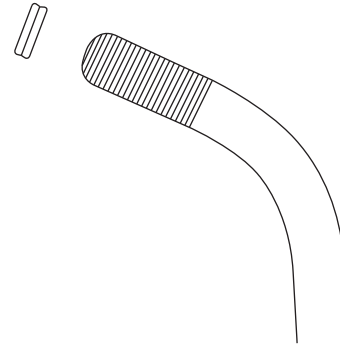


Ratchet is calibrated in mm and measures size of opening. Useful in many procedures to accurately assess bone graft needs.



gS 40.3190 6 1/2"

Saxena-Style Retractor
outside cross serrated blades
calibrated ratchet

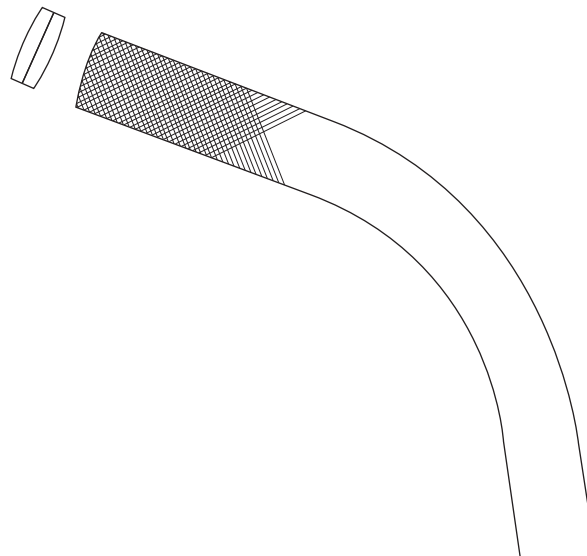


gS 40.3192 6 1/2"

Saxena-Style Retractor
outside serrated blades
calibrated ratchet



Ratchet is calibrated in mm and measures size of opening. Useful in many procedures to accurately assess bone graft needs.



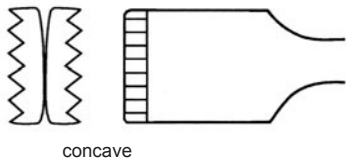
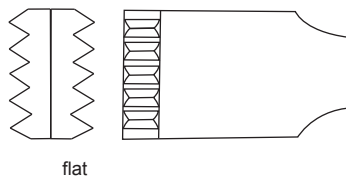
gS 40.3195 10"

Saxena-Style Retractor
outside cross serrated blades
calibrated ratchet



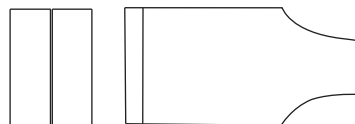
38-40/22 - self-retaining retractors

38-40



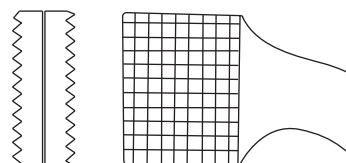
blades
gS 40.3260 flat
gS 40.3270 concave

Lamina Spreader
10 1/2"
with teeth



gS 40.3265 10 1/2"

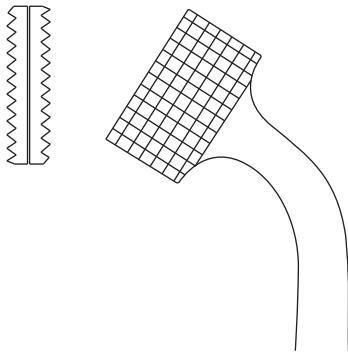
Lamina Spreader
flat blades
without teeth



gS 40.3275 10 1/2"

Lamina Spreader
outside cross serrated blades
20mm width x 15mm depth

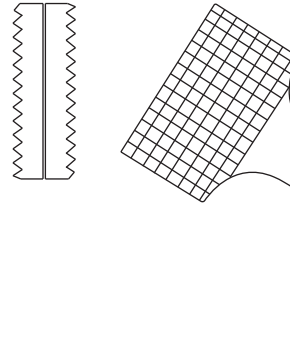




Blades help to separate the femur and tibia during total knee procedures.

gS 40.3321 6 1/2"

Femoral Tibial Spreader
21mm width x 13mm depth
cross serrated outside blades



gS 40.3323 9 1/2"

Femoral Tibial Spreader
23mm width x 13mm depth
cross serrated outside blades



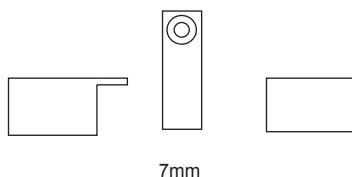
Bayoneted blades help to provide optimized visibility to surgical site.

gS 40.3500 11"

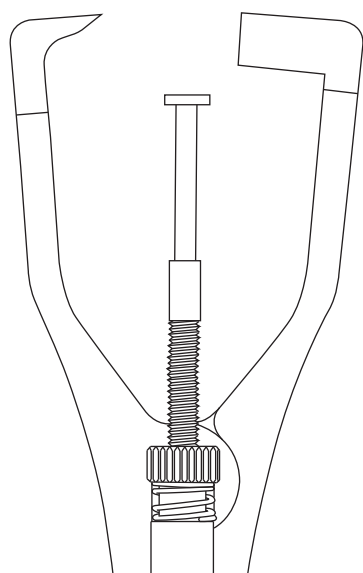
Spreader
7mm width bayoneted blades
with teeth



38-40/24 - self-retaining retractors



38-40



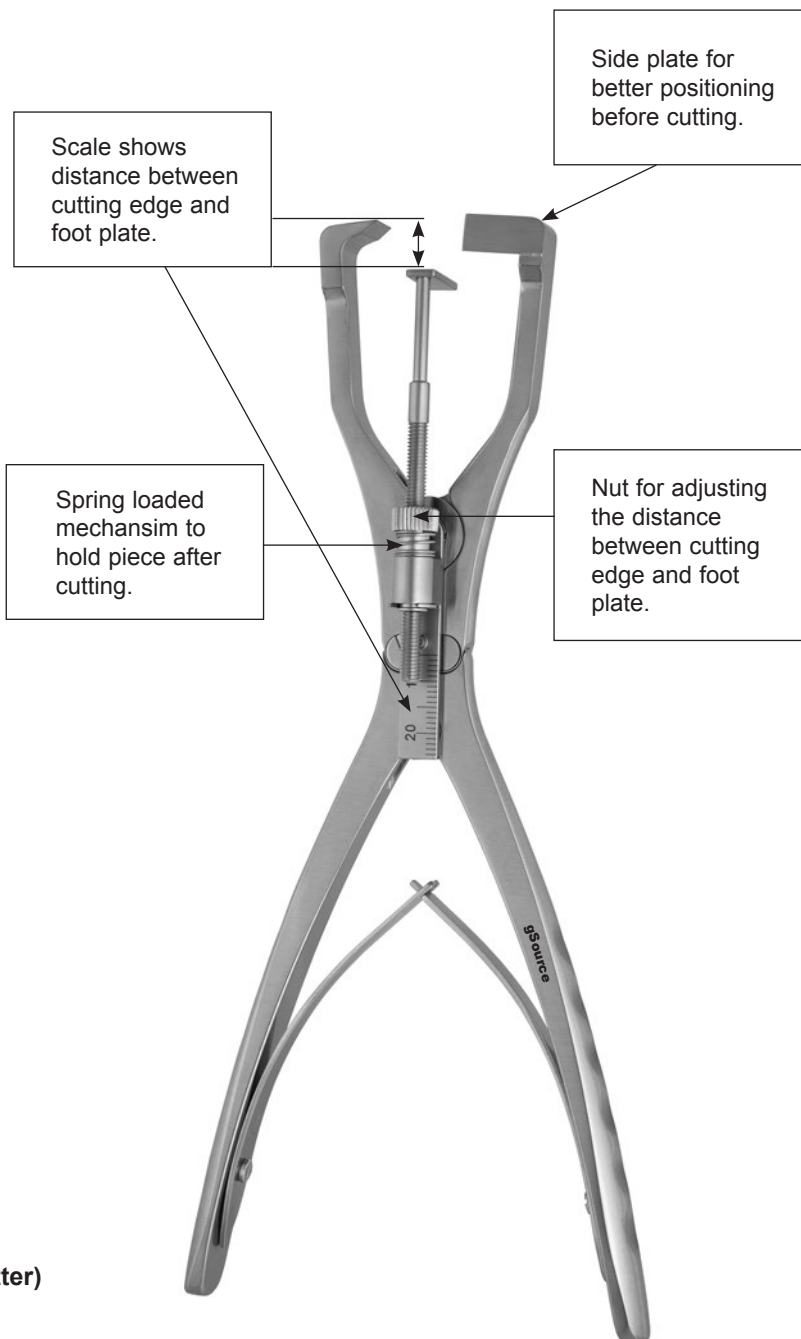
Useful for removing small pieces of bone for grafting procedures. The length of the bone piece required can be adjusted by turning the nut. To remove a bone piece, the bone must have contact with the base and side plates. By pressing the handles together, the piece of bone is separated and held by a spring mechanism in the closed base and side plates.

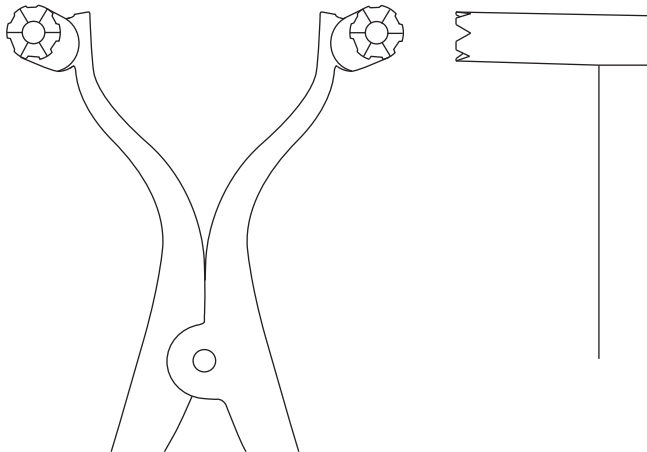
width
gS 40.1027 7mm
gS 40.1029 9mm

Bone Graft Harvesting Forceps (Graft Cutter)

8 1/2"

for graft from 6mm-9mm



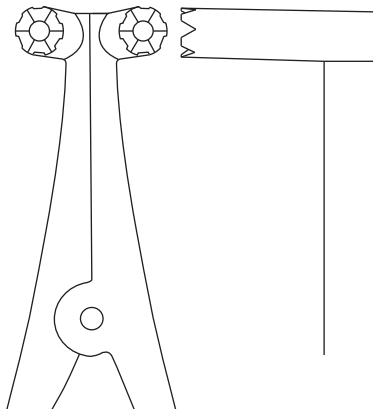


Outspread arms are useful for small bone fixation and other indications.

gS 40.1120 6"

gDistractor, Open

with guides, calibrated ratchet
max cap 2.4mm [.094"]

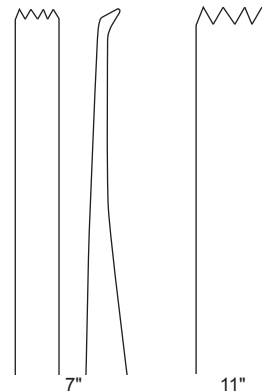


For small bone fixation procedures.

gS 40.1100 6"

gDistractor

with guides, calibrated ratchet
max cap 2.4mm [.094"]



gS 40.3418 7"

gS 40.3428 11"

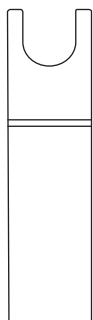
Vertebra Distractor
straight
with teeth



38-40/26 - self-retaining retractors

OD = Outside Diameter

38-40



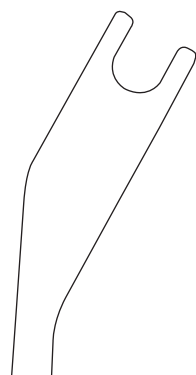
gS 40.3555 10"

gDistractor, MIS
for 5.5mm OD rods



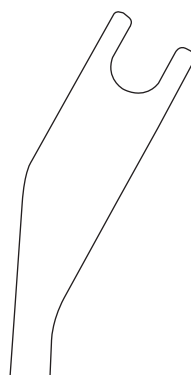
gS 40.3565 11"

gCompressor, MIS
for 5.5mm OD rods



gS 40.3655 13"

gDistractor, Parallel
for 5.5mm OD rods



gS 40.3665 13"

gCompressor, Parallel
for 5.5mm OD rods



Drill guide for parallel positioning of the distraction screws.

For right side approach.



gS 40.1010

gS 40.1010 right body 2 1/2" spread

gS 40.1012 right body 3 1/4" spread, long bar

gS 40.1016 right drill guide, plastic handle, black

Caspar Distractor Right



gS 40.1016

Drill guide for parallel positioning of the distraction screws.

For left side approach.



gS 40.1020

gS 40.1020 left body 2 1/2" spread

gS 40.1022 left body 3 1/4" spread, long bar

gS 40.1026 left drill guide, plastic handle, black

Caspar Distractor Left



gS 40.1026

38-40/28 - self-retaining retractors

OD = Outside Diameter
TL = Thread Length



38-40

gS 40.1030 8 1/4"

**Caspar Bone Graft
Holder and Impactor**
phenolic handle



For pre-drilling
holes for
distraction screws.

	depth
gS 40.1040	8mm
gS 40.1042	14mm

**Twist Drill for
Distraction Screws**
5 3/4", 1.7mm OD



gS 40.1035 8"

**Screwdriver for
Distraction Screws**
plastic handle, black



An internal fixation
device, such as the
Distraction Screws
shown below, must
never be reused. They
are intended for
single use only.

	TL
gS 40.1052	12mm
gS 40.1054	14mm
gS 40.1056	16mm
gS 40.1058	18mm

Distraction Screws
1 screw per package
non-sterile



	width x depth
gS 40.7520	20mm x 36mm
gS 40.7522	20mm x 53mm
gS 40.7524	20mm x 68mm
gS 40.7526	20mm x 85mm
gS 40.7530	36mm x 36mm
gS 40.7532	36mm x 53mm
gS 40.7534	36mm x 68mm
gS 40.7536	36mm x 85mm

Kolbel Retractor Blades
blunt



gS 40.7505 5 1/2"

Kolbel Retractor
frame only
hinged

gS 40.7510 8"
Kolbel Retractor
ring handle only



gS 40.7515 8"
Kolbel Retractor
ring handle only
hinged



38-40/30 - self-retaining retractors

TiAIN = Titanium Aluminum Nitride

38-40

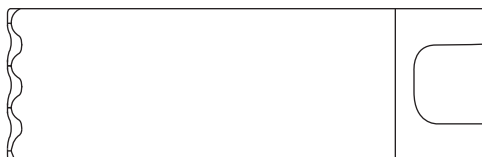
Interchangeable blades slide easily onto the hinged arms of frame allowing for quick set-up and removal. Useful in microdiscectomy or microdecompression spinal surgeries. TiAIN coating helps to eliminate light reflections.

gS 40.2000 5 1/2", frame only, hinged

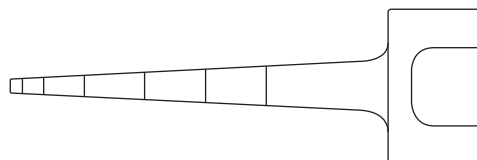
McCulloch Retractor

60mm spread

TiAIN coated, black matte finish



gS 40.2050



gS 40.2350

serrated narrow blade (pair) - width x depth

gS 40.2030	20mm x 30mm
gS 40.2040	20mm x 40mm
gS 40.2050	20mm x 50mm
gS 40.2060	20mm x 60mm
gS 40.2070	20mm x 70mm
gS 40.2080	20mm x 80mm



hook blade (each) - depth

gS 40.2220	20mm
gS 40.2230	30mm
gS 40.2240	40mm
gS 40.2250	50mm
gS 40.2260	60mm
gS 40.2270	70mm



serrated wide blade (pair) - width x depth

gS 40.2130	27mm x 30mm
gS 40.2140	27mm x 40mm
gS 40.2150	27mm x 50mm
gS 40.2160	27mm x 60mm
gS 40.2170	27mm x 70mm
gS 40.2180	27mm x 80mm



toothed hook blade (each) - depth

gS 40.2320	20mm
gS 40.2330	30mm
gS 40.2340	40mm
gS 40.2350	50mm
gS 40.2360	60mm
gS 40.2370	70mm



McCulloch Retractor Blades

TiAIN coated, black matte finish

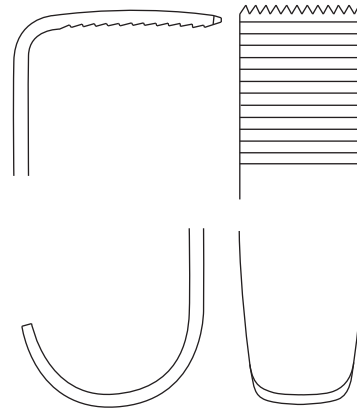
self-retaining retractors - 38-40/31

Highly versatile retractor with interchangeable center and side blades. Center blade is attached to the retractor with the wing nut and blade can be adjusted as needed. There is a ball-snap attachment for the side blades.

Useful in peripheral vascular surgery of the carotid, subclavian, femoral, popliteal and tibial regions as well as in spinal surgery of the cervical and lumbar regions. Also useful in orthopedic surgery for hip and shoulder procedures and in general surgery for inguinal hernia, appendectomy and other minor procedures.

gS 40.6000 7"

Henly Retractor
ring handle only



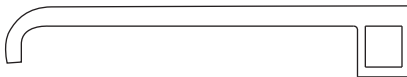
gS 40.6002

	width x depth
gS 40.6001	16mm x 19mm
gS 40.6002	16mm x 25mm
gS 40.6003	16mm x 32mm
gS 40.6004	16mm x 76mm

Henly Retractor
Adjustable Center Blade
with teeth, serrated



38-40



gS 40.6012



	width x depth
gS 40.6011	23mm x 17mm
gS 40.6012	23mm x 42mm
gS 40.6013	23mm x 67mm

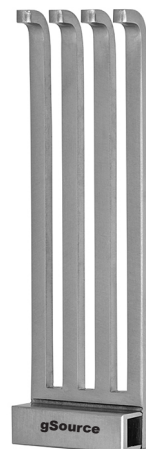
Henly Retractor Blades
4 blunt prongs
set of 2



17mm



42mm



67mm

38-40/32 - self-retaining retractors

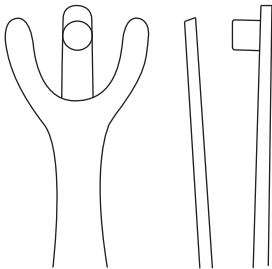
38-40

Highly versatile retractor. Double hinged arms fold along patient's back helping to provide unhindered access to surgical site. Interchangeable blades easily connect into openings on hinged arms of frame.

For blades gS 40.7644 through gS 40.7678.

gS 40.7690 8 3/4"

Double Hinged Retractor
ring handle only



Useful for blade removal.

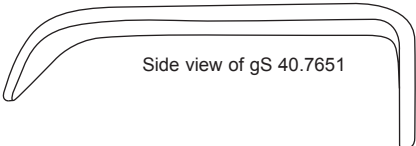
gS 40.7625 4 1/2"

Retractor Blade Ejector Forceps

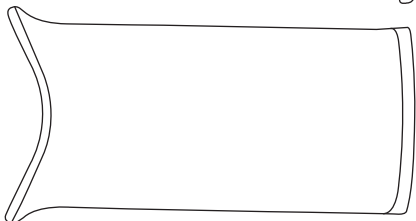


width x depth	blunt	serrated	5 prong
24mm x 25mm	gS 40.7644	gS 40.7657	gS 40.7678
24mm x 30mm	gS 40.7647	gS 40.7658	gS 40.7668
24mm x 35mm	gS 40.7648	gS 40.7659	gS 40.7669
24mm x 40mm	gS 40.7649	gS 40.7660	gS 40.7670
24mm x 45mm	gS 40.7650	gS 40.7661	gS 40.7671
24mm x 50mm	gS 40.7651	gS 40.7662	gS 40.7672
24mm x 55mm	gS 40.7652	gS 40.7663	gS 40.7673
24mm x 60mm	gS 40.7653	gS 40.7664	gS 40.7674
24mm x 65mm	gS 40.7654	gS 40.7665	gS 40.7675
24mm x 70mm	gS 40.7655	gS 40.7666	gS 40.7677
24mm x 75mm	gS 40.7656	gS 40.7667	gS 40.7678

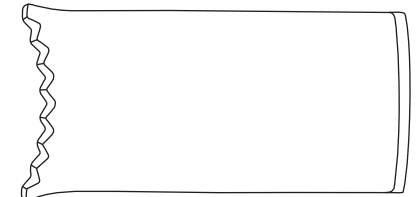
Caspar Retractor Blades



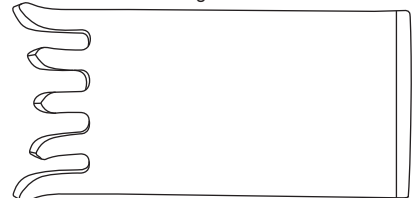
Side view of gS 40.7651



gS 40.7651



gS 40.7662



gS 40.7672

self-retaining retractors - 38-40/33

38-40

gS 40.7631 6 1/2"
hinged

Caspar Retractor Handle
ring handle only



gS 40.7610 4 1/2", 4" arms
with 85 mm opening

Caspar Cervical Spreader
hinged, transversal
frame only



blade	depth
gS 40.8802	25mm
gS 40.8803	30mm
gS 40.8804	5mm
gS 40.8805	40mm
gS 40.8806	45mm
gS 40.8807	50mm
gS 40.8808	55mm
gS 40.8809	60mm

gS 40.8801 6" handle only

Cervical Retractor Small
blunt blades



blade	depth
gS 40.8831	25mm
gS 40.8832	30mm
gS 40.8833	35mm
gS 40.8834	40mm
gS 40.8835	45mm
gS 40.8836	50mm
gS 40.8837	55mm
gS 40.8838	60mm

gS 40.8830 10" handle only, hinged

Cervical Retractor Large
4 sharp prongs



38-40/34 - self-retaining retractors

38-40



gS 40.5459

Scoville Retractor

body only

5 1/2" arms with 6 3/4" spread



gS 40.5460

Scoville-Haverfield Retractor

hinged, body only

5 3/4" arms with 7 1/4" spread



gS 40.5470 2" depth

gS 40.5480 3" depth

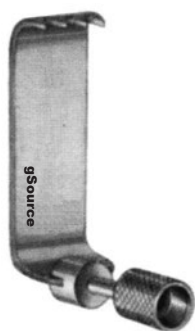
gS 40.5490 2" depth

with cross pin

gS 40.5500 2 3/4" depth

with cross pin

Scoville Hook



gS 40.5510 1" x 2 1/2" width x depth

gS 40.5520 2" x 2 1/2" width x depth

gS 40.5530 1 1/8" x 2 5/8" width x depth

gS 40.5540 1" x 3 1/2" width x depth

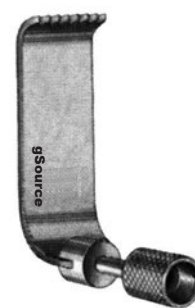
Scoville Blade with teeth



gS 40.5560 1 1/2" x 1 5/8" width x depth

gS 40.5570 1 7/8" x 2 5/8" width x depth

Scoville Blade 4 prongs



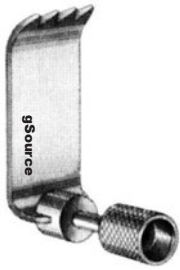
gS 40.5580 1" x 2 1/4" width x depth

gS 40.5590 1" x 3" width x depth

gS 40.5600 2" x 3 1/2" width x depth

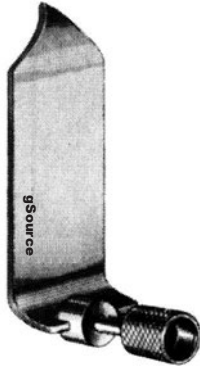
Meyerding Blade with fine teeth

self-retaining retractors - 38-40/35



	width x depth
gS 40.5610	1" x 2"
gS 40.5620	2" x 2"
gS 40.5630	1" x 2 1/2"
gS 40.5640	1 1/2" x 2 1/2"
gS 40.5650	1" x 3"
gS 40.5660	1 1/2" x 3"
gS 40.5670	2" x 3"
gS 40.5680	1" x 4"
gS 40.5690	2" x 4"

Hibbs Blade
with teeth



	width x depth
gS 40.5710	1 1/4" x 3"
gS 40.5720	1 1/4" x 4"

Taylor Spinal Blade



	width x depth
gS 40.5730	1 1/2" x 1 3/4"

Taylor Laminectomy Blade
3 prongs



	width x depth
gS 40.5740	2" x 1 7/8"
gS 40.5750	2 1/2" x 2 1/2"
gS 40.5760	2 1/4" x 3 1/8"

Taylor Laminectomy Blade
4 prongs



	width x depth
gS 40.8901	1 3/4" x 1 5/8" with 5 3/4" opening
gS 40.8902	2 5/8" x 1 3/4" with 7 3/4" opening
gS 40.8903	2 5/8" x 2 3/4" with 8 1/2" opening

Finochietto Rib Spreader
stainless steel



gS 40.9002
Finochietto Rib Spreader
small, aluminum, with 7" opening
1 1/8" width x 1 3/4" depth blades

38-40/36 - self-retaining retractors

38-40



gS 40.9004

Finochietto Rib Spreader

medium, aluminum, with 7" opening
1 5/8" width x 2 3/8" depth blades



gS 40.9030

Finochietto Rib Spreader

infant, with 3" opening
13/16" width x 3/4" depth blades

did you know... ?

Anterolateral thoracotomy is a surgical technique in which entry to the chest is made with an incision below the breast but above the costal margins (lower edge of the chest (thorax) formed by the bottom edge of the rib cage). The incision involves the pectoralis, serratus anterior, and intercostal muscles. Left anterolateral thoracotomy is common for open chest massage, a critical maneuver in the management of traumatic cardiac arrest. Anterolateral thoracotomy requires the use of a retractor similar to a rib spreader, such as the Tuffier Rib Spreader shown on this page.

Theodore Tuffier was a French surgeon born in 1857, whose contributions were in the field of intratracheal anesthesia, pulmonary resection and experimental cardiac surgery. He performed the first partial lung resection in 1891.



gS 40.9020

Tuffier Rib Spreader

6 1/2" opening
2" width x 1 3/4" depth blades

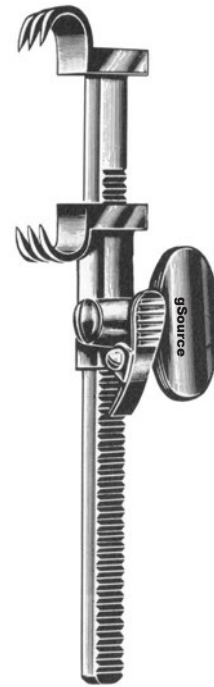
self-retaining retractors - 38-40/37



gS 40.9320

Favaloro-Morse Spreader

8" opening
1 1/2" width x 1 1/8" depth blades

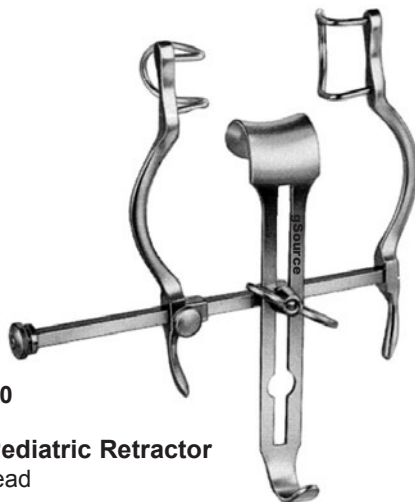


gS 40.9100 8"

Bailey Rib Contractor

4 1/2" opening

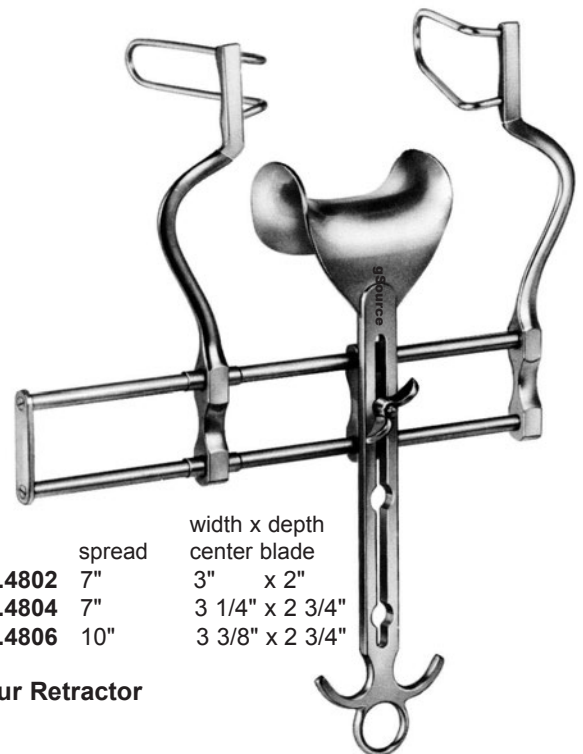
38-40



gS 38.4800

Balfour Pediatric Retractor

3 1/2" spread

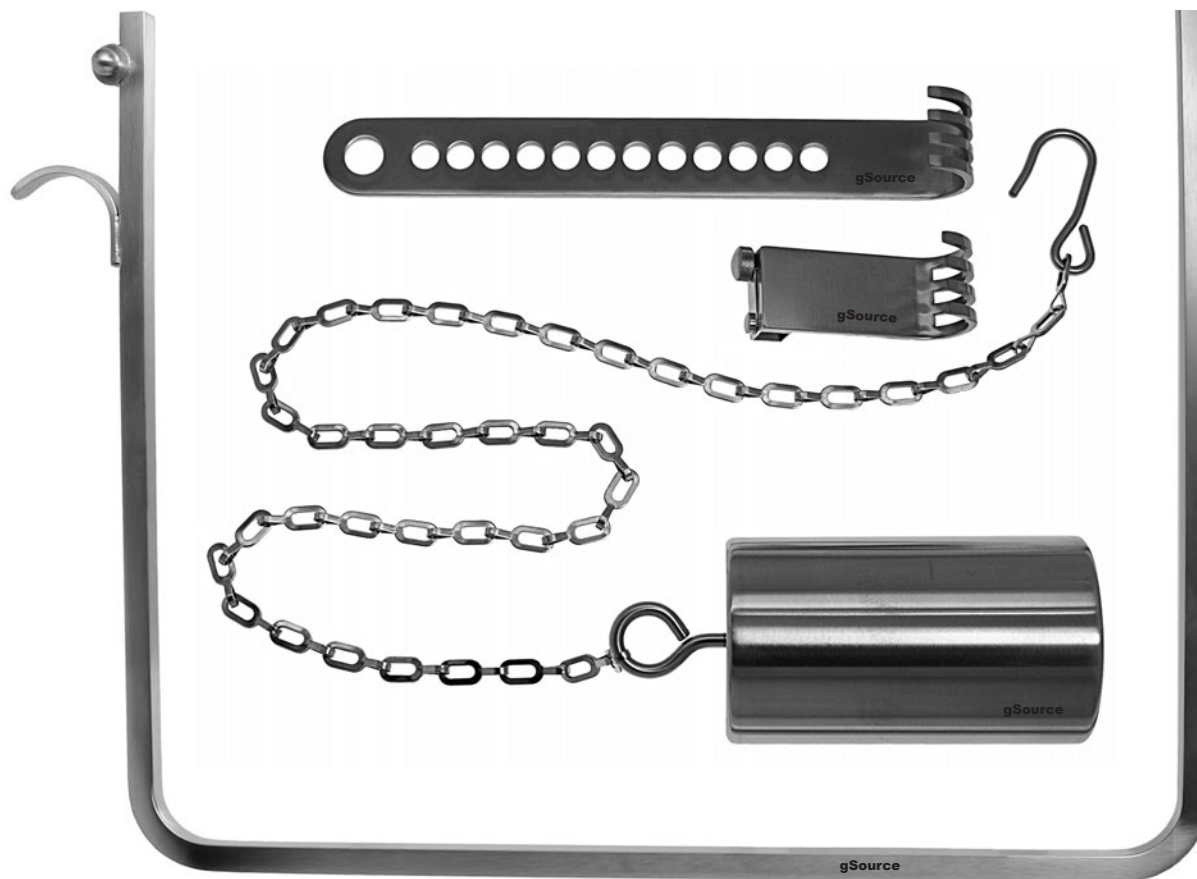


	spread	width x depth center blade
gS 38.4802	7"	3" x 2"
gS 38.4804	7"	3 1/4" x 2 3/4"
gS 38.4806	10"	3 3/8" x 2 3/4"

Balfour Retractor

38-40/38 - self-retaining retractors

38-40

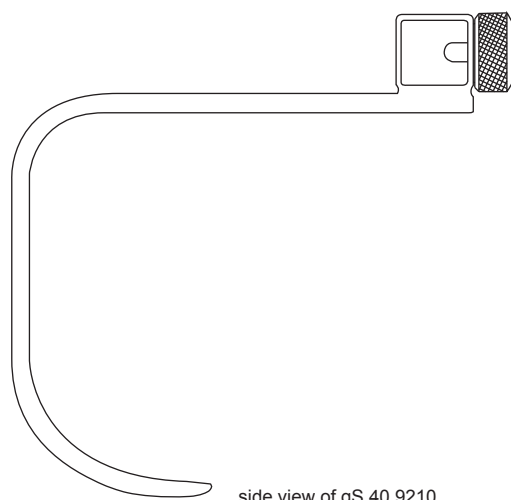


short blade	width x depth	shape
gS 40.9202	25mm x 25mm	curved round
gS 40.9210	25mm x 51mm	curved flat
gS 40.9214	25mm x 64mm	curved flat
gS 40.9215	25mm x 76mm	curved flat
gS 40.9218	25mm x 114mm	curved flat

long blade	width x depth	shape
gS 40.9204	25mm x 25mm	curved round
gS 40.9220	25mm x 51mm	curved flat
gS 40.9224	25mm x 64mm	curved flat
gS 40.9225	25mm x 76mm	curved flat
gS 40.9228	25mm x 114mm	curved flat

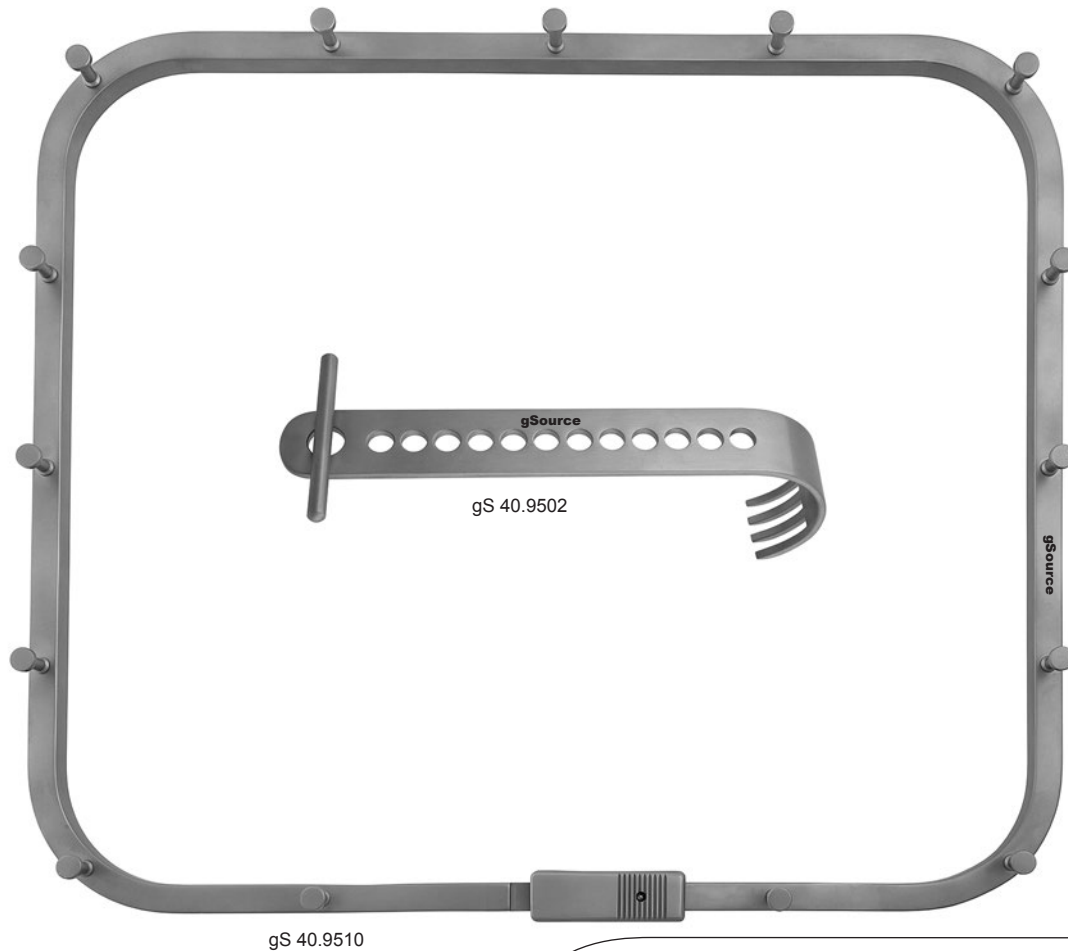
gS 40.9280 frame only 12" x 9 1/2"
gS 40.9282 weight only with chain – 4 lbs.

Initial Incision Retractor
 (Charnley)



side view of gS 40.9210

self-retaining retractors - 38-40/39



38-40

Multiple holding posts on frame allow for better positioning and the ability to use numerous blades at the same time. Provides excellent exposure during hip arthroplasty and hip fracture surgery. Blades have T-handles to help prevent hand slippage. Blade handle length is 6".

T-handle

blade width x depth

gS 40.9502 1" x 2"

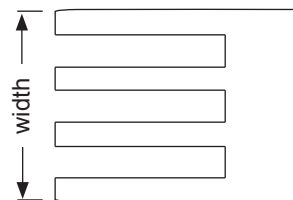
gS 40.9503 1" x 3"

gS 40.9504 1" x 4"

gS 40.9505 1" x 5"

gS 40.9506 1" x 6"

gS 40.9510 square frame only
12 3/4" x 11 1/4"



side view of gS 40.9503

Hip Retractor

did you know... ?

Donald Church Balfour was born in 1882 in Toronto, Canada and obtained the degree of bachelor of medicine in 1906 from the University of Toronto. During his internship at the Hamilton General Hospital, he became influenced by Dr. Ingersoll Olmstead, a prominent surgeon, who recommended him for an opening at the Mayo Clinic in the department of pathology in 1907. He was accepted and worked with Drs. Louis B. Wilson and William C. MacCarty in the surgical pathology department. In 1909, he became a junior surgeon and rotated between the surgical services of the Drs. Mayo (William J. and Charles). In 1910 he married Carrie Mayo, daughter of Dr. William J. Mayo. In 1912 he became head of a section of general surgery in the Mayo Clinic.

Dr. Balfour contributed much of his time to the work of the Mayo Foundation. From 1915 to 1923 he was associate professor of surgery, and from 1923 to 1947 he was professor of surgery. He was chief of the Division of Surgery of the Mayo Foundation from 1923 to 1935, and became director of the Mayo Foundation in 1937, serving in that capacity until his retirement in 1947. He became internationally recognized for the management of difficult gastrointestinal cases and focused his research and writings of more than 225 articles on disorders of the stomach and duodenum (the beginning portion of the small intestine, starting at the lower end of the stomach and extending to the jejunum, the middle portion of the small intestine).

He also designed numerous instruments, including the Balfour Retractor shown on page 37, and equipment such as a device for holding bottles of solution, the operating table and operating room mirror. Dr. Balfour received recognition from the Mayo Clinic, as well as from numerous national and international organizations. He held honorary fellowship in the Royal College of Surgeons of England, Edinburgh, and Australasia. Dr. Balfour was one of the founders of the World Medical Organization and a charter member of the World Health Organization and of the Central Surgical Association. He passed away in 1963.

Enrique Finochietto was born in 1881 in Buenos Aires, Argentina and entered medical school at age 16. He received his medical degree from the University of Buenos Aires in 1904. After graduation, he became an intern at the Hospital Rawson in Buenos Aires and remained a member of its staff for his entire life.

Finochietto studied nose and throat, gynecological, and orthopedic surgical practices in many western European hospitals from 1906 to 1909. Upon his return to Buenos Aires, he was appointed chief of the surgical division at the Hospital Rawson. He returned to Europe in 1918, working during World War I in the Argentine Hospital for the Wounded in Passy, located near Paris. For his dedication and work, he received the Legion of Honor and Red Cross Medal in 1919. Finochietto then traveled to the United States and visited with Harvey Cushing and the Mayo brothers. He observed surgical practices at the Mayo Clinic and other prominent hospitals before returning to Argentina.

While he acted as chief of the surgical division at the Hospital Rawson, the facility was undergoing an extensive enlargement and modernization. Finochietto planned the new surgical pavilion (Pavilion IX), where he worked alongside his brothers, Drs. Miguel Ángel and Ricardo Finochietto. Pavilion IX included numerous innovations of his design such as an outpatient department with separate dressing and examining rooms, separate sterile dressing packages, a narrower stretcher to maneuver through the halls more easily, separate departments of orthopedic surgery, endoscopy and pathology, as well as laboratories and radiology departments that were located within the hospital itself. He also eliminated the book form of medical records and instead created separate envelopes for patients.

Dr. Finochietto not only changed the way surgical pavilions were organized and operated, he also invented many surgical instruments with sixty-seven inventions to his credit. These included a motorized surgical table which allowed a patient to be moved to any position, a special orthopedic table, a bench that allowed surgeons to operate while seated, the surgical vacuum, Finochietto scissors, and the Finochietto thoracic rib spreaders as shown on pages 35-36 in this section.

Establishing the Surgical Graduate School of Buenos Aires, he also changed how surgery was taught and performed in Argentina. Finochietto was adamant about giving students more practical experience in surgery and included instruction on proper, professional demeanor throughout a surgical procedure. He also taught as a Clinical Professor of Surgery at the University of Buenos Aires and became the president of the Buenos Aires Surgical Society in 1922. He developed new surgical techniques in 1924 for the treatment of the stomach, duodenum and small intestine. In 1929 Dr. Finochietto performed the first intervention on a cardiac lesion in Argentina, successfully repairing a bullet wound to the heart of a minor. He passed away in 1948 at the age of 66.

gS 42.5950 6" #92

Probe and Packer
double ended



gS 42.5980 5 3/4" #91

Spatula and Packer
double ended
blunt/blunt



gS 42.6020 5 3/4" #90

Excavator and Packer
double ended

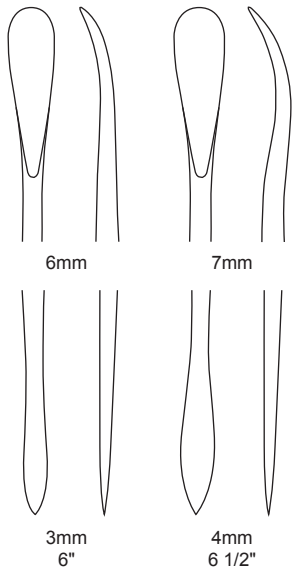


gS 42.6180 6" #89

Probe and Excavator
double ended

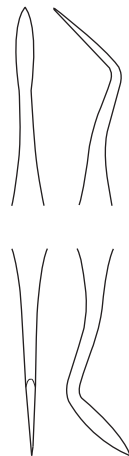


42-43/2 - elevators



gS 42.6120 6"
gS 42.6121 6 1/2" #7A

**Beale Spatula
and Packer**
double ended, sharp/sharp



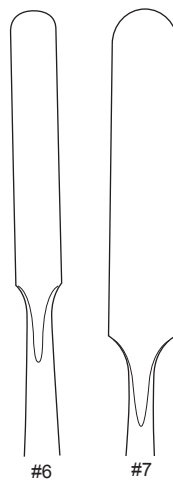
gS 42.6140 6 1/4" #3

**Hollenback Elevator
and Spatula**
double ended, sharp/sharp



gS 42.6330 6 3/4"

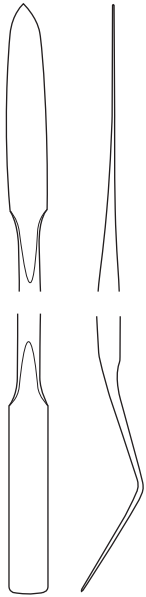
**Weston Spatula and
Chisel**
double ended, octagonal handle



gS 42.6316 7" #6
gS 42.6317 7 1/2" #7

Spatula
octagonal handle





gS 42.6305 7" #5

Spatula

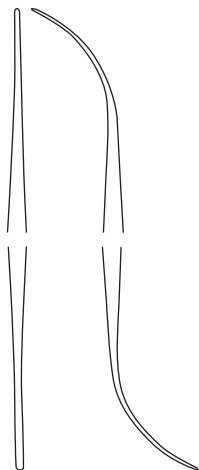
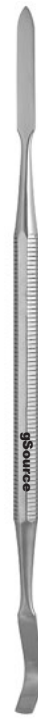
double ended, sharp point
bent end, octagonal handle



gS 42.6306 6 3/4" #6

Spatula

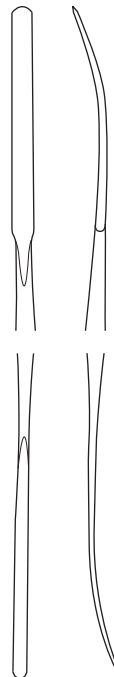
double ended, sharp point
curved end, octagonal handle



gS 42.6220 6 3/4"

Varady Micro Spatula

double ended, sharp/sharp
0.7mm and 1.2mm



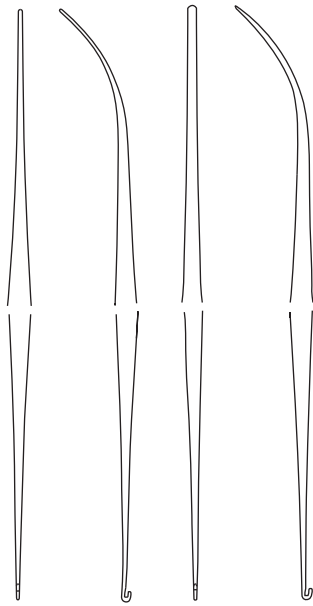
gS 42.6221 7"

Varady Dissecting Spatula

double ended, sharp/sharp
1.9mm and 2.9mm



42-43/4 - elevators



gS 42.6222

gS 42.6223

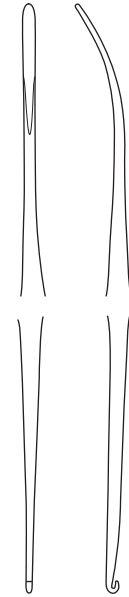
gS 42.6222 0.7mm spatula/1.3mm hook
gS 42.6223 1.1mm spatula/1.5mm hook

Varady Extractor
 6 3/4"
 double ended, sharp/sharp



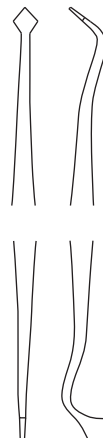
gS 42.6225 7"

Varady Extractor
 double ended, blunt/blunt
 1.9mm spatula/2.8mm hook



gS 42.6224 7"

Varady Extractor
 double ended, blunt/blunt
 1.7mm spatula/1.8mm hook



gS 42.6130 6 1/2"

Frahm Lancet
 double ended
 sharp/sharp



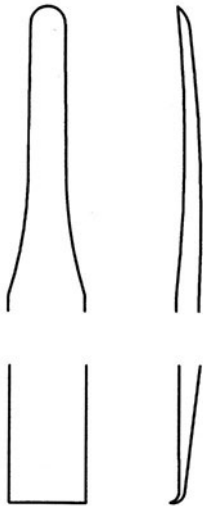
gS 42.5940 6 1/2"

**Johnson-Tucker Hook
and Fork**
delicate, double ended



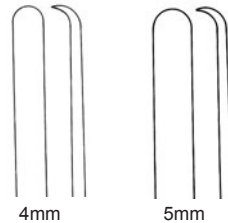
gS 42.6790 4 1/2" narrow blade
gS 42.6900 5" wide blade

Locke Elevator
with McGlamry Bullneck
to resist bending



gS 43.3680 5 1/2"

Carroll Elevator
sharp
5mm and 10mm ends



gS 43.3050 6" 4mm wide
gS 43.3052 5 1/2" 5mm wide

McKenty Elevator
semi-sharp



42-43/6 - elevators

42-43

gS 42.1750 sharp/blunt
gS 42.1760 blunt/blunt

Sayre Elevator

6 1/2"
5mm and 9mm ends

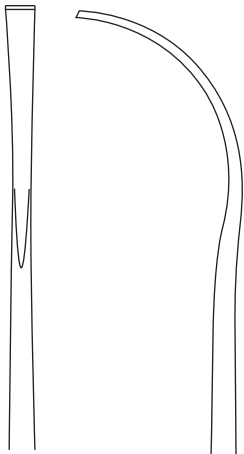


Designed to deglove a metatarsal head.

gS 42.8590 9mm
gS 42.8600 11mm
gS 42.8620 13mm
gS 42.8640 15mm
gS 42.8660 17mm

Metatarsal Elevator

(McGlamry)
6 1/2", sharp



gS 43.9260 8 1/2"

gElevator, Ganz
sharp 4mm, curved
with 5" knurled handle

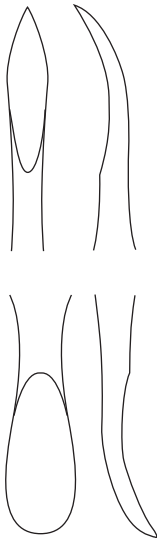


Useful in facilitating
a discectomy in
anterior lumbar
fusion and non-fusion
procedures.

gS 43.9286 10 1/2"

gDissector
blunt 6mm, slight curve
with 6" knurled handle





gS 43.3700 7 1/4"

Molt #9 Elevator (Dingman)

double ended
sharp/sharp 6mm and 7mm ends



42-43



Side wings prevent rolling.

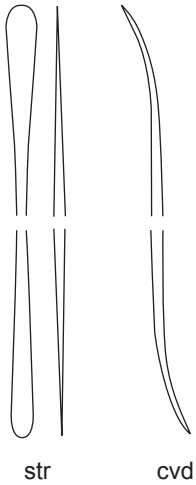
gS 42.7140 7 1/2"

Freer Elevator

double ended
sharp/blunt 5mm ends

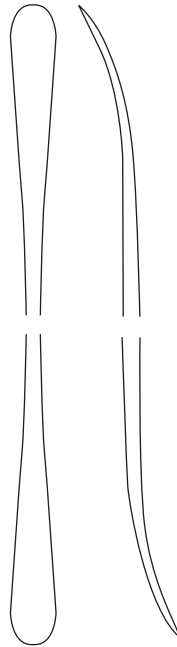


42-43/8 - elevators



gS 42.7130 straight
gS 42.7132 curved

Presbyterian Hospital Elevator
7", double ended
semi-blunt/blunt 4mm ends



Side wings prevent rolling.

gS 42.7165 9 1/2"

Davis Dissector (McCulloch)
double ended
sharp/blunt 6mm ends



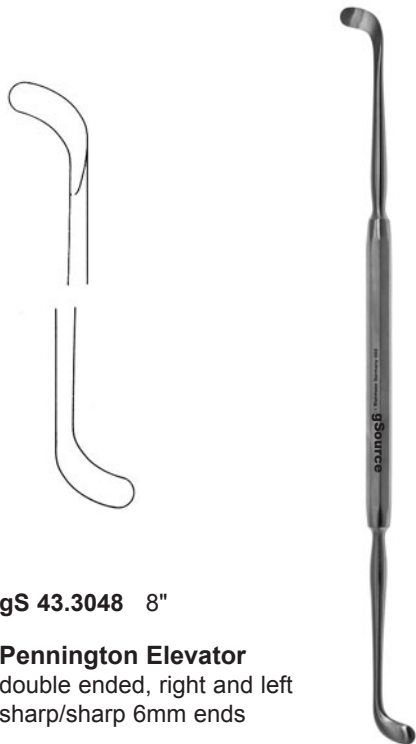
gS 42.7143 7"

Watson-Cheyne Elevator
double ended
blunt/blunt 9mm and 10mm ends



gS 42.7145 7 1/2"

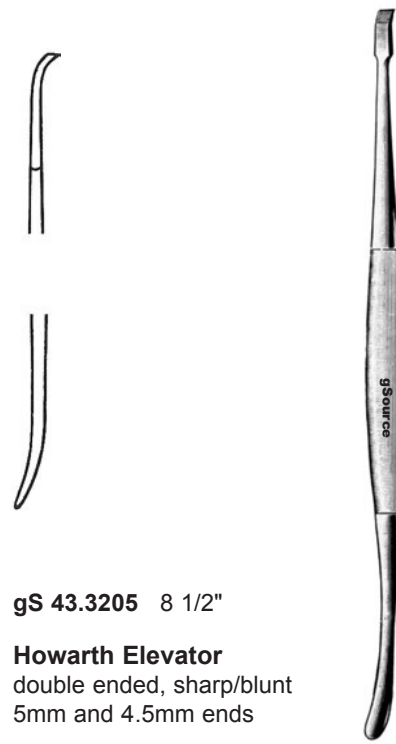
McDonald Elevator
double ended
blunt/blunt 5mm ends



gS 43.3048 8"

Pennington Elevator

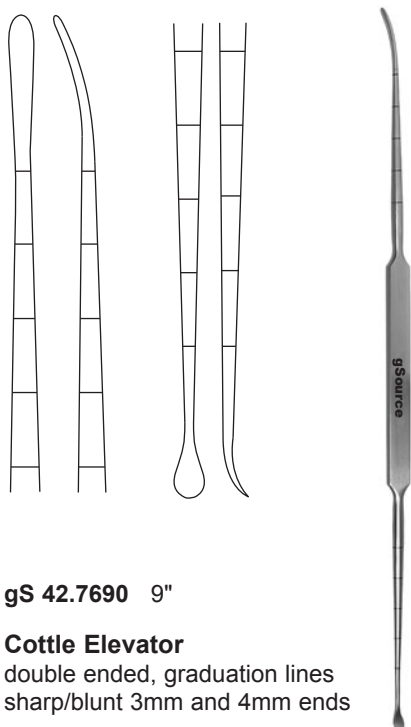
double ended, right and left
sharp/sharp 6mm ends



gS 43.3205 8 1/2"

Howarth Elevator

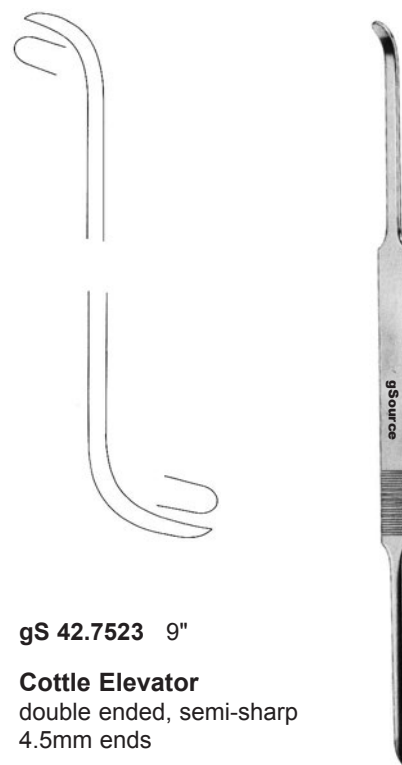
double ended, sharp/blunt
5mm and 4.5mm ends



gS 42.7690 9"

Cottle Elevator

double ended, graduation lines
sharp/blunt 3mm and 4mm ends



gS 42.7523 9"

Cottle Elevator

double ended, semi-sharp
4.5mm ends

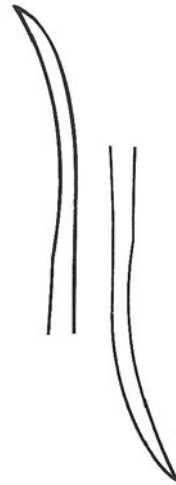
42-43/10 - elevators

42-43



gS 42.7160 7 3/4"

Kleinert-Kutz Elevator
double ended
sharp/sharp 2mm and 3mm ends



gS 43.7160 8 1/2"

Alerdyce Elevator
double ended
semi-sharp/blunt 7mm ends

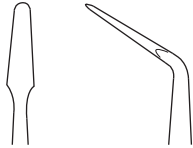


1.0/2.0mm 2.0/2.5mm

gS 42.7418 1.0mm and 2.0mm balls
gS 42.7420 2.0mm and 2.5mm balls

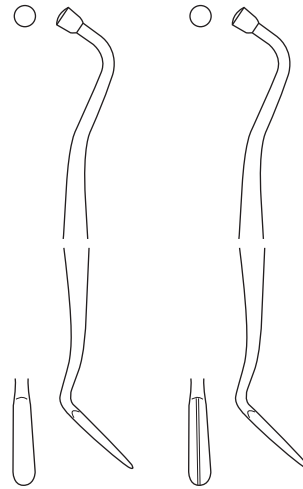
Ball End Elevator
8 1/2"
double ended ball tips





gS 42.7180 6 1/2"

Frazier Dura Separator
blunt

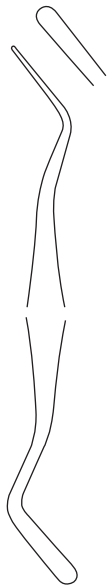


gS 42.7169

gS 42.7170

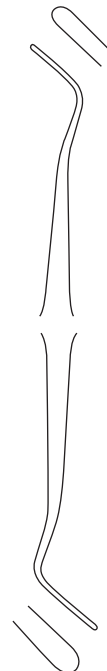
gS 42.7169 without groove
gS 42.7170 with groove

Woodson Dura Separator and Packer
7", double ended, blunt 3mm



gS 42.7171 7"

Woodson Elevator and Spatula
double ended, blunt 3mm



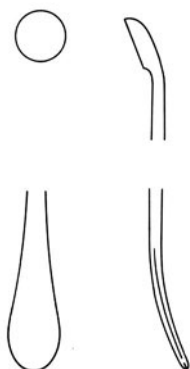
gS 42.7172 10"

Woodson Elevator and Spatula
double ended, blunt 3mm



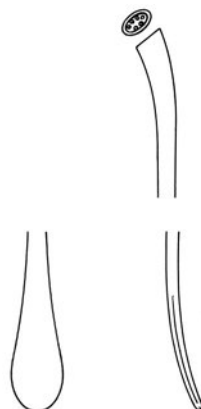
42-43/12 - elevators

42-43



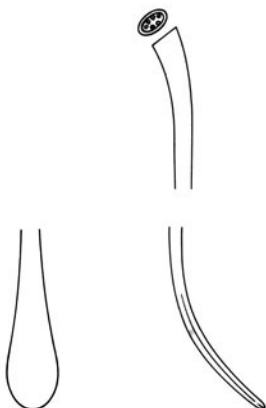
gS 43.9221 7"

Penfield Elevator #1
double ended



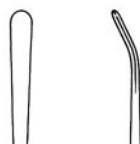
gS 43.9222 7 3/4"

Penfield Elevator #2
double ended



gS 43.9223 7 3/4"

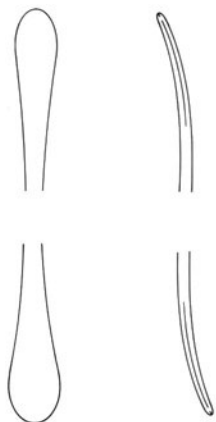
Penfield Elevator #3
double ended



gS 43.9224 8 1/2"

Penfield Elevator #4





gS 43.9225 11 1/2"

Penfield Elevator #5
double ended



gS 43.9250 15"

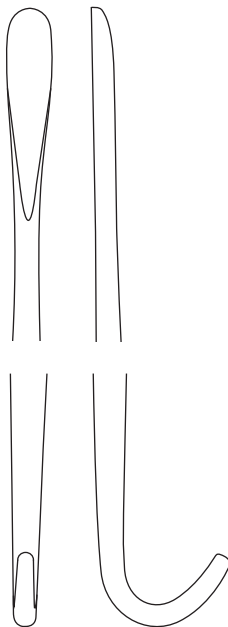
Penfield Elevator
blunt 4mm



4mm

gS 42.7150 semi-blunt 4mm
gS 42.7152 blunt 6mm

Sachs Nerve Elevator
8"

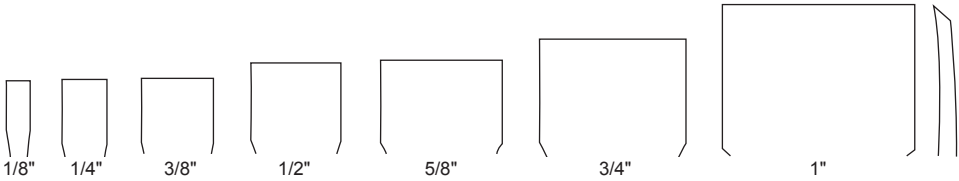


gS 42.7230 11 1/2"

Smithwick Hook & Dissector
semi-sharp 5mm dissector
blunt 10mm hook

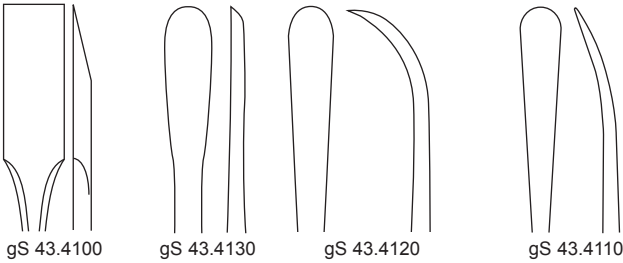


42-43/14 - elevators



gS 43.3575	7"	1/8"
gS 43.3580	7"	1/4"
gS 43.3600	7 1/2"	3/8"
gS 43.3620	7 1/2"	1/2"
gS 43.3630	7 1/2"	5/8"
gS 43.3640	8"	3/4"
gS 43.3660	8 1/2"	1"

Key Elevator
sharp



gS 43.4100	straight	8mm sharp	edge straight
gS 43.4130	straight	7mm semi-sharp	curved
gS 43.4120	curved	7mm semi-sharp	curved
gS 43.4110	slightly curved	7mm blunt	curved

Adson Elevator
6 3/4"





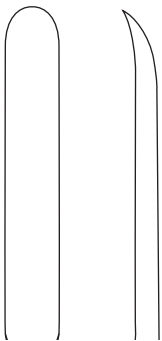
gS 42.7816 6 1/4"

Joseph Elevator
slightly curved
sharp 4mm



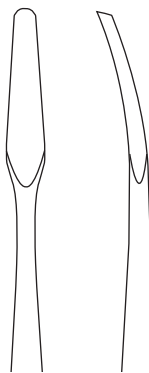
gS 42.7810 6"

Williger Bone Elevator
slightly curved
sharp 6mm



gS 43.3020 7"

Bone Raspatory
slightly curved
sharp 8mm



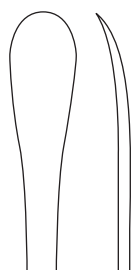
gS 43.3010 6 3/4"

Joseph Raspatory
slightly curved
sharp 3mm



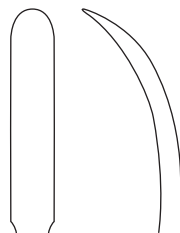
42-43/16 - elevators

42-43



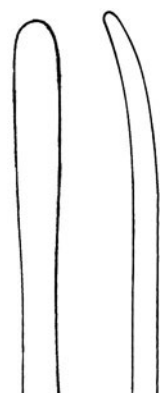
gS 42.7719 7 1/2"

Cottle Elevator
slightly curved
semi-sharp 9mm



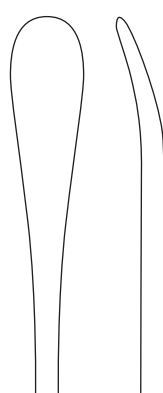
gS 42.7716 7 1/2"

Cottle Elevator (Joseph)
curved
sharp 5.5mm



gS 43.3190 7 3/4"

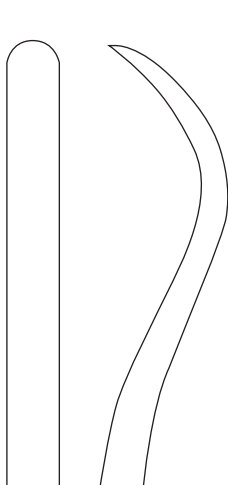
Lane Elevator
blunt
6mm



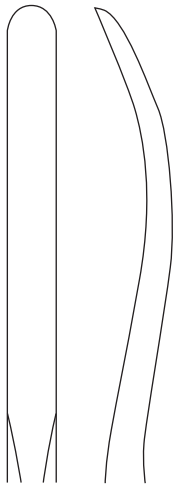
gS 43.3192 7 3/4"

Lane Elevator
blunt
10mm

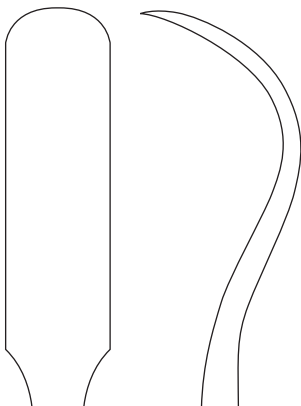




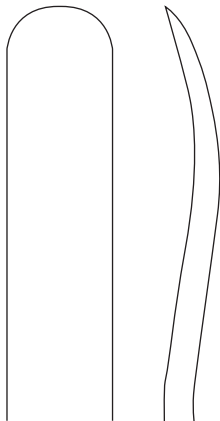
gS 43.3460



gS 43.3480



gS 43.3440



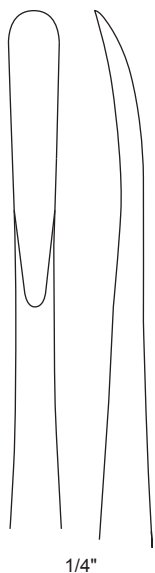
gS 43.3450

			curve
gS 43.3460	7 3/4"	7mm	full
gS 43.3480	8"	7mm	slight
gS 43.3440	7 1/2"	14mm	full
gS 43.3450	7 1/2"	14mm	slight

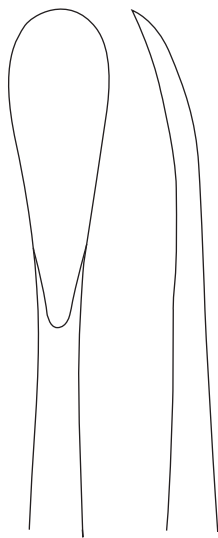
Crego Elevator
sharp



42-43/18 - elevators



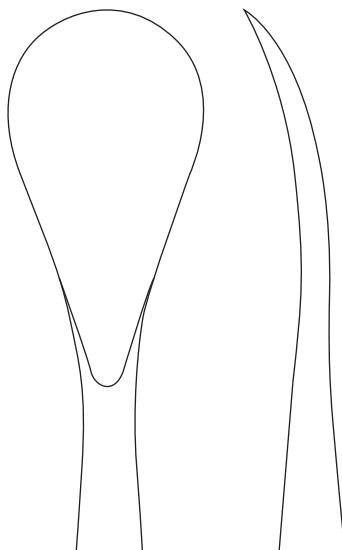
1/4"



1/2"



3/4"



1"

- gS 43.2410 1/4"
- gS 43.2420 1/2"
- gS 43.2430 3/4"
- gS 43.2440 1"

Periosteal Elevator
7 1/4", curved sharp blade
curved edge, hollow handle





gS 43.3060 7 1/4"

Periosteal Elevator

curved sharp 3mm
straight edge, phenolic handle



gS 43.3070 7 1/4"

Periosteal Elevator

curved sharp 6mm
straight edge, phenolic handle



gS 43.3110 7 1/4"

Periosteal Elevator

straight sharp 6mm
straight edge, phenolic handle



gS 43.3120 7 1/4"

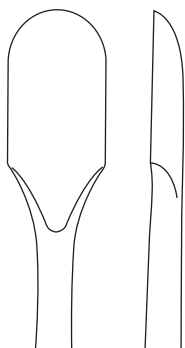
Periosteal Elevator

curved sharp 6mm
curved edge, phenolic handle



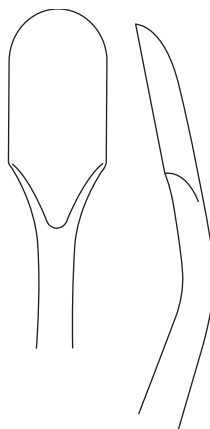
42-43/20 - elevators

42-43



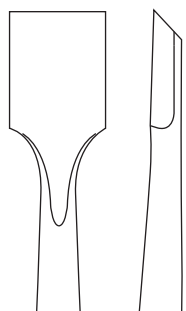
gS 43.3130 7 3/4"

Periosteal Elevator
straight sharp 14mm
curved edge, phenolic handle



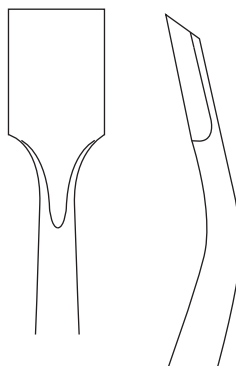
gS 43.3140 7 1/4"

Periosteal Elevator
angled sharp 14mm
curved edge, phenolic handle



gS 43.3150 7 1/4"

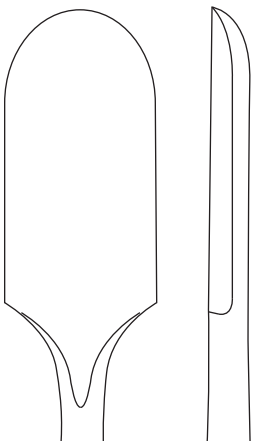
Periosteal Elevator
straight sharp 13mm
straight edge, phenolic handle



gS 43.3160 7 3/4"

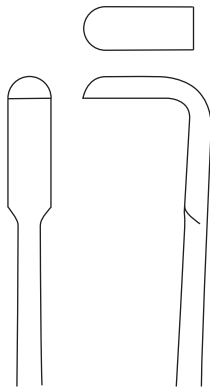
Periosteal Elevator
angled sharp 13mm
straight edge, phenolic handle





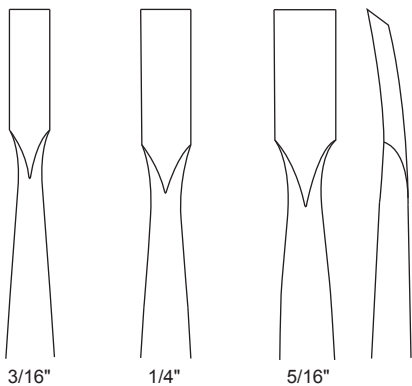
gS 43.3170 7 1/4"

Periosteal Elevator
straight sharp 20mm
curved edge, phenolic handle



gS 43.2306 7"

Periosteal Elevator
90° sharp 6mm
curved edge, plastic handle, black



gS 43.3185 3/16" [5.0mm]

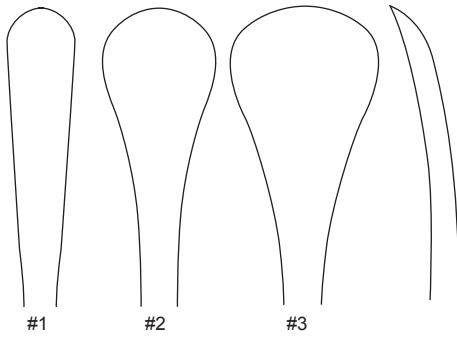
gS 43.3186 1/4" [6.4mm]

gS 43.3188 5/16" [8.0mm]

Periosteal Elevator
8", curved sharp
straight edge

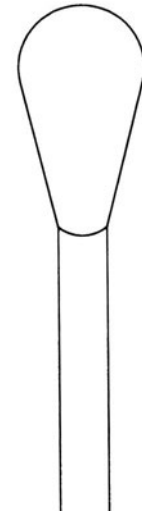


42-43/22 - elevators

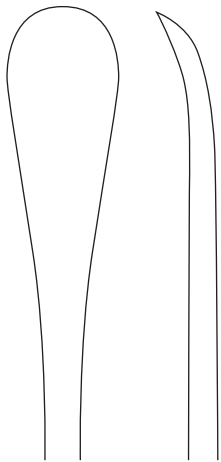


	#
gS 43.4160	1 9mm
gS 43.4162	2 15mm
gS 43.4164	3 20mm

Hoen Elevator
7 1/2"
sharp



gS 43.1850 7 1/2"
Sedillot Elevator
sharp 18mm

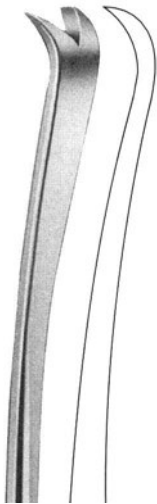


gS 43.1852 8"
Sedillot Elevator
sharp 16mm
ring handle



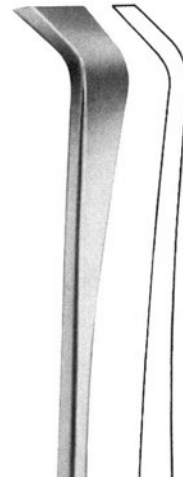
gS 43.2281 7 1/2"
Semb Periosteal Elevator #1





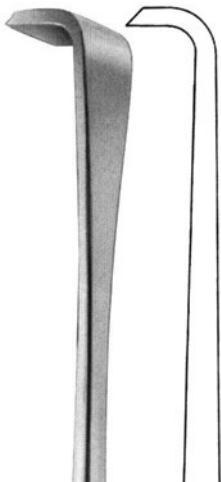
gS 43.2282 9"

**Semb Periosteal
Elevator #2**
12mm



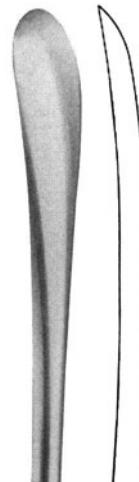
gS 43.2283 9"

**Semb Periosteal
Elevator #3**
13mm



gS 43.2284 9"

**Semb Periosteal
Elevator #4**
90° 13mm

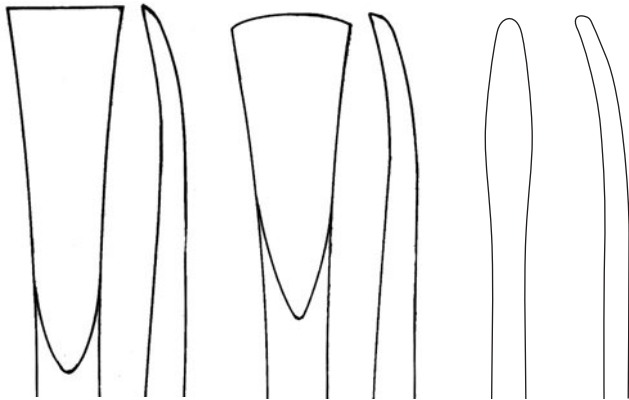


gS 43.2287 9"

**Semb Periosteal
Elevator #5**
15mm



42-43/24 - elevators



gS 43.4210

gS 43.4220

gS 43.4212

- gS 43.4210** 15mm sharp straight edge
- gS 43.4220** 15mm sharp curved edge
- gS 43.4212** 6mm blunt

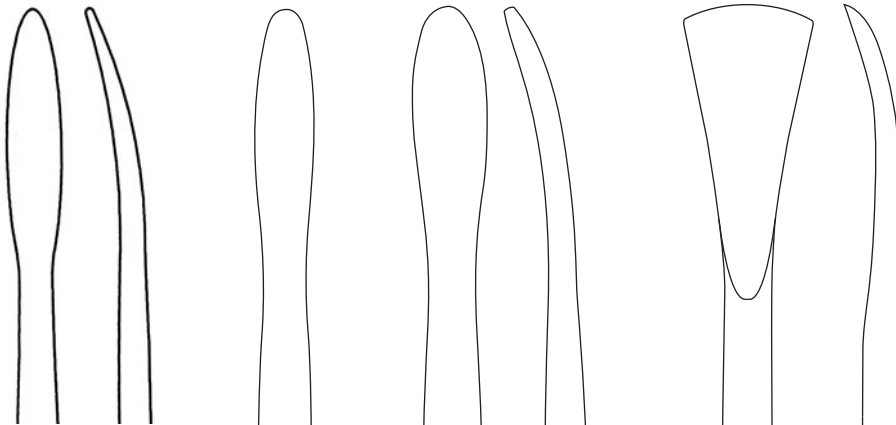
Cushing Elevator

7 1/2"



gS 43.4210

gS 43.4212



6mm

8mm

10 mm

17mm

- gS 43.3220** 6mm blunt
- gS 43.3222** 8mm blunt
- gS 43.3224** 10mm blunt
- gS 43.3240** 17mm sharp

Langenbeck Elevator

7 3/4"



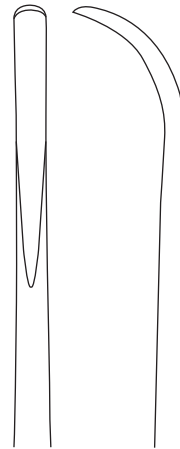
gS 43.3224

gS 43.3240



gS 43.1942 6 3/4"

Muehling Raspatory
sharp 4mm slightly curved

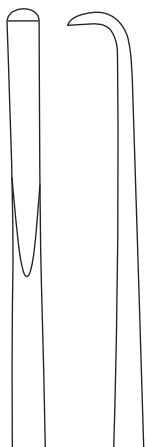


gS 43.1943 6 3/4"

Muehling Raspatory
sharp 4mm curved



42-43



gS 43.1944 6 3/4"

Muehling Raspatory
sharp 4mm 90°



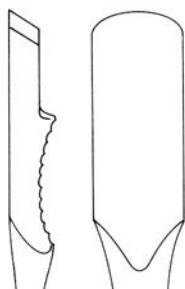
gS 43.1965 6 3/4"

Muehling Raspatory
sharp 6mm
full curve



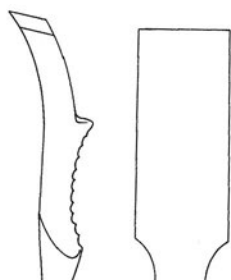
42-43/26 - elevators

42-43



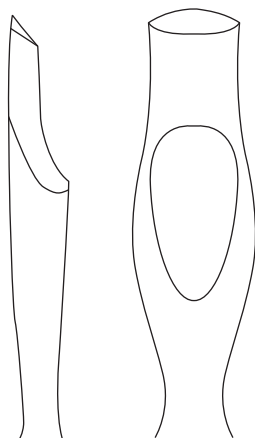
gS 43.2060 6"

Farabeuf Raspatory
sharp 13mm
straight, convex edge



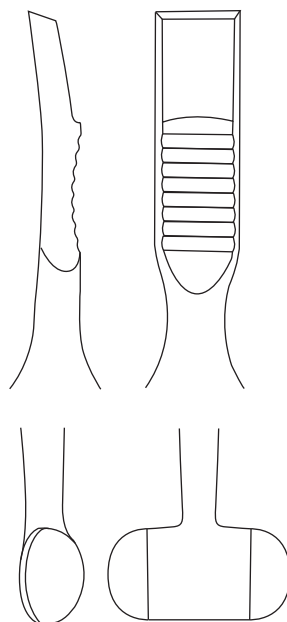
gS 43.2080 6"

Farabeuf Raspatory
sharp 13mm
curved, straight edge



gS 43.2120 6 3/4"

Kirmission Raspatory
sharp



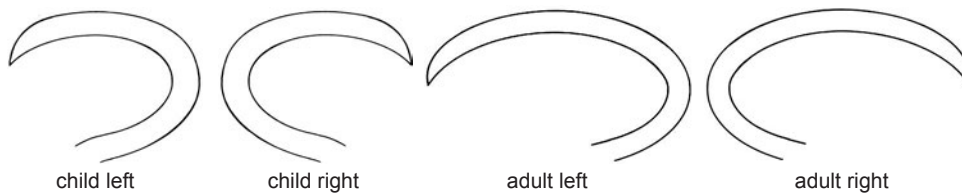
gS 43.2100 8"

Alexander Farabeuf Raspatory
sharp/sharp



did you know... ?

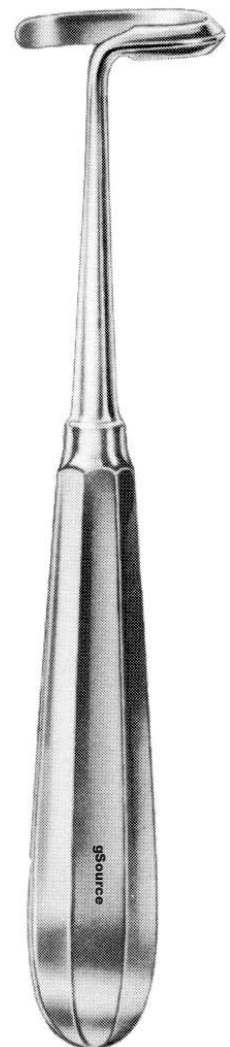
Eugène-Louis Doyen was a French surgeon born in Reims in 1859. He studied medicine in Reims and Paris and opened a private medical institute in Paris. As a skilled and innovative physician, he introduced several surgical techniques and medical instruments such as the Doyen Rib Raspatory shown on this page. He was a pioneer in the use of electrosurgery and electrocoagulation, and also marketed a yeast extract he called "mycolysine" for the treatment of infectious diseases. He had a strong interest in photography and cinematography and produced films of operations including a craniectomy, an abdominal hysterectomy and a separation of conjoined twins in the area of the xiphoid process of the sternum. Doyen also served as editor-in-chief of the *Revue Critique de Médecine et de Chirurgie*, as well as the *Archives de Doyen*, a medical-surgical journal of the Doyen Institute. He passed away in 1916.



- gS 43.2258** child left
- gS 43.2259** child right
- gS 43.2260** adult left
- gS 43.2261** adult right

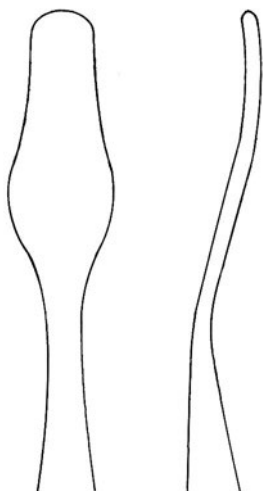
Doyen Rib Raspatory

7"
sharp end

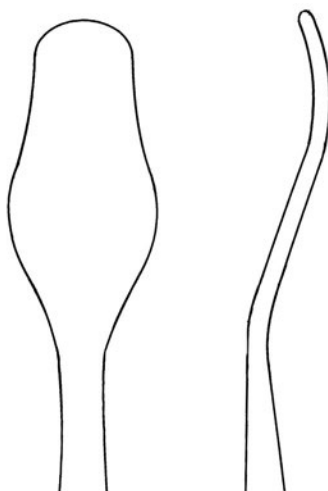


42-43/28 - elevators

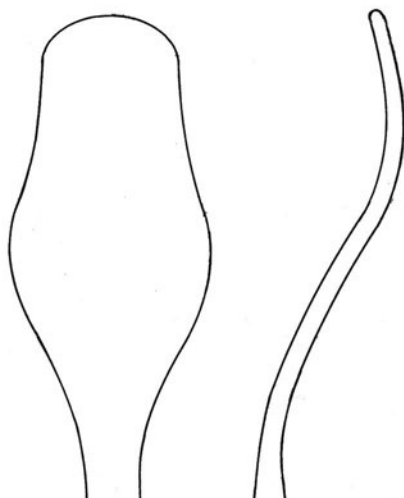
42-43



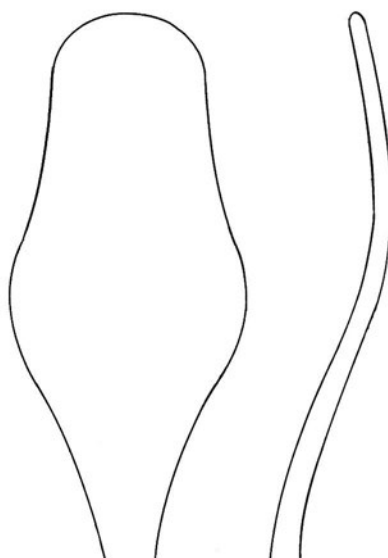
13mm



19mm



25mm

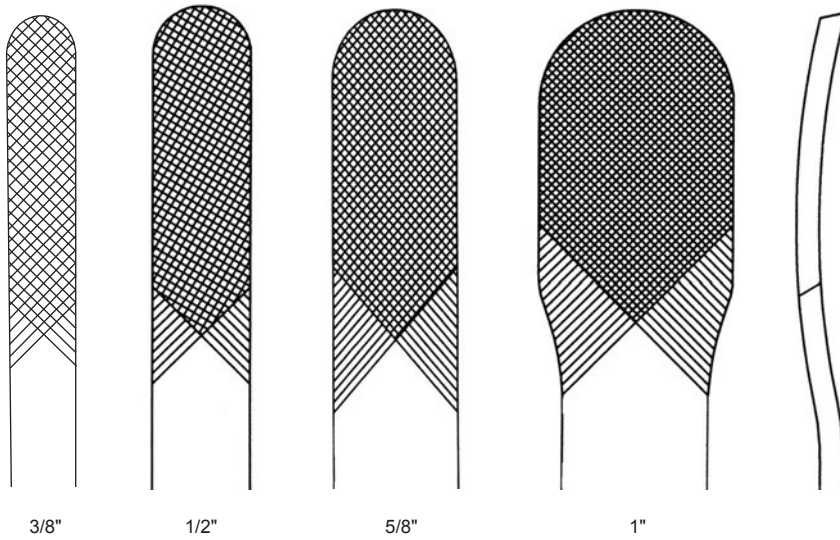


30mm

gS 43.3500	7 1/2"	13mm
gS 43.3520	8"	19mm
gS 43.3540	9"	25mm
gS 43.3560	10"	30mm

Chandler Elevator
blunt

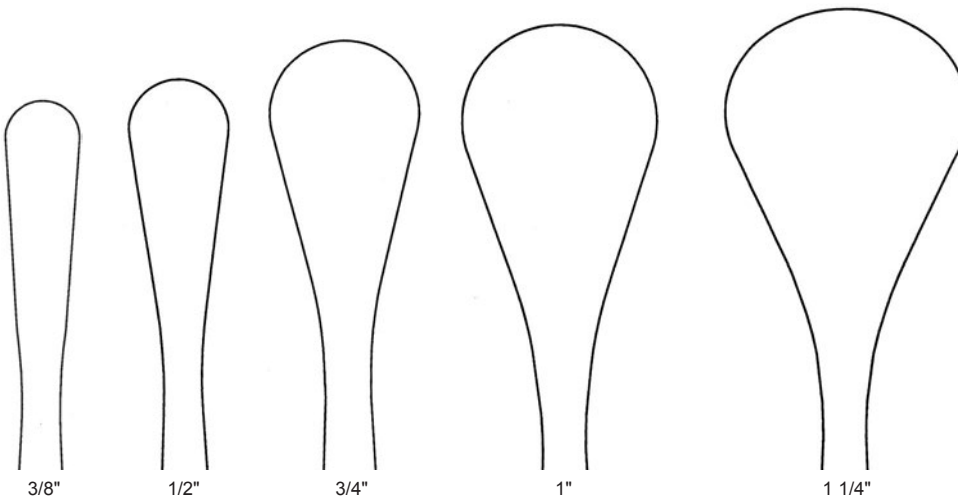




gS 43.9010 10 1/2" 3/8"
 gS 43.9020 10 1/2" 1/2"
 gS 43.9030 10 1/2" 5/8"
 gS 43.9040 14" 1"

Useful for shoulder surgery,
 to elevate or retract soft
 tissue and muscle.

Darrach Elevator
 blunt tips with serrations



gS 43.4396 3/8"
 gS 43.4400 1/2"
 gS 43.4420 3/4"
 gS 43.4440 1"
 gS 43.4460 1 1/4"

Cobb Elevator
 9 1/2", sharp
 with solid stainless steel hexagonal handle



42-43/30 - elevators



1/4"



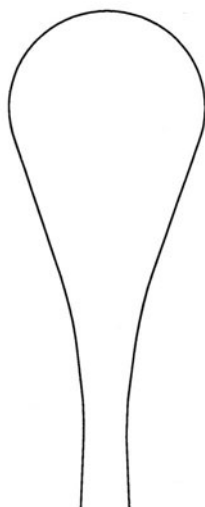
3/8"



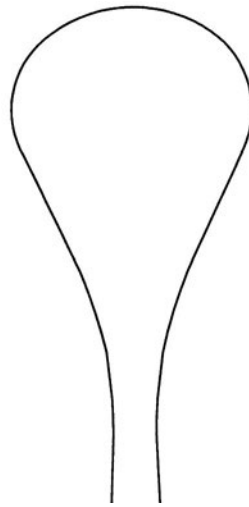
1/2"



3/4"



1"



1 1/4"

gS 43.5020 1/4"
gS 43.5030 3/8"
gS 43.5040 1/2"
gS 43.5060 3/4"
gS 43.5070 1"
gS 43.5080 1 1/4"

Cobb Elevator

9", sharp
with knurled aluminum handle





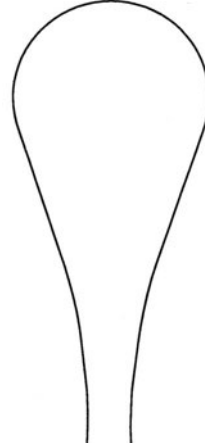
3/8"



1/2"



3/4"



1"

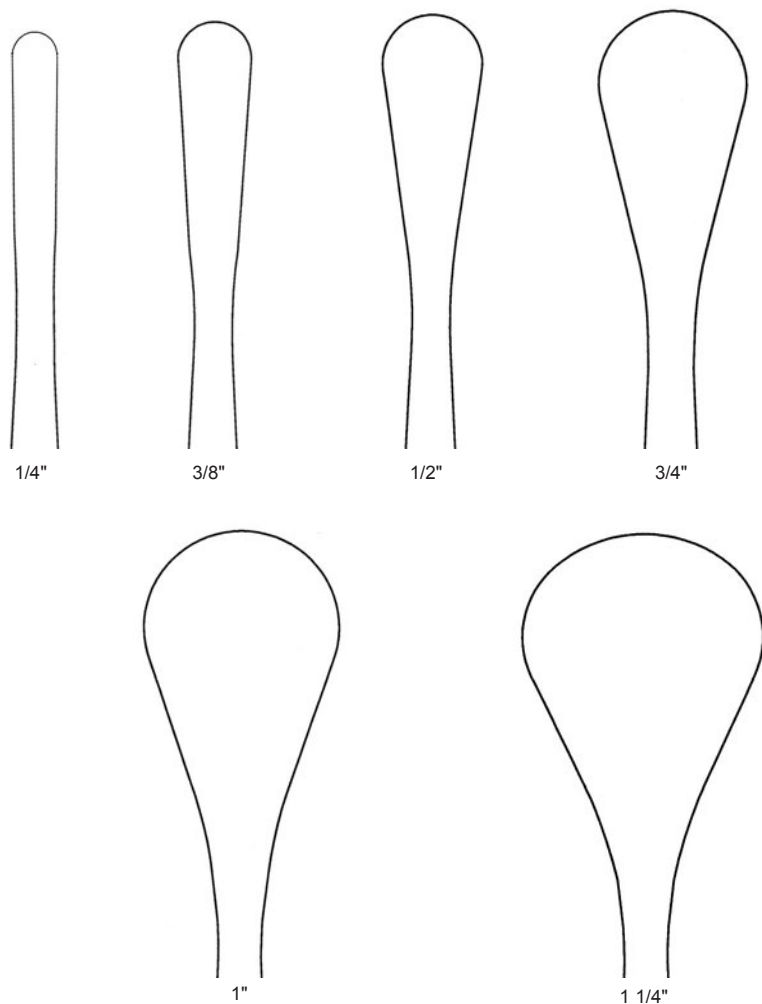
gS 43.5331 3/8"
gS 43.5341 1/2"
gS 43.5361 3/4"
gS 43.5381 1"

Cobb Elevator
10", sharp
with phenolic handle



42-43

42-43/32 - elevators



stainless steel handle

gS 43.5129	1/4"
gS 43.5131	3/8"
gS 43.5141	1/2"
gS 43.5161	3/4"
gS 43.5181	1"
gS 43.5201	1 1/4"

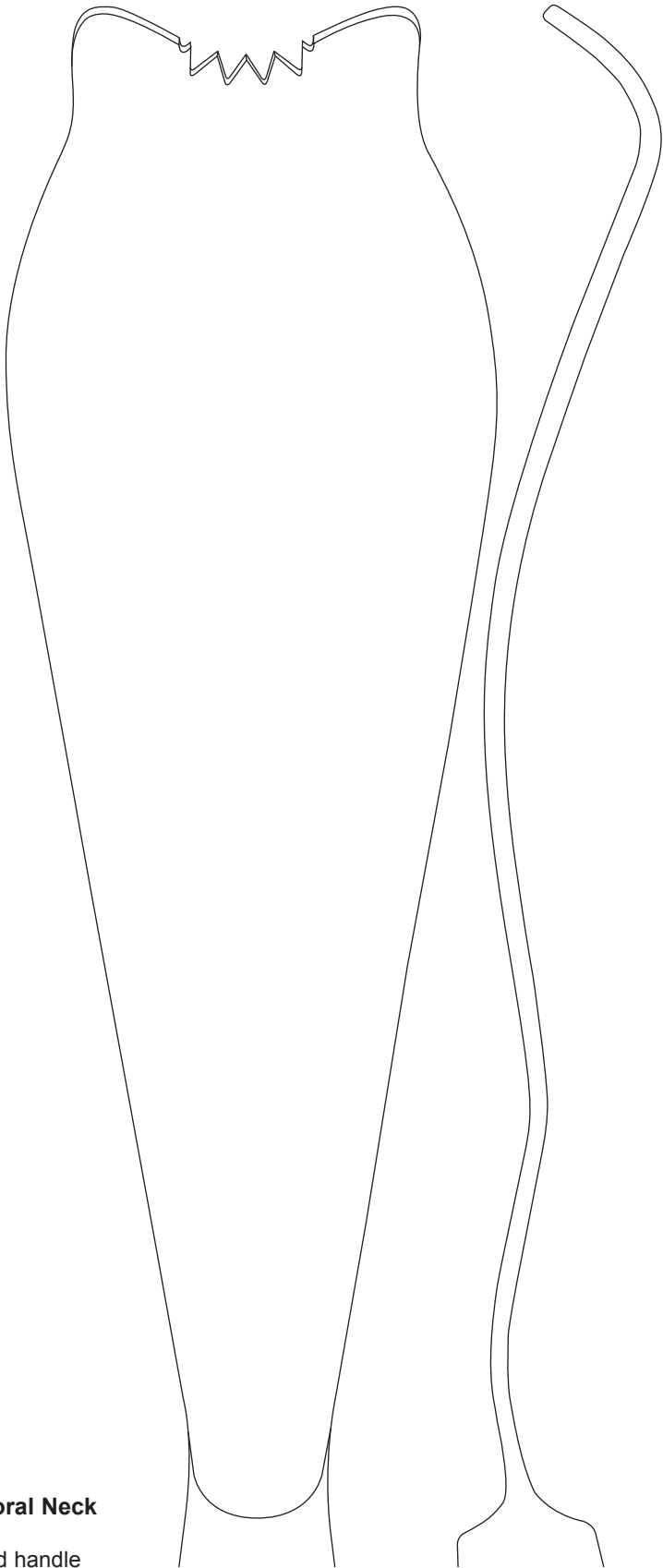
aluminum handle

gS 43.5130	3/8"
gS 43.5140	1/2"
gS 43.5160	3/4"
gS 43.5180	1"
gS 43.5200	1 1/4"

Cobb Elevator

11", sharp
with knurled handle





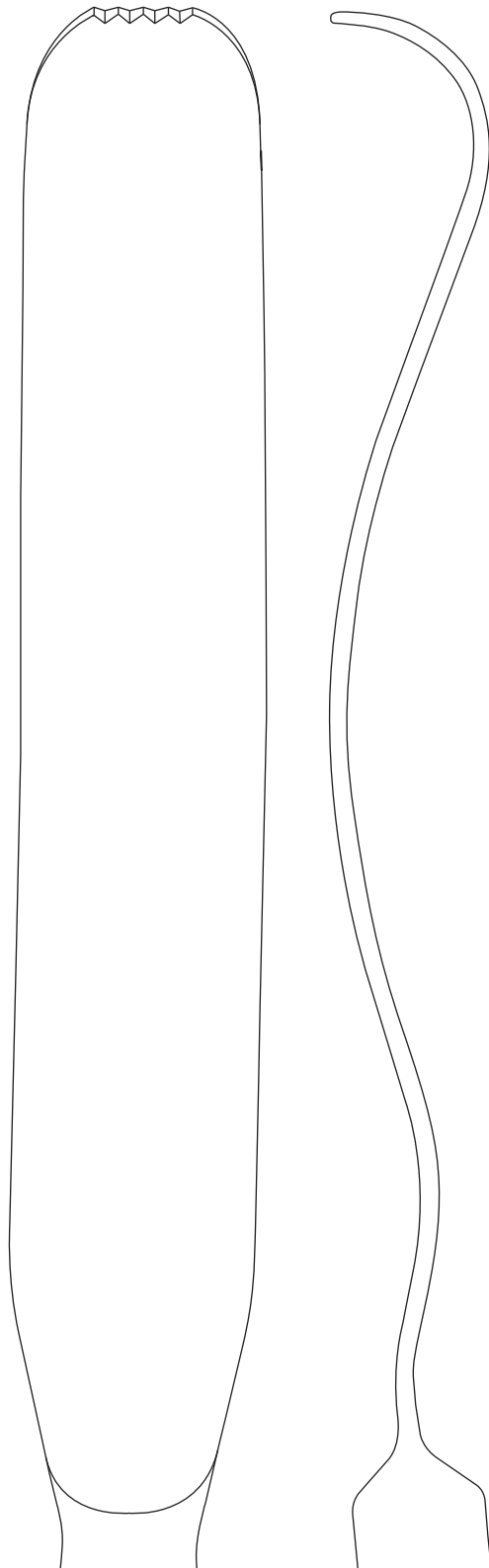
gS 43.9420 13"
gElevator, Femoral Neck
70mm
with 4 1/2" knurled handle



42-43

42-43/34 - elevators

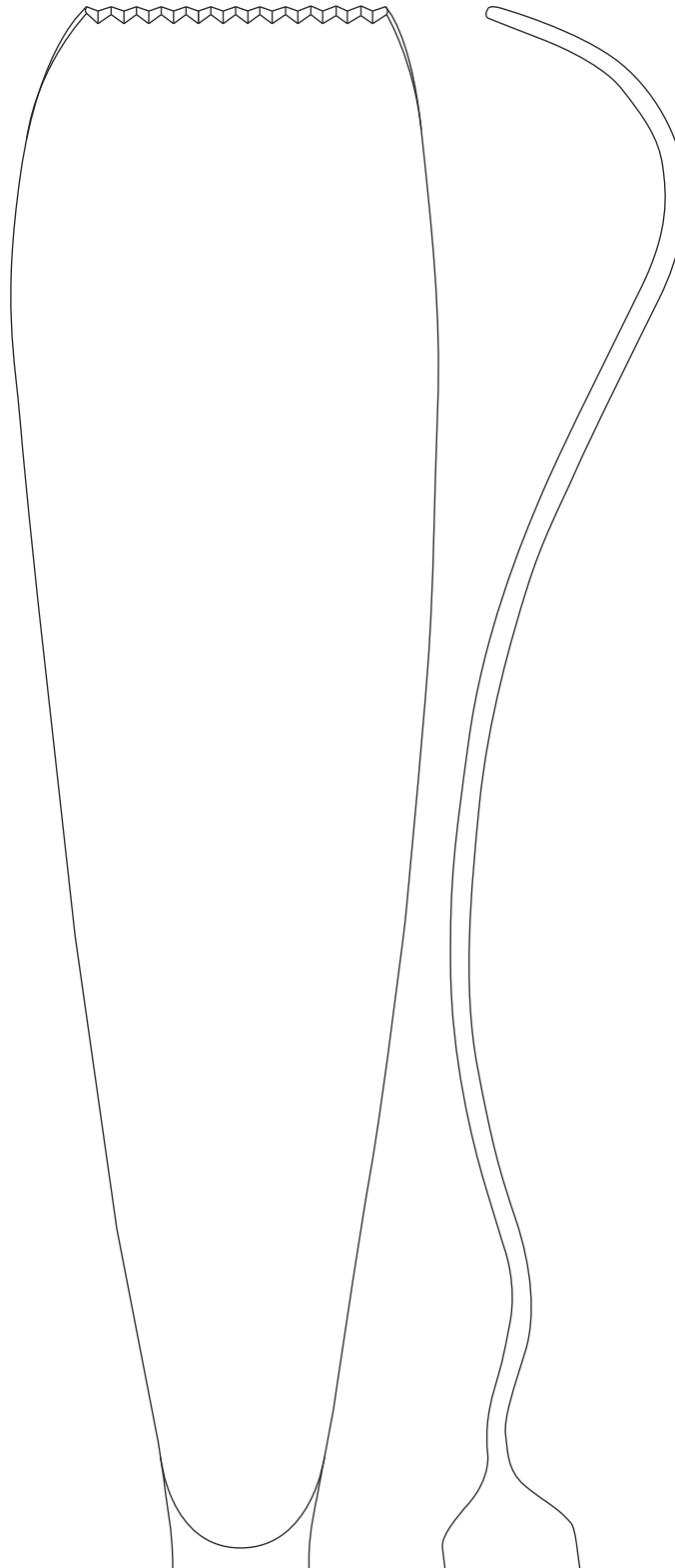
42-43



gS 43.9425 15"

gElevator, Femoral Neck
31mm
with 7" knurled handle





gS 43.9428 16"

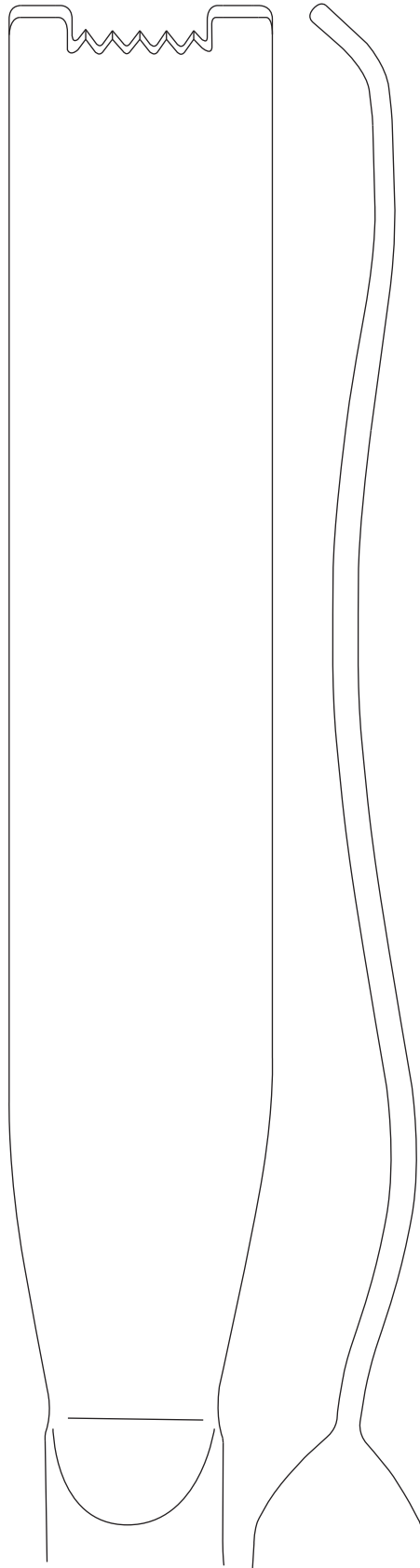
gElevator, Femoral Neck
56mm
with 8 1/2" knurled handle



42-43

42-43/36 - elevators

42-43



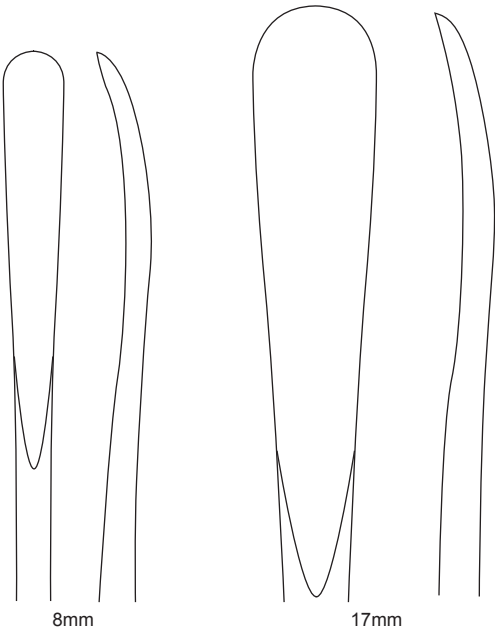
gS 43.9438 17 1/2"

gElevator, Femoral Neck
38mm
with 9" knurled handle



gS 43.9308 8mm
gS 43.9317 17mm

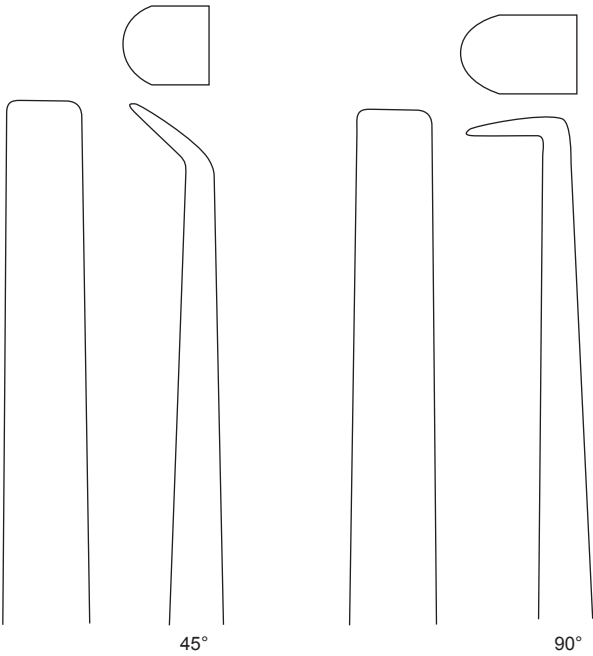
Wagner Elevator
13" sharp, slightly curved
with phenolic handle



42-43

gS 43.9410 45°
gS 43.9414 90°

Rib Elevator
17", 9mm sharp
with phenolic handle



42-43/38 - elevators

42-43

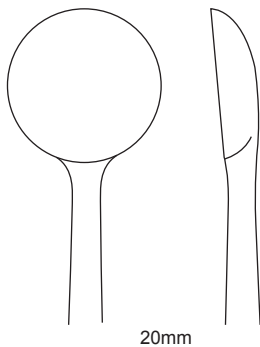
Useful in facilitating a discectomy in anterior lumbar fusion and non-fusion procedures. Double handed grip provides maximum control.



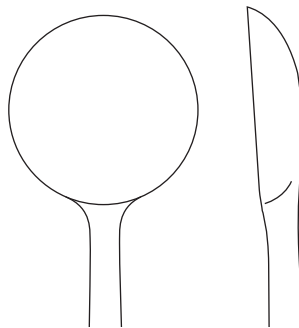
gS 43.9817 17"

gElevator, Bone, Double Handed

sharp 17mm curved
with 9" plastic handle, black



20mm



25mm

Useful in facilitating a discectomy in anterior lumbar fusion and non-fusion procedures. Double handed grip provides maximum control.

gS 43.9920 20mm

gS 43.9925 25mm

gElevator, Endplate, Double Handed

17" straight, sharp
with 9" plastic handle, black





gS 44.4360 6 1/4"

Bone Awl
straight
square taper

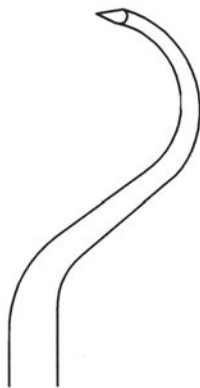


gS 44.4361 6 1/4"

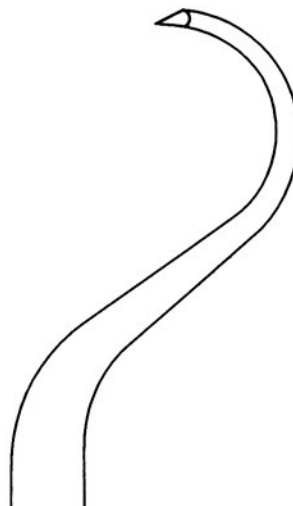
Bone Awl
angled
square taper



small



medium



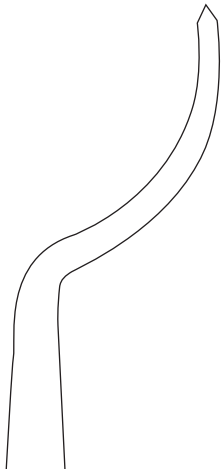
large

gS 44.0130 small curve
gS 44.0140 medium curve
gS 44.0150 large curve

Shoulder Percussion
Awl
8 1/2"



44/2 - bone awls



gS 44.0220 8"

Glenoid Punch (Bankart)



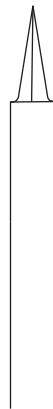
gS 44.0157 7"
gS 44.0160 9"

Shoulder Penetrating Awl
small curve
phenolic handle



gS 44.5200 11"

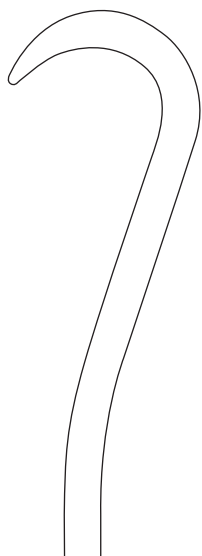
Kuntscher Diamond
Pointed Awl



gS 44.4513 10"

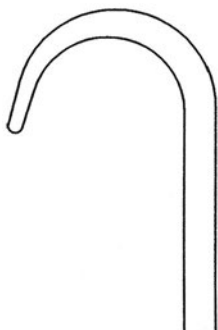
gAwl
sharp point
phenolic handle



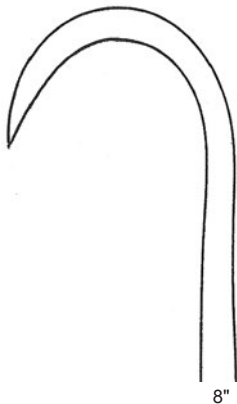


gS 45.4320 sharp
gS 45.4321 blunt

Bone Hook
8"
T-handle, 20mm deep

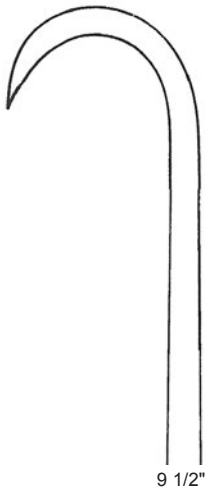
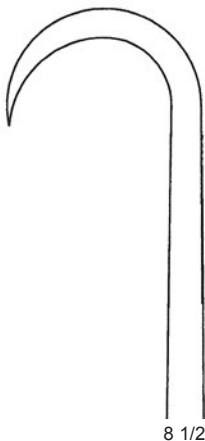


gS 45.4343 8 1/2"
Volkman Bone Hook
blunt
20mm deep

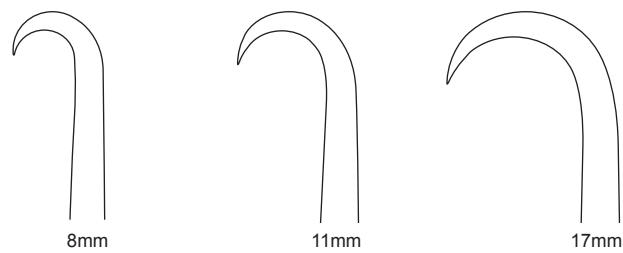


gS 45.4340 8" 25mm deep
gS 45.4346 8 1/2" 20mm deep
gS 45.4350 9 1/2" 20mm deep

Volkman Bone Hook
sharp

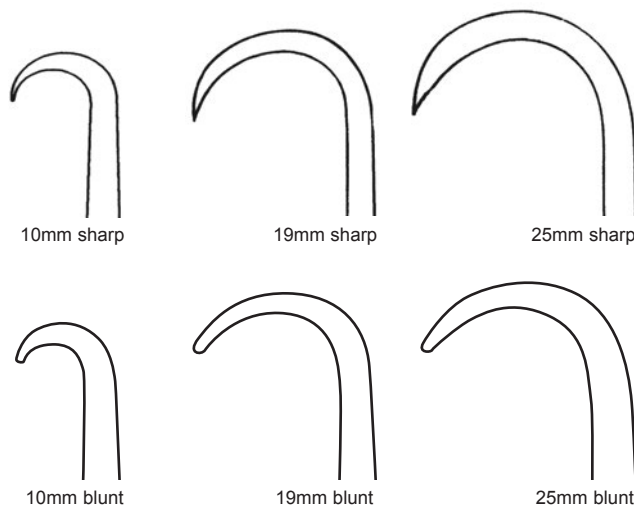


45/2 - bone hooks



gS 45.3700 8mm
gS 45.3702 11mm
gS 45.3704 17mm

Carroll Bone Hook
7"
sharp

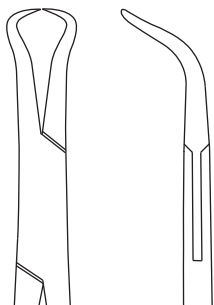


gS 45.4420 10mm deep, sharp
gS 45.4430 19mm deep, sharp
gS 45.4440 25mm deep, sharp

gS 45.4450 10mm deep, blunt
gS 45.4460 19mm deep, blunt
gS 45.4470 25mm deep, blunt

Bone Hook
9"

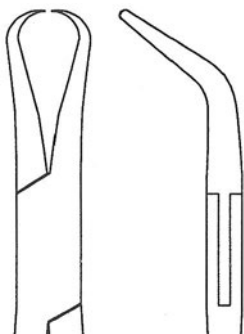




Max opening with
ratchet engaged: 16mm.

gS 46.2180 3 1/2"

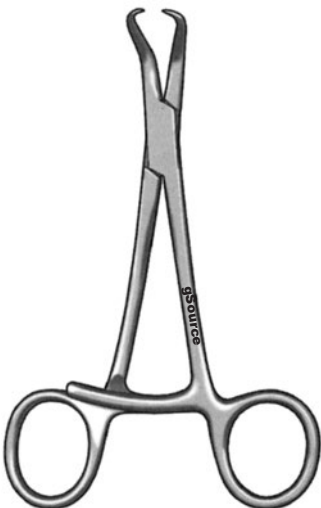
Termite Forceps
curved pointed tips



Max opening with
ratchet engaged: 14mm.

gS 46.2190 4 3/4"

Stagbeetle Forceps
curved pointed tips



For positioning mini plates.

Max opening with
ratchet engaged: 16mm.

gS 46.2390 5"

**Plate and Bone Holding
Forceps**
one pointed tip, one footplate



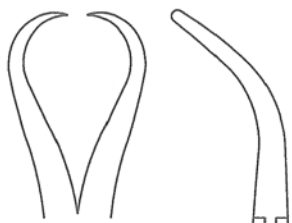
Max opening with
ratchet engaged: 13mm.

gS 46.2395 5 1/2"

Plate Holding Forceps
curved



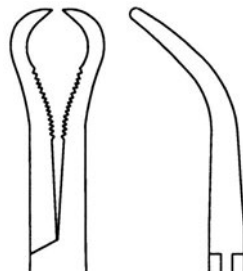
46-47/2 - bone holding



Max opening with ratchet engaged: 16mm.

gS 46.4000 5"

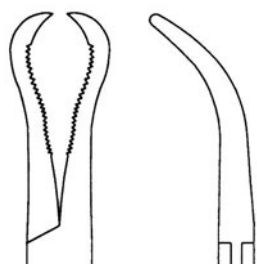
Bone Reduction Forceps
curved, pointed tips



Max opening with ratchet engaged: 16mm.

gS 46.2330 5"

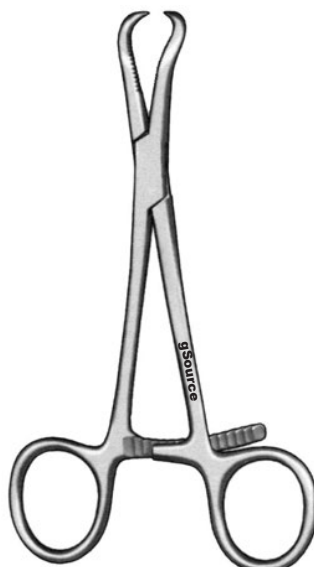
Bone Reduction Forceps
curved, pointed tips
10mm serrations



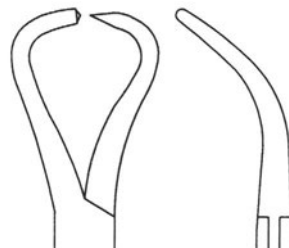
Max opening with ratchet engaged: 16mm.

gS 46.2350 5"

Bone Reduction Forceps
curved, pointed tips
15mm serrations



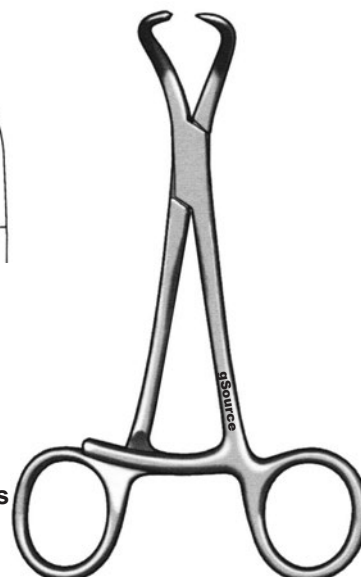
One tip has a stepped point for better hold on bone.

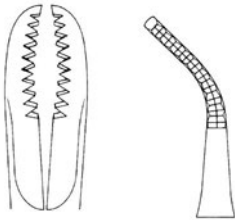


Max opening with ratchet engaged: 13mm.

gS 46.2370 5"

Bone Reduction Forceps
curved, one pointed tip
one step-pointed tip

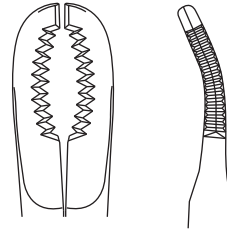




Max opening with
ratchet engaged: 15mm.

gS 46.2280 6"

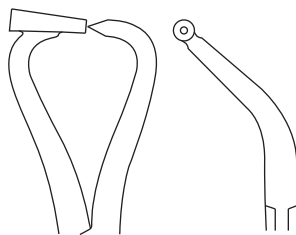
Bone Reduction Forceps
curved
serrated jaws



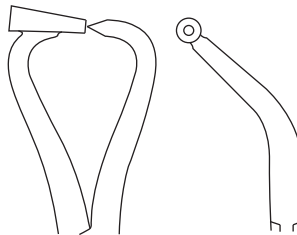
Max opening with
ratchet engaged: 30mm.

gS 46.2282 6"

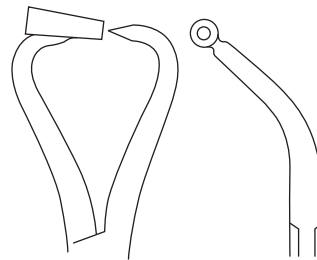
Bone Reduction Forceps
curved
narrow serrated jaws



0.9mm



1.2mm



1.6mm

For positioning k-wires.

Max opening with
ratchet engaged: 12mm.

gS 46.4009 0.9mm [.035"]

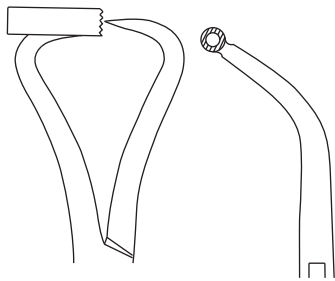
gS 46.4012 1.2mm [.047"]

gS 46.4016 1.6mm [.062"]

Bone Reduction Forceps
5 1/2"
curved with guide



46-47/4 - bone holding

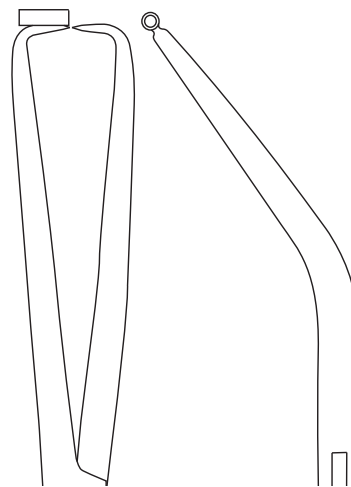


For positioning k-wires
with diameter up to
1.6mm [.062"].

Max opening with
ratchet engaged: 13mm.

gS 46.4040 5 1/4"

Bone Reduction Forceps
curved with 1.6mm [.062"]
guide



For positioning k-wires
with diameter up to
1.1mm [.045"].

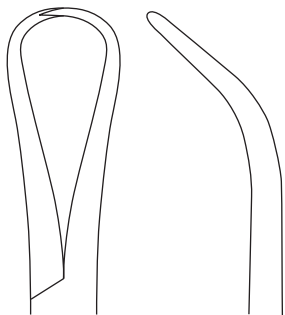
Max opening with
ratchet engaged: 18mm.

gS 46.4060 6 3/4"

Bone Reduction Forceps
curved with 1.1mm [.045"]
guide

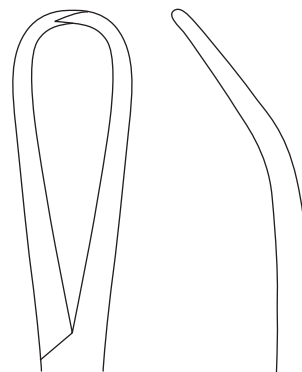


46-47



gS 46.4116 6 1/2"

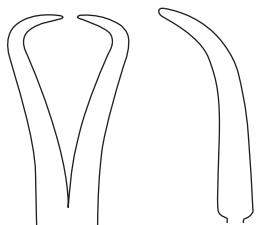
**Glenoid Perforating
Forceps**
strong angle



gS 46.4117 6 1/2"

**Glenoid Perforating
Forceps**
slight angle



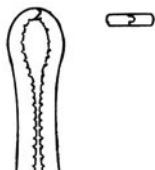


2mm-10mm calibrations on ratchet help with determining bone diameter when using compression screws.

Max opening with ratchet engaged: 10mm.

gS 46.2375 5"

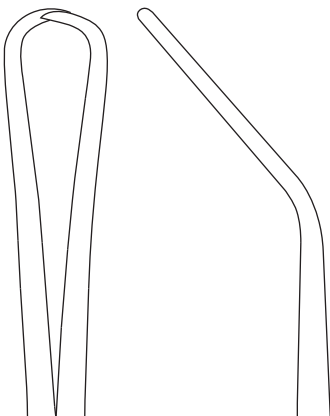
Phalangeal Percutaneous Bone Reduction Forceps



Useful for sesamoid removal.

gS 46.8870 6"

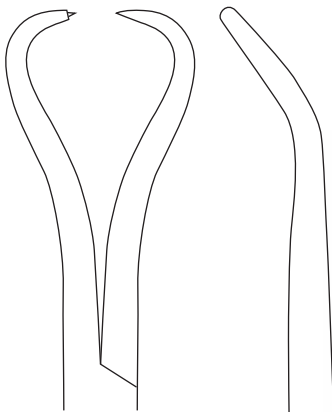
Locke Phalangeal Forceps
serrated jaws with 1x2 teeth



Max opening with ratchet engaged: 15mm.

gS 46.2320 7"

Bone Reduction Forceps (Reill)
curved jaw



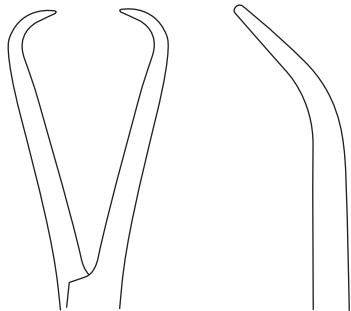
One step-pointed tip.

gS 46.2335 7"

Bone Reduction Forceps
double ratchet
opening: 4mm to 45mm

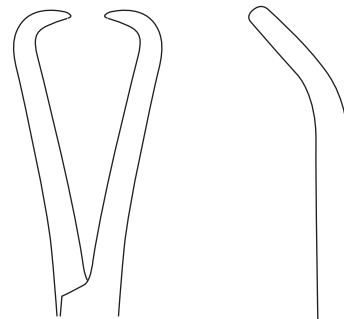


46-47/6 - bone holding



gS 46.2332 6"

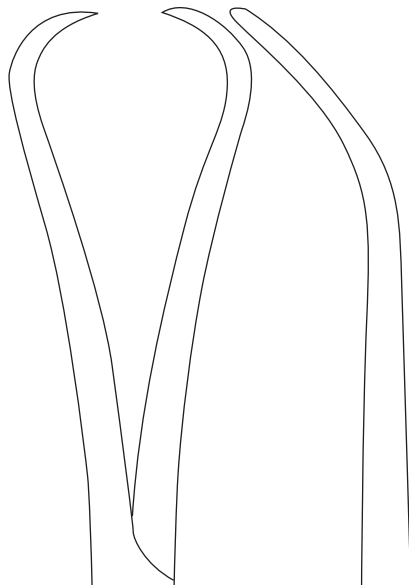
gForceps, Bone Reduction
double ratchet
opening: 2mm to 35mm



Heavy tips are
shorter for strength.

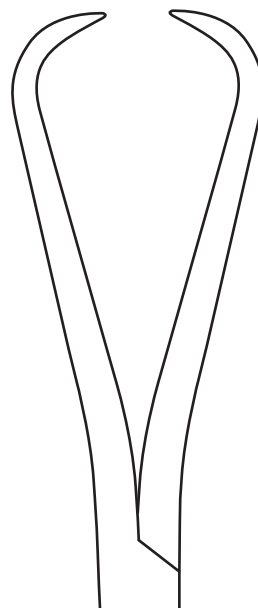
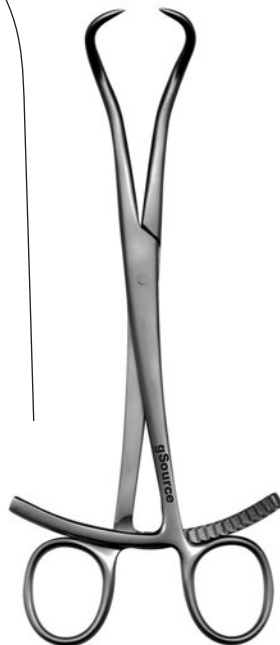
gS 46.2333 6"

gForceps, Bone Reduction
double ratchet, heavy tips
opening: 2mm to 35mm



gS 46.2340 8"

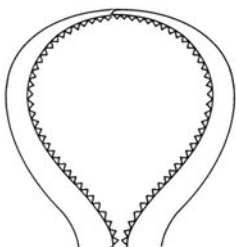
Bone Reduction Forceps
double ratchet
opening: 9mm to 100mm



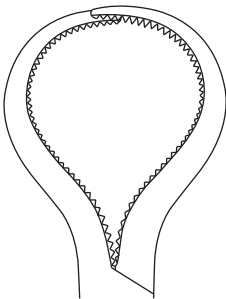
gS 46.2348 12"

Bone Reduction Forceps
double ratchet
opening: 5mm to 45mm

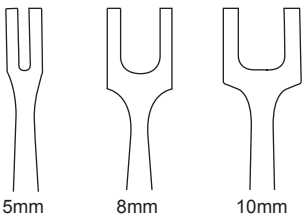




gS 46.2300 7"
Lewin Bone Holding Forceps
slightly curved
overlapping serrated jaws



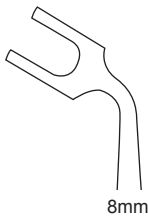
gS 46.2305 6 3/4"
gForceps, Lewin Bone Holding
30° angled handle
overlapping serrated jaws



Jaws with 8 pointed teeth help to provide stabilization and guidance for small bone fixation.

gS 46.3005 5 1/2" 5mm
gS 46.3008 5 1/2" 8mm
gS 46.3010 6 1/4" 10mm

Ikuta Bone Clamp
straight



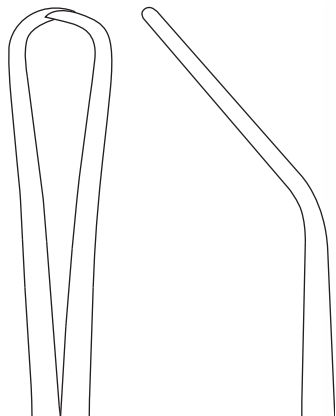
Space between prongs allows for placement of k-wires or screws.

gS 46.3015 5 1/2" 5mm
gS 46.3018 5 1/2" 8mm
gS 46.3020 6 1/4" 10mm

Ikuta Bone Clamp
angled

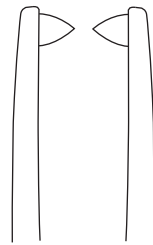


46-47/8 - bone holding



gS 46.2342 8"

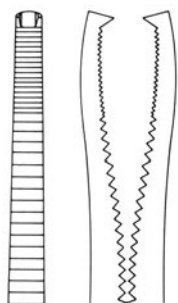
Bone Reduction Forceps
with speedlock
max opening: 70mm



1x1 sharp points

gS 46.8520 8 1/2"

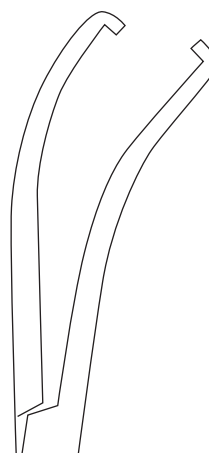
Malleolar Forceps
with ratchet
max opening: 60mm



Delicate serrated jaws for
small bone fragments.

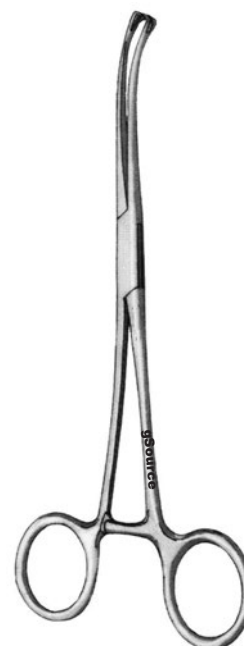
gS 46.8910 7 1/2"

Dingman Forceps
angular serrated jaws
2x2 sharp teeth



gS 46.8872 6 1/2"

Sesamoidectomy Clamp
curved jaw



gS 46.8510 8 1/2"

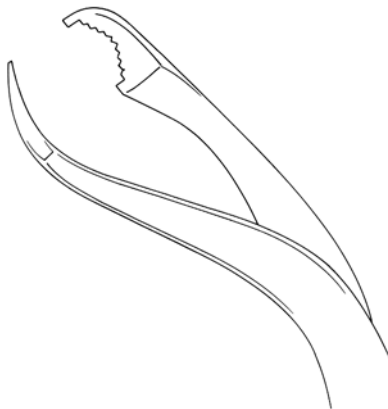
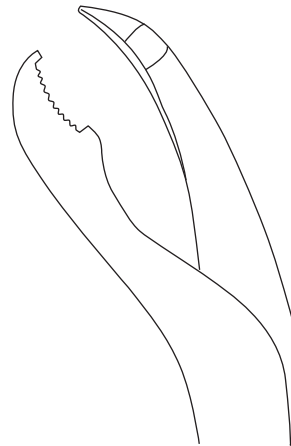
Fibula Forceps
with speedlock
angled tips



Max opening with
ratchet engaged: 28mm.

gS 46.1990 6 1/2"

Verbrugge Forceps
reversed jaw
with long ratchet



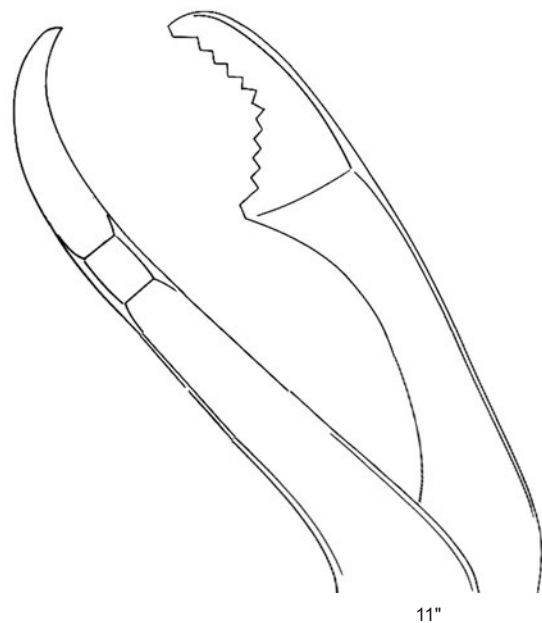
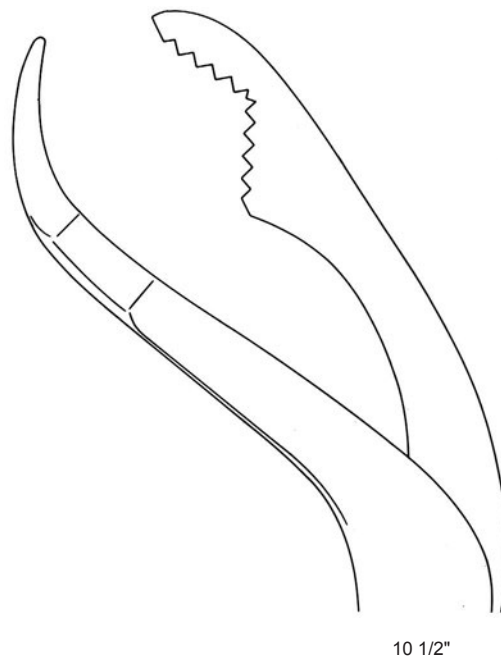
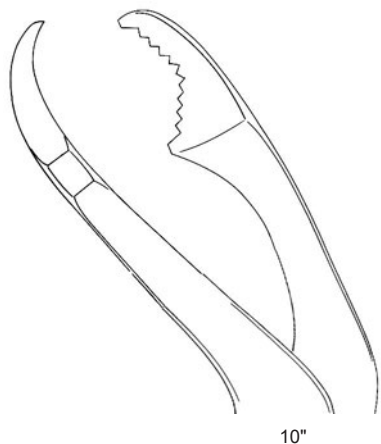
Max opening with
ratchet engaged: 9mm.

gS 46.2210 7"

Verbrugge Forceps
with short ratchet



46-47/10 - bone holding

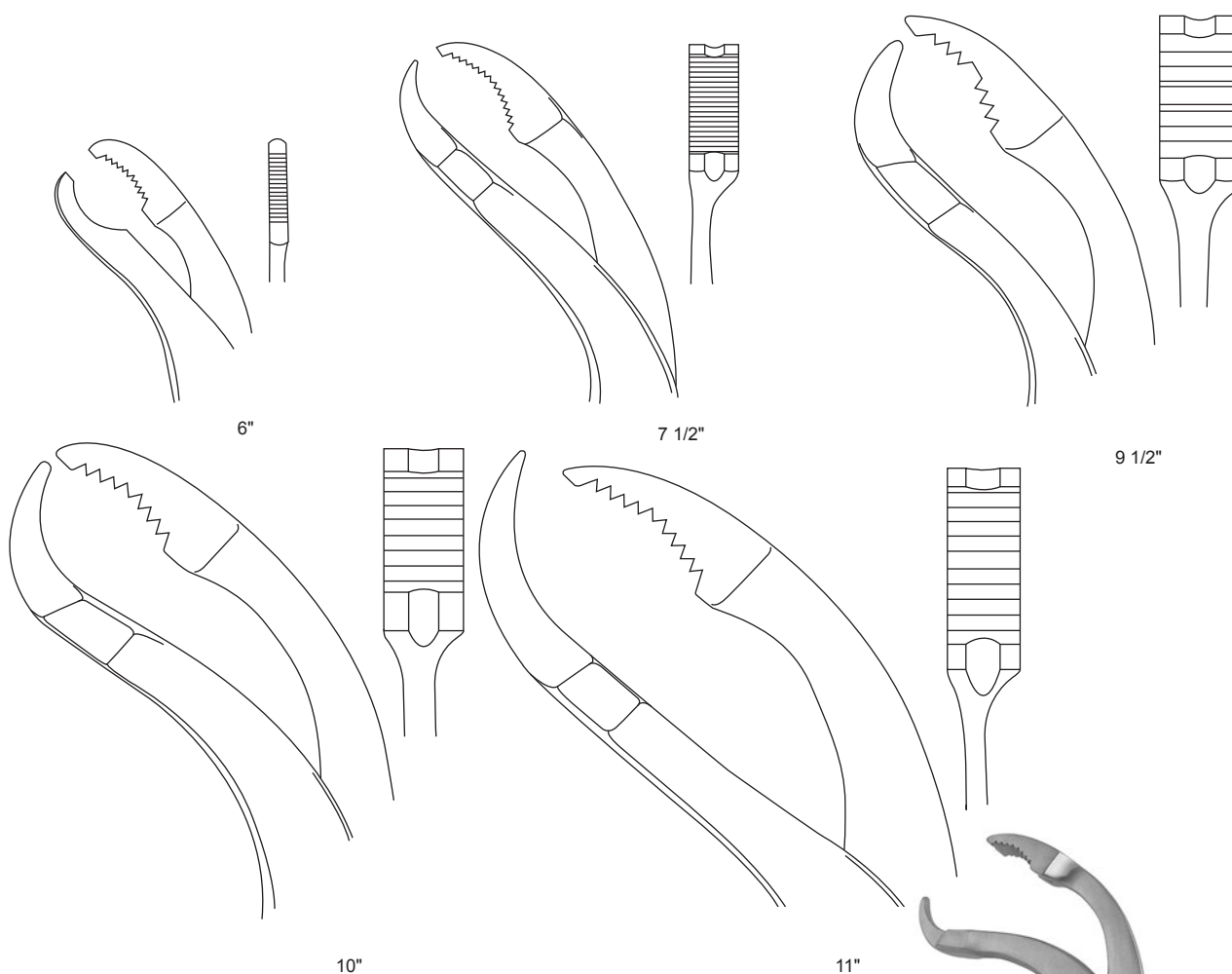


gS 46.2220 10"
gS 46.2240 10 1/2"
gS 46.2260 11"

Max opening with
ratchet engaged

52mm
48mm
48mm

Verbrugge Forceps
with long ratchet

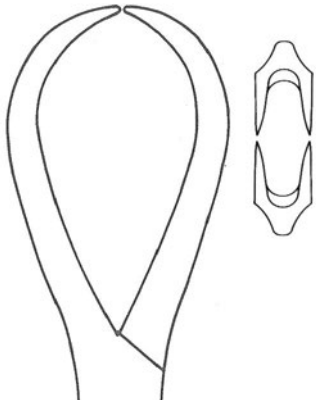


		Max opening
gS 46.1900	6"	25mm
gS 46.1920	7 1/2"	55mm
gS 46.1940	9 1/2"	65mm
gS 46.1960	10"	65mm
gS 46.1980	11"	65mm

Verbrugge Forceps
self-centering with speedlock

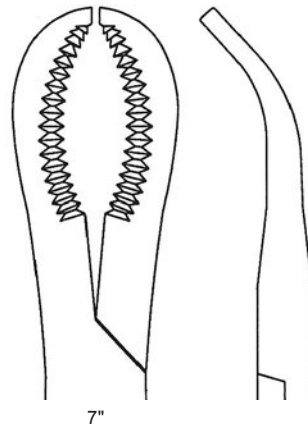


46-47/12 - bone holding



gS 46.2310 7"

Patella Forceps
speedlock, 2x2 sharp teeth
max opening: 48mm



gS 46.2407 7" max: 28mm
gS 46.2409 9" max: 45mm

Bone Holding Forceps
with speedlock
curved serrated jaws



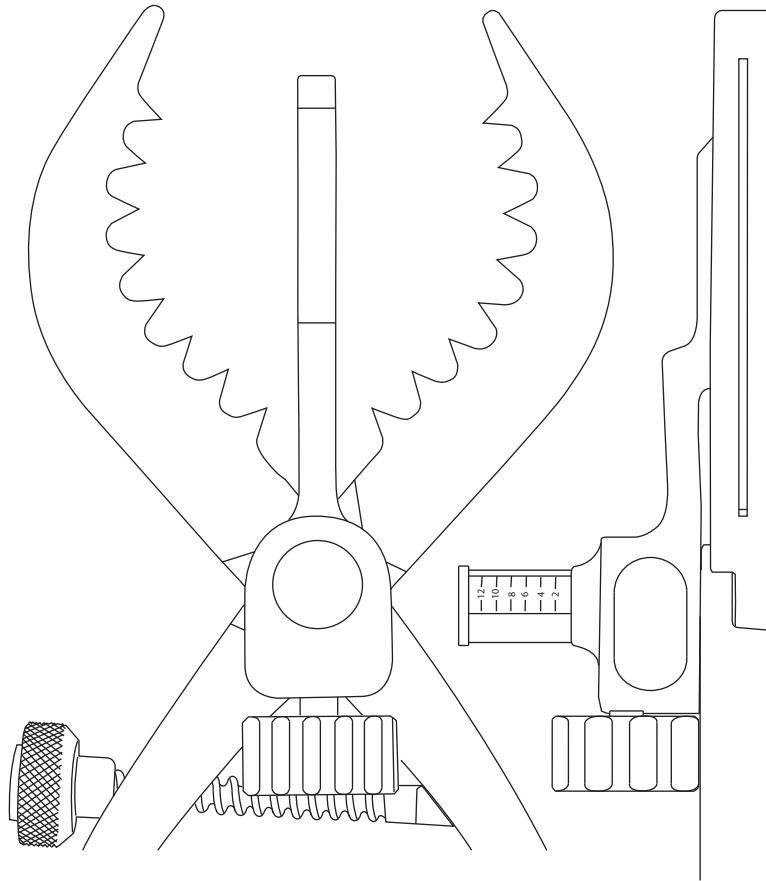
46-47

For positioning 2.7mm and
3.5mm plates.

gS 46.2380 8"

Plate Holding Forceps
with swivel foot





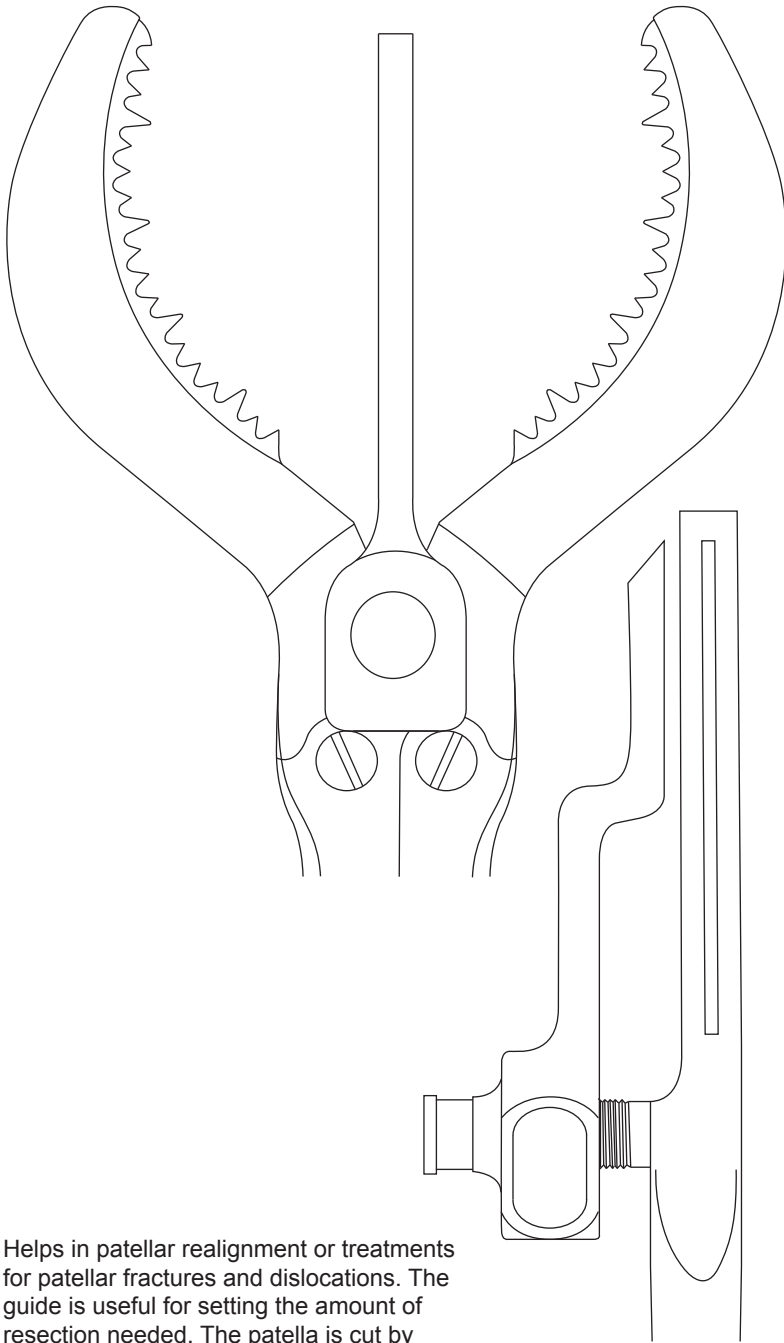
Helps in patellar realignment or treatments for patellar fractures and dislocations. The guide is useful for setting the amount of resection needed. The patella is cut by inserting the saw blade through the saw guides on either side of the jaw.

gS 46.2312 9 1/2"

Patella Osteotomy Forceps
for 1.10mm saw blades
with speedlock



46-47/14 - bone holding

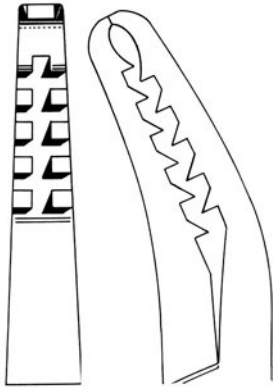


46-47

Helps in patellar realignment or treatments for patellar fractures and dislocations. The guide is useful for setting the amount of resection needed. The patella is cut by inserting the saw blade through the saw guides on either side of the jaw.

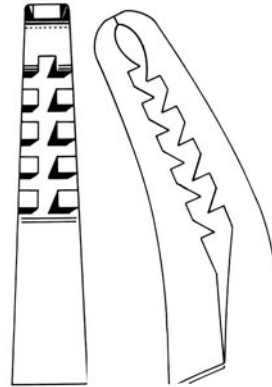
gS 46.2315 11"

Patella Osteotomy Forceps
for 1.20mm saw blades
with speedlock



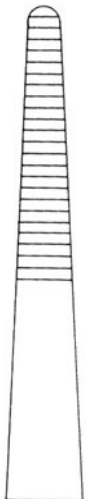
gS 46.2430 7 1/2"

Semb Bone Forceps
angled on side
deep teeth



gS 46.2432 7 1/2"

Semb Bone Forceps
angled on side
deep teeth, with ratchet

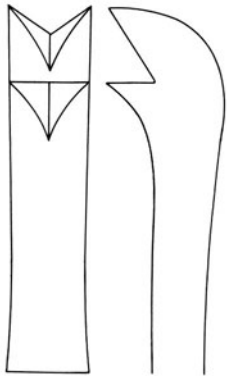


gS 46.2470 8 1/2"

Van Buren Bone Forceps
angled on side
serrated jaws



46-47/16 - bone holding



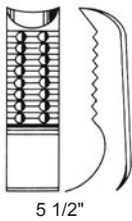
gS 46.2440 8"

Fergusson Bone Forceps
deep 2x2 teeth

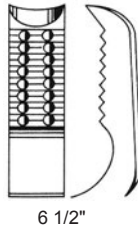


gS 46.2450 8"

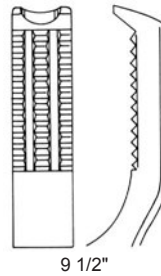
Langenbeck Bone Forceps
partially serrated
2x2 teeth



5 1/2"



6 1/2"



9 1/2"

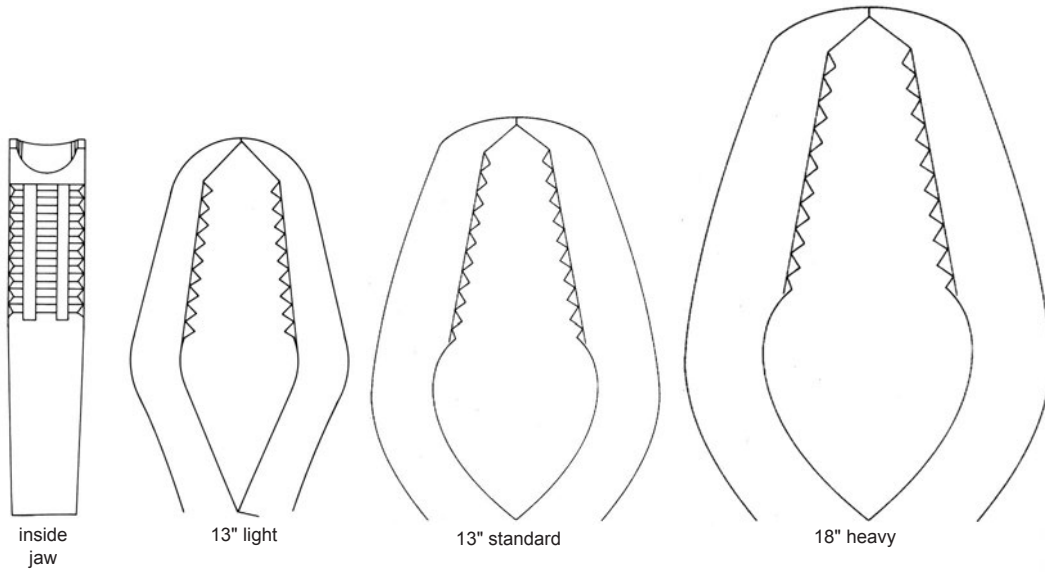
gS 46.1620 5 1/2" with ratchet
gS 46.1630 6 1/2" with ratchet
gS 46.1640 9 1/2" with ratchet

gS 46.1645 5 1/2" without ratchet
gS 46.1650 6 1/2" without ratchet
gS 46.1655 9 1/2" without ratchet

Kern Bone Forceps
serrated jaws
2x2 teeth

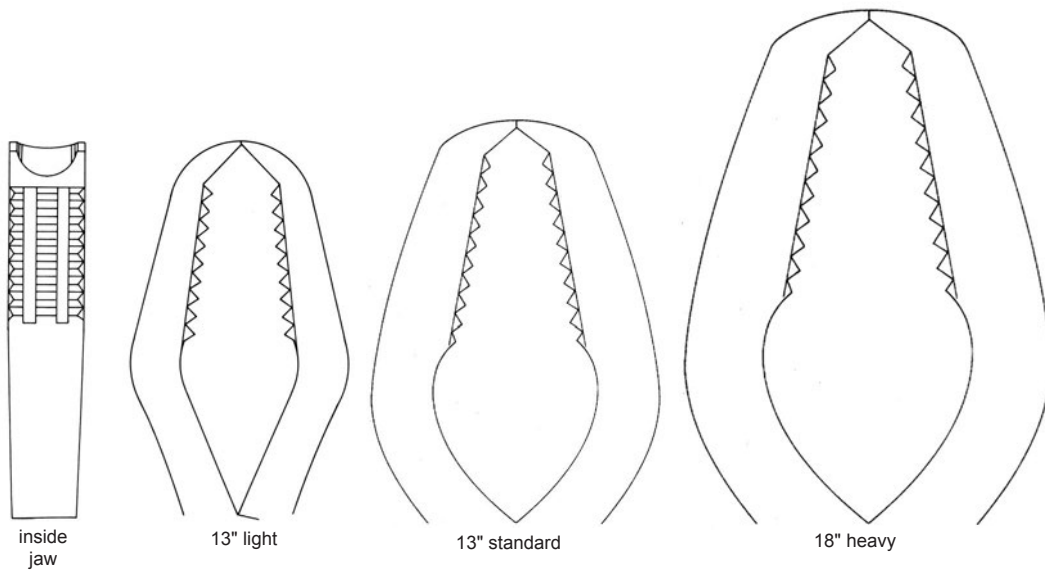


shown with ratchet



- gS 46.1850 13" light
gS 46.1855 13" standard
gS 46.1860 18" heavy

Lane Bone Forceps
without ratchet
2x2 teeth, serrated jaws

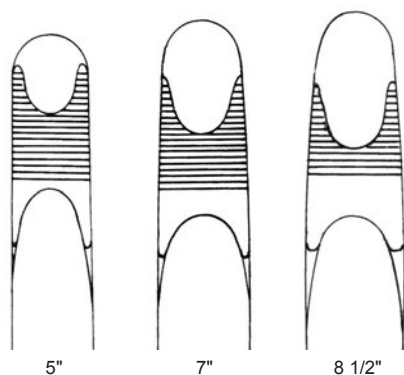


- | | | |
|------------|--------------|---|
| | | Max opening with
ratchet engaged |
| gS 46.1815 | 13" light | 30mm |
| gS 46.1820 | 13" standard | 34mm |
| gS 46.1832 | 18" heavy | 48mm |

Lane Bone Forceps
with ratchet
2x2 teeth, serrated jaws

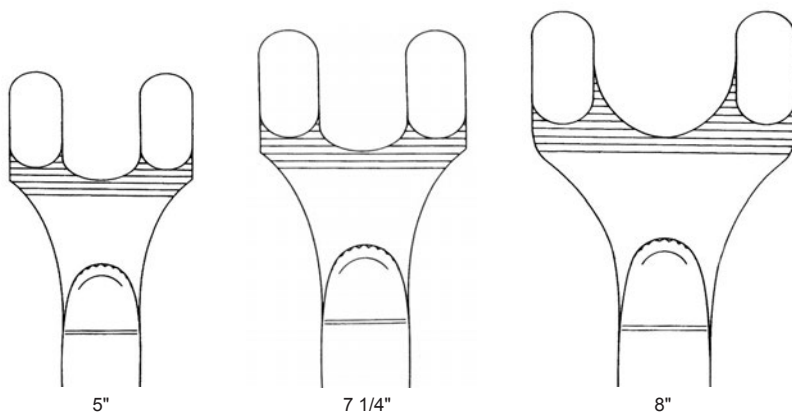


46-47/18 - bone holding



		Max cap opening
gS 46.2650	5"	1"
gS 46.2655	7"	2"
gS 46.2660	8 1/2"	2 1/2"

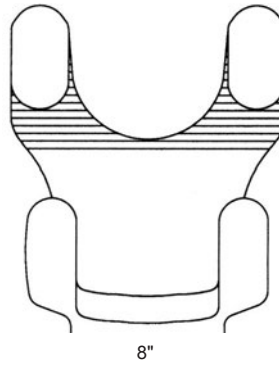
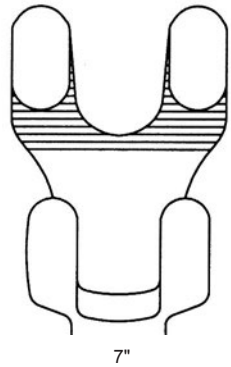
Lowman Bone Clamp
1x1 jaws



		Max cap opening
gS 46.2520	5"	1"
gS 46.2540	7 1/4"	2"
gS 46.2560	8"	2 1/2"

Lowman Bone Clamp
1x2 jaws

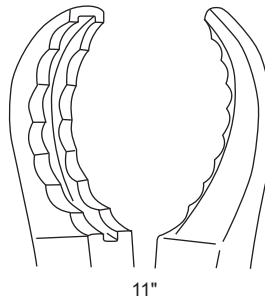
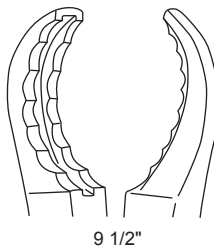
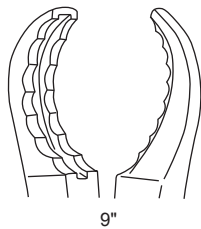
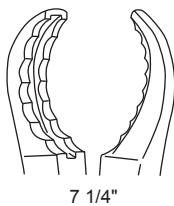
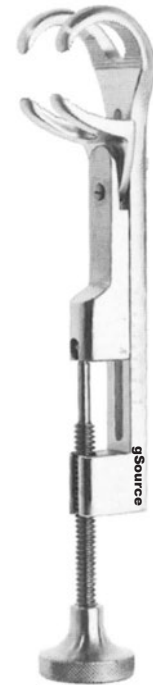




Max cap
opening

gS 46.4680 7" 2"
gS 46.4685 8" 2 1/2"

Lambert-Lowman Bone Clamp
2x2 jaws

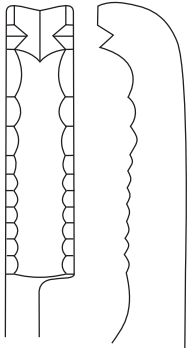


gS 46.2116 7 1/4"
gS 46.2118 9"
gS 46.2120 9 1/2"
gS 46.2122 11"

Ulrich Bone Holding Forceps
straight
with speedlock

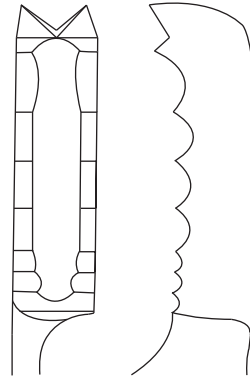


46-47/20 - bone holding



gS 47.0919 7 1/2"

**Farabeuf Lambotte
Forceps**
adjustable jaw with ratchet

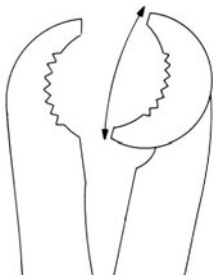


gS 47.1020 10"

**Farabeuf Lambotte
Forceps**
adjustable jaw with ratchet



46-47

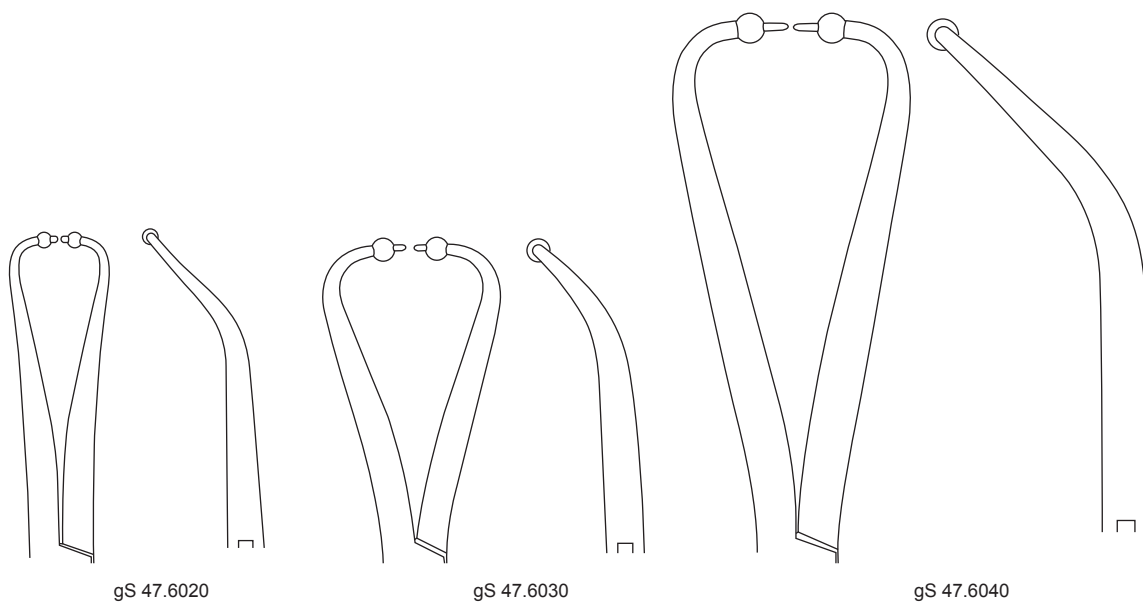


gS 47.1130 8 1/2"
gS 47.1140 10 1/2"
gS 47.1150 11 1/2"

Lambotte Bone Forceps
adjustable jaw with swivel head
with ratchet



OD = Outside Diameter



Pointed-ball tips help to prevent penetration of bone.

Speedlock allows for quick tightening and release of clamp on bone and helps to provide a secure hold.

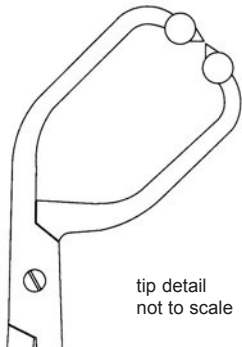
Curved pattern helps with positioning on bone.

		OD Ball Tips
gS 47.6020	5 1/2"	2mm
gS 47.6030	6 1/2"	3mm
gS 47.6040	8"	4mm

gClamp, Bone Fragment
ball tips, curved
speedlock

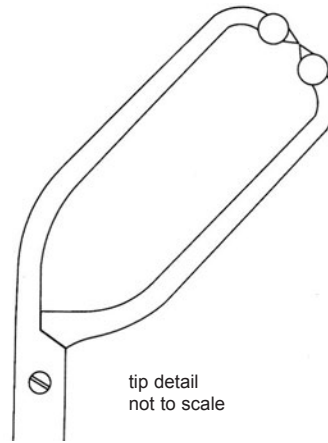
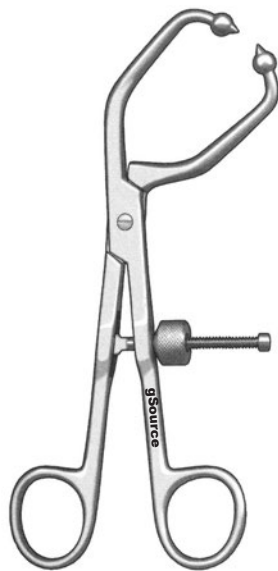


46-47/22 - bone holding



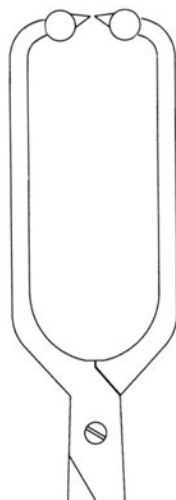
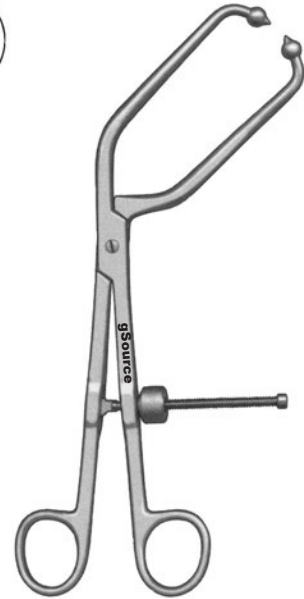
gS 47.6190 7 3/4"

Pelvic Reduction Forceps
angled short pointed ball tips
with speedlock



gS 47.6192 9 1/2"

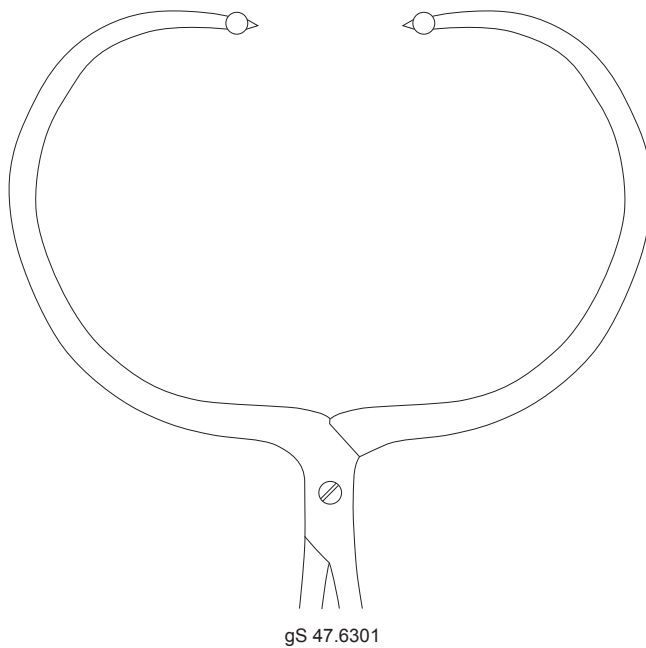
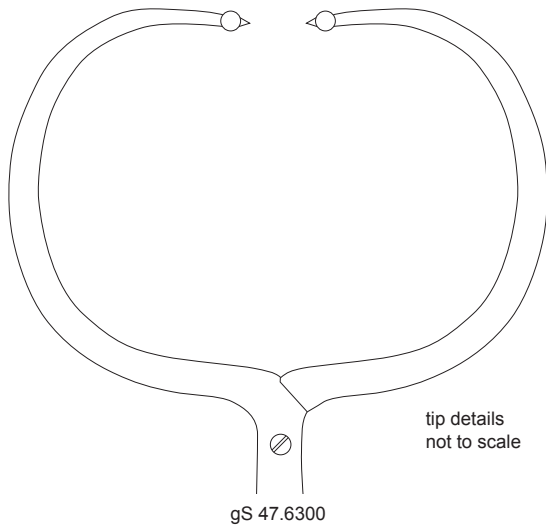
Pelvic Reduction Forceps
angled long pointed ball tips
with speedlock



gS 47.6196 10"

Pelvic Reduction Forceps
straight long pointed ball tips
with speedlock



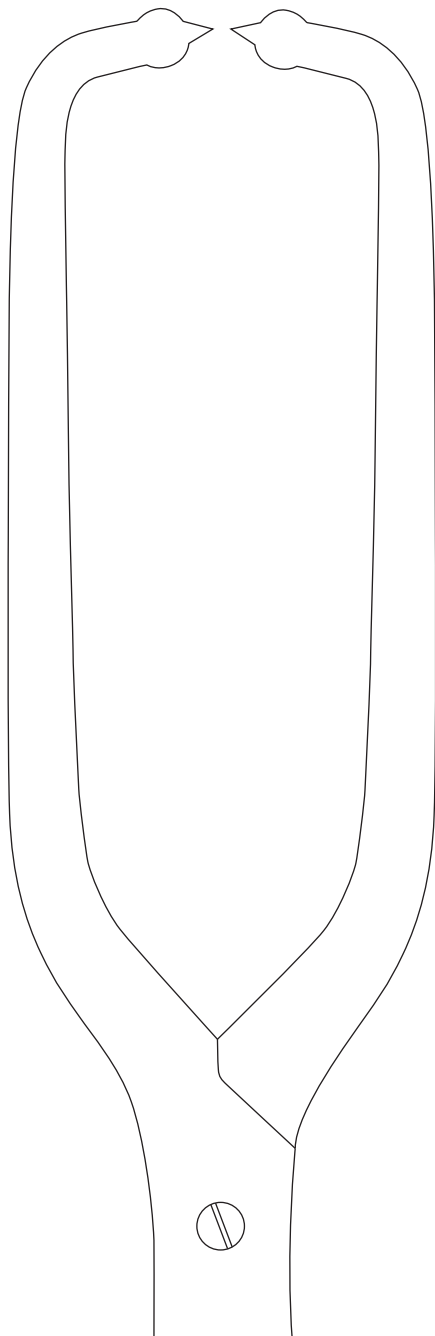


gS 47.6300 medium 14mm-128mm opening
gS 47.6301 large 39mm-181mm opening

Periarticular Reduction Forceps
15" straight, pointed ball tips
with speedlock

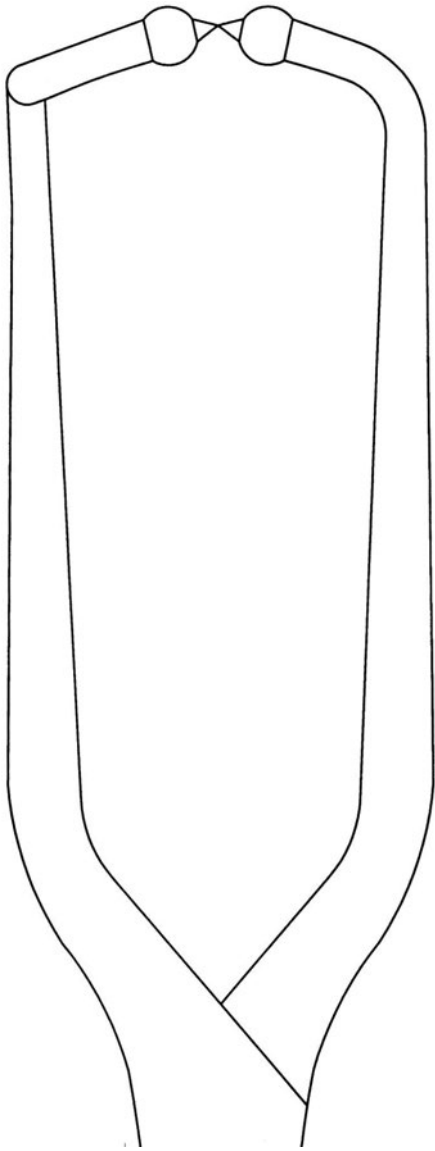


46-47/24 - bone holding



gS 47.6200 16"

Pelvic Reduction Forceps
straight long pointed ball tips
with speedlock



gS 47.6208 16"

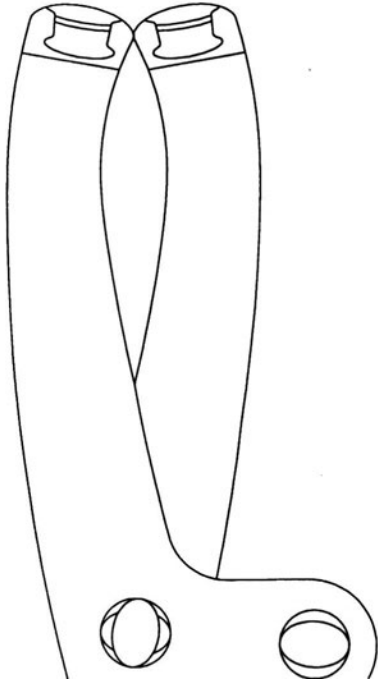
Pelvic Reduction Forceps

long 1x2 pointed ball tips
with speedlock



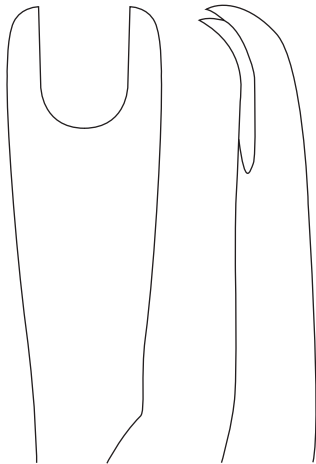
46-47

46-47/26 - bone holding



gS 47.6212 13 1/2"

Pelvic Reduction Forceps
adjustable jaw for screws
with speedlock



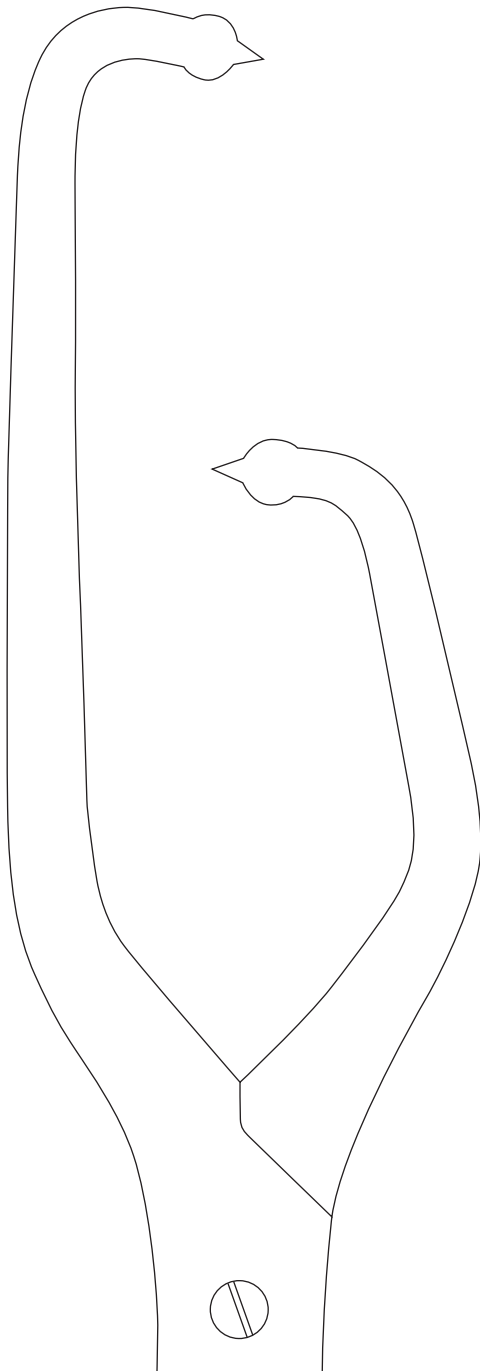
gS 47.1064 12 1/2"

Bishop Bone Forceps
adjustable jaw
with ratchet



46-47

46-47/28 - bone holding



46-47

gS 47.6204 16"

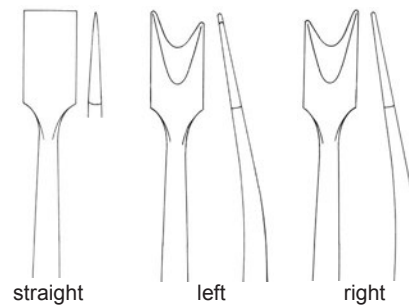
Pelvic Reduction Forceps
asymmetric pointed ball tips
with speedlock



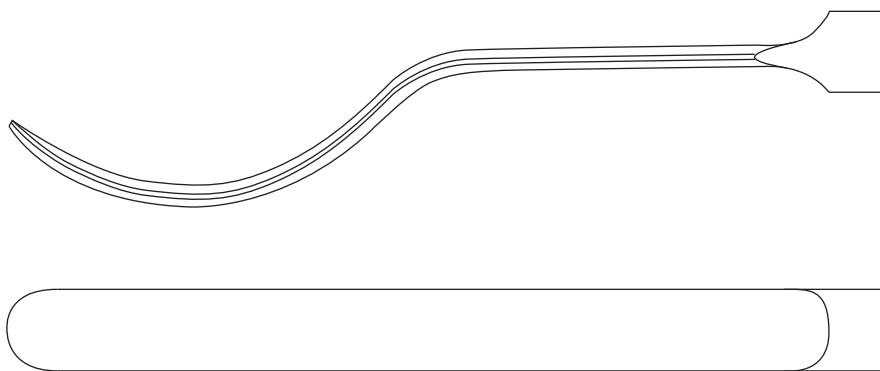
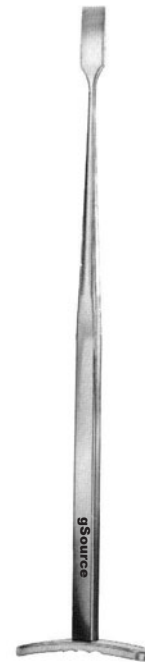
Commonly referred to as a meniscus knife.

Useful for cutting and making incisions into the menisci in the knee.

gS 49.8620 straight
gS 49.8660 curved left
gS 49.8700 curved right



Smillie Knife
 6 3/4"
 with "T" grip handle

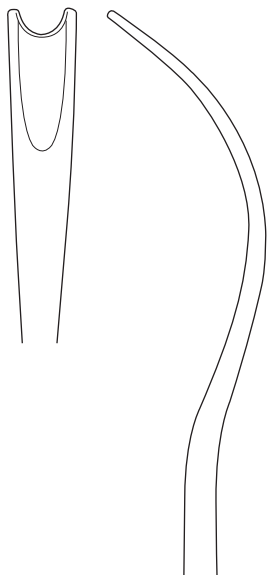


Useful for detaching the labrum from the acetabulum.

gS 49.3300 8"
Krull Acetabular Knife
 12mm blade



49/2 - cartilage



gS 49.8800 10"
Downing Cartilage Knife
concave edge with guards



49

- gS 49.1001** 3mm
- gS 49.1002** 4mm
- gS 49.1003** 5mm
- gS 49.1004** 6mm
- gS 49.1005** 7mm



Bunnell Tendon Stripper
6"
with knurled handle



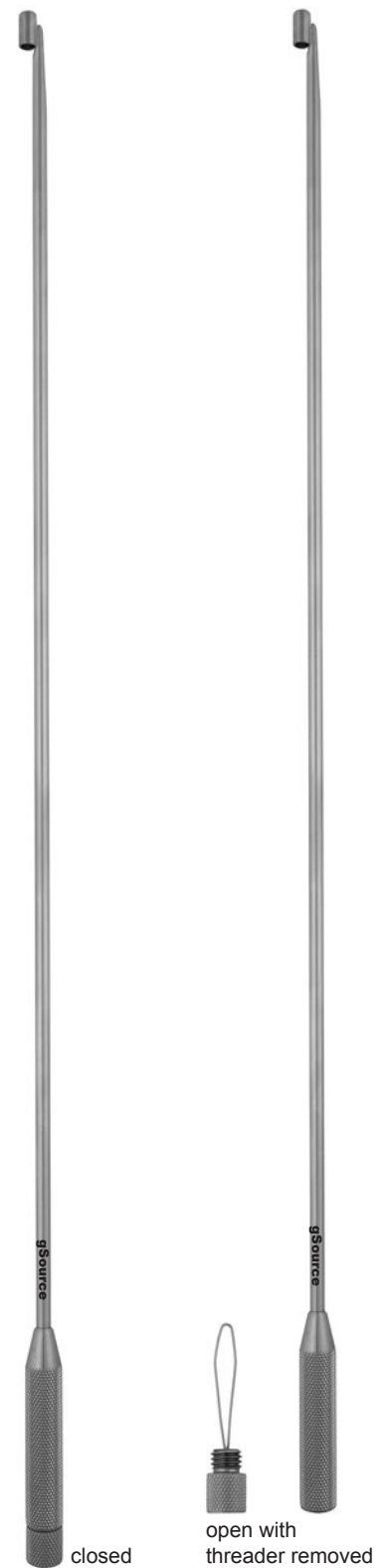


Useful for stripping a tendon to a select diameter for positioning the tendon during bone attachment or other procedures.

Threader is removed by unscrewing from handle end.

gS 49.8500 16 1/2"

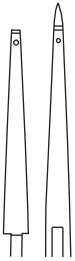
Tendon Stripper
with threader



closed

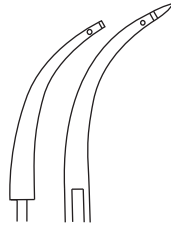
open with
threader removed

49/4 - cartilage



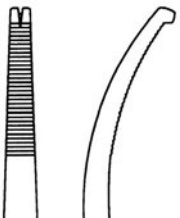
gS 49.7141 4 3/4"
gS 49.7151 6"

Tendon Passer
 straight
 one stepped tip



gS 49.7142 4 3/4"
gS 49.7152 6"

Tendon Passer
 curved
 one stepped tip



gS 49.3180 7 1/4"

**Preston Ligamentum
 Flavum Forceps**
 angled serrated jaws, 1x2 teeth

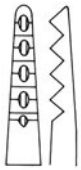


Helps with suturing
 double layered
 cartilage transplants.

gS 49.3025 6 1/4"

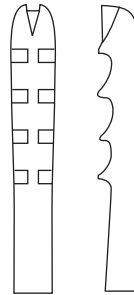
**Aiach Cartilage Graft
 Forceps**
 5mm slotted jaws





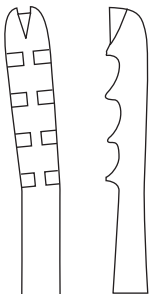
gS 49.2018 7 1/2"

Martin Cartilage Clamp
straight
with teeth



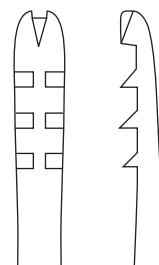
gS 49.2210 8"

Walton Cartilage Clamp
(Bircher-Ganske)
straight with teeth



gS 49.2220 8"

Walton Cartilage Clamp
(Bircher-Ganske)
slightly curved with teeth



gS 49.2230 8"

Walton Cartilage Clamp
(Bircher-Ganske)
curved on side with teeth



49/6 - cartilage

gS 49.8300 5 1/2"

Hoer Grasping Forceps
serrated
1x2 teeth



gS 49.8400 4 1/2"

Carroll Tendon Pulling Forceps
curved shaft
serrated jaws



49

gS 49.8450 6"

gS 49.8455 7 1/2"

gS 49.8460 9 1/2"

Brand Tendon Pulling Forceps
angled shaft
serrated jaws with 1x2 teeth



6"

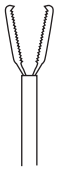


7 1/2"



9 1/2"





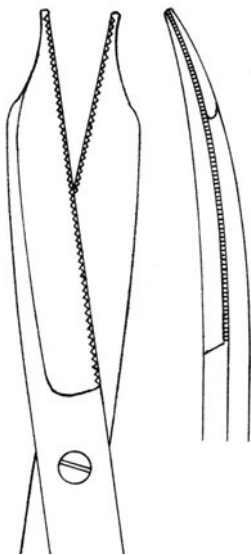
gS 49.8350 8"

Kleinert-Kutz Tendon Retriever
rigid shaft, serrated 1x2



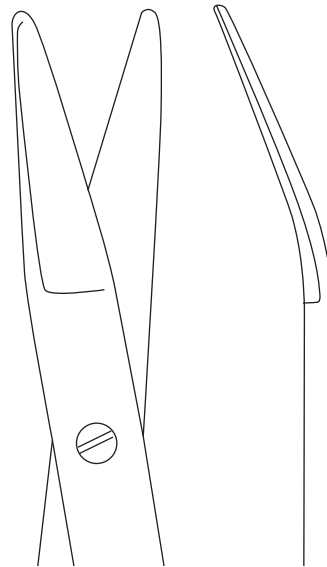
gS 49.8356 8"

Kleinert-Kutz Tendon Retriever
flexible shaft, serrated 1x2



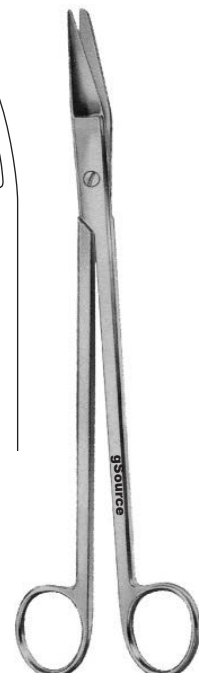
gS 49.9280 8"

Martin Cartilage Scissors
two curved serrated blades

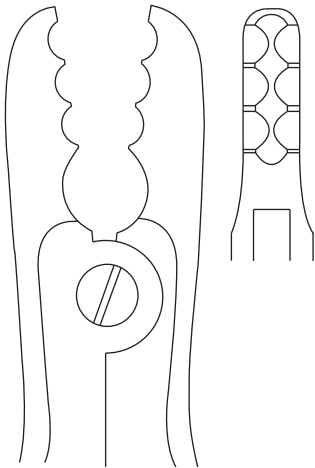


gS 49.9290 9 1/2"

Mueller Capsule Scissors
angular blades

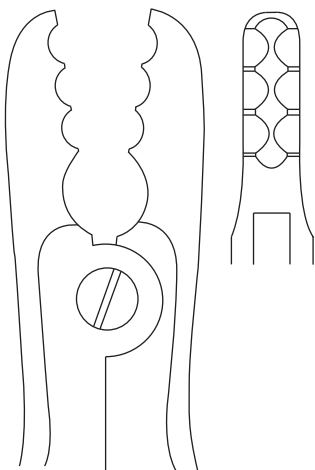


49/8 - cartilage



gS 49.2280 8 1/2"

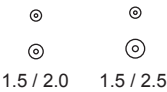
Ortho Grasper
curved handle
7x20mm bite



gS 49.2300 10 1/2"

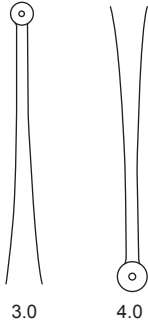
Ortho Grasper
straight handle
7x20mm bite





gS 50.5080 1.5mm / 2.0mm
gS 50.5920 1.5mm / 2.5mm

Curette Excavator
5 1/2"
double ended, with holes



Features larger cup sizes and wider neck.

gS 50.5930 5 1/2"

gCurette, Excavator
3.0mm / 4.0mm
double ended, with holes



gS 50.5590 #57-0 1.0mm
gS 50.5610 #57-1 1.5mm
gS 50.5630 #57-2 2.0mm
gS 50.5650 #57-3 2.5mm

Curette Excavator
5"
single ended, without hole



gS 50.5680 #58-0 1.0mm
gS 50.5780 #58-1 1.5mm
gS 50.5000 #58-2 2.0mm
gS 50.5040 #58-3 2.5mm

Curette Excavator
5"
single ended, with hole



50/2 - dermal curettes



Commonly referred to as Verruca curette. McGlamry Bullneck resists bending.

gS 50.5570 4mm
gS 50.5571 5mm

Curette Excavator #4
5"
single ended, without hole



Inside cutting edge of blade useful for shaving down and reducing the thickness of nails in order to help relieve pressure.

gS 50.4050 5"

Ingrown Nail Shaver
single ended
with fenestrated blade



Useful for scraping skin lesions and growths such as warts or melanomas.

Round ring on working end is sharp on inside and blunt on outside so surrounding skin is not damaged when lesion is removed.



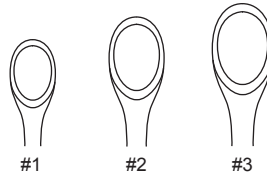
gS 50.5950 1mm
gS 50.5960 2mm
gS 50.5970 3mm
gS 50.5980 4mm
gS 50.5990 5mm
gS 50.6000 6mm

Fox Curette
5 1/2"
round



Useful for scraping skin lesions and growths such as warts or melanomas.

Oval ring on working end is sharp on inside and blunt on outside so surrounding skin is not damaged when lesion is removed.



- gS 50.6030** #1 small
- gS 50.6050** #2 medium
- gS 50.6070** #3 large

Piffard Curette
5 1/2"
oval



Useful in removal of skin samples for biopsy. Round end is sharp and when pushed into the skin and twisted slightly, it excises a small plug of skin. The depth of the excision needed is determined by the physician. Knurled handle helps to provide a secure gripping surface.

Can also be used in gynecological biopsies where deeper tissue samples are needed.



- gS 50.6110** 2mm
- gS 50.6120** 3mm
- gS 50.6130** 4mm
- gS 50.6140** 5mm
- gS 50.6150** 6mm
- gS 50.6170** 8mm

Keyes Punch
4"
round



50/4 - dermal curettes

Useful for treating facial blemishes. Lancet helps to rupture pustules. Cup has a small round hole used for extraction by placing it around the blemish and applying gentle pressure.

gS 50.6660 4"

Saalfeld Comedone Extractor

lancet and fenestrated cup



gS 50.6662 5 1/2"

Saalfeld Comedone Extractor

lancet and fenestrated cup



crimped

fine

square

Useful for treating facial blemishes. By placing the appropriate working loop end around the blemish and applying gentle pressure, debris is forced out.

gS 50.6800 crimped

gS 50.6820 fine

gS 50.6840 square

Schamberg Comedone Extractor

3 3/4", fenestrated loops



Useful for treating facial blemishes. The spoon ends each have a small round hole used for extraction by placing it around the blemish and applying gentle pressure.

gS 50.6920 5 3/4"

Unna Comedone Extractor

fenestrated spoon ends



Useful for treating facial blemishes.
Lancet helps to rupture pustules.
Cup has a small round hole used
for extraction by placing it around
the blemish and applying gentle
pressure. Cap protects lancet when
not in use.

gS 50.7040 6 1/2"

Walton Comedone Extractor

one fenestrated cup
curved lancet with cap



Useful in dermal procedures as well
as ENT procedures.

10° angle

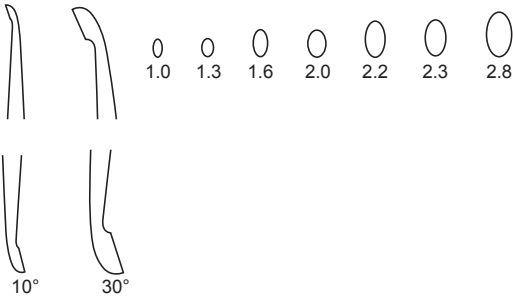
gS 50.4234	7"	1.0mm / 1.6mm
gS 50.4230	7"	1.6mm / 2.0mm
gS 50.4238	7"	2.3mm / 2.8mm

30° angle

gS 50.4210	6"	1.0mm / 1.3mm
gS 50.4212	6"	1.0mm / 2.0mm
gS 50.4214	6"	1.6mm / 2.0mm
gS 50.4216	6"	2.2mm / 2.8mm
gS 50.4220	6 1/4"	1.6mm / 1.6mm
gS 50.4222	6 1/4"	1.6mm / 2.0mm
gS 50.4232	7"	1.6mm / 2.0mm
gS 50.4236	7"	1.0mm / 1.6mm
gS 50.4240	7"	2.3mm / 2.8mm

House Stapes Curette

double ended
oval cups



50/6 - dermal curettes



Useful for scraping biological tissue or debris for biopsy, excision, or cleaning procedures. Also useful for smoothing away unwanted bumps or growths.

gS 50.7200 5 1/2"

Martini Curette

4mm / 5mm round ends



Useful for dermal, small bone and periodontal procedures.

gS 50.7300 5 1/2"

Williger Curette

3mm / 4mm oval cups



did you know... ?

During a skin biopsy, a physician will remove a small sample of skin for testing in order to help in the diagnosis of the patient's skin condition or lesion.

Three common skin biopsy procedures include:

Shave biopsy – Superficial skin biopsy where a thin layer is shaved off the surface of a lesion. A lesion may be a tumor or an area of inflammation.

Punch biopsy – A cylindrical sample is removed to view layers of a lesion.

Excisional biopsy – A scalpel is used to remove the entire visible portion of a lesion.

Useful for scraping biological tissue or debris for biopsy, excision, or cleaning procedures.

gS 50.7320 6"

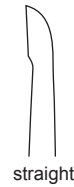
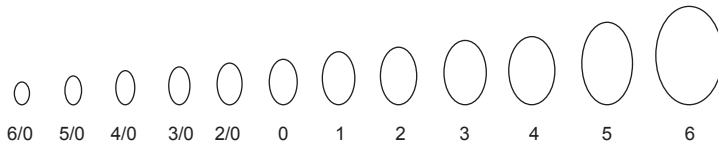
Jansen Curette

3mm / 4mm oval cups



51/2 - bone curettes

51



straight

#	cup width	7"	8"	9"
6/0	2.0mm	—	gS 51.6475	gS 51.6624
5/0	2.2mm	gS 51.6110*	gS 51.6476	gS 51.6626
4/0	2.5mm	gS 51.6120*	gS 51.6477	gS 51.6628
3/0	2.8mm	gS 51.6130*	gS 51.6478	gS 51.6630
2/0	3.3mm	gS 51.6150*	gS 51.6479	gS 51.6640
0	3.7mm	gS 51.6170*	gS 51.6480	gS 51.6650
1	4.3mm	gS 51.6190*	gS 51.6481	gS 51.6660
2	4.8mm	gS 51.6210*	gS 51.6482	gS 51.6670
3	5.6mm	gS 51.6230*	gS 51.6483	gS 51.6680
4	6.1mm	gS 51.6250*	gS 51.6484	gS 51.6690
5	6.7mm	gS 51.6290*	gS 51.6485	gS 51.6700
6	8.8mm	gS 51.6310*	gS 51.6486	gS 51.6710

*Fits in gS 98.6020
gRack, Brun Curettes -
see page 98-99/9.

Brun Curette

straight

oval cups, hollow handle



angled

#	cup width	7"	8"	9"
6/0	2.0mm	—	gS 51.6497	gS 51.2070
5/0	2.2mm	gS 51.6400*	gS 51.6498	gS 51.2080
4/0	2.5mm	gS 51.6401*	gS 51.6487	gS 51.2090
3/0	2.8mm	gS 51.6402*	gS 51.6488	gS 51.2100
2/0	3.3mm	gS 51.6403*	gS 51.6489	gS 51.2110
0	3.7mm	gS 51.6404*	gS 51.6490	gS 51.2120
1	4.3mm	gS 51.6410*	gS 51.6491	gS 51.2130
2	4.8mm	gS 51.6420*	gS 51.6492	gS 51.2140
3	5.6mm	gS 51.6430*	gS 51.6493	gS 51.2150
4	6.1mm	gS 51.6440*	gS 51.6494	gS 51.2160
5	6.7mm	gS 51.6450*	gS 51.6495	gS 51.2170
6	8.8mm	gS 51.6460*	gS 51.6496	gS 51.2180

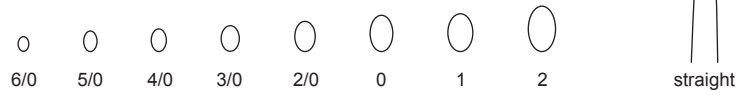
*Fits in gS 98.6020
gRack, Brun Curettes -
see page 98-99/9.

Brun Curette

angled

oval cups, hollow handle

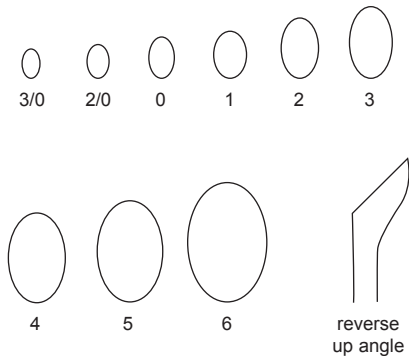




	#	cup width
gS 51.2015	6/0	1.5mm
gS 51.2017	5/0	1.7mm
gS 51.2020	4/0	2.0mm
gS 51.2024	3/0	2.4mm
gS 51.2027	2/0	2.7mm
gS 51.2030	0	3.0mm
gS 51.2036	1	3.3mm
gS 51.2038	2	3.6mm

Lempert Curette

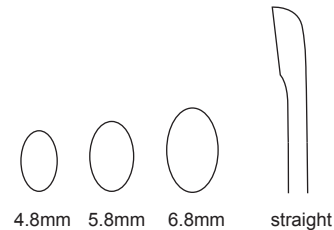
8", straight
oval cups, hollow handle



	#	cup width
gS 51.6800	3/0	2.5mm
gS 51.6820	2/0	2.8mm
gS 51.6840	0	3.3mm
gS 51.6851	1	4.0mm
gS 51.6852	2	4.5mm
gS 51.6853	3	5.5mm
gS 51.6854	4	7.5mm
gS 51.6855	5	8.5mm
gS 51.6856	6	10.0mm

Epstein Curette

8", reverse up angle
oval cups, hollow handle



	cup width
gS 51.5481	4.8mm
gS 51.5482	5.8mm
gS 51.5483	6.8mm

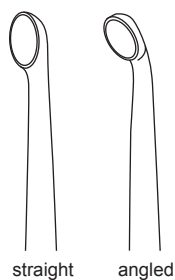
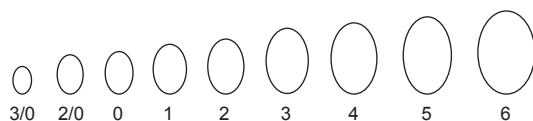
Halle Curette

8 1/2", straight, malleable
oval cups, hollow handle



51/4 - bone curettes

51

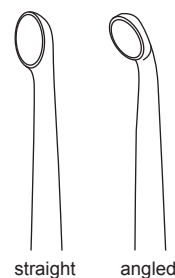
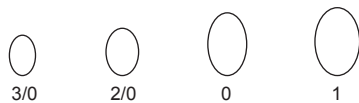


#	straight	angled	cup width
3/0	gS 51.6510	gS 51.2500	2.8mm
2/0	gS 51.6520	gS 51.2510	3.3mm
0	gS 51.6530	gS 51.2520	3.8mm
1	gS 51.6540	gS 51.2530	4.3mm
2	gS 51.6550	gS 51.2540	4.8mm
3	gS 51.6560	gS 51.2550	5.5mm
4	gS 51.6570	gS 51.2560	6.0mm
5	gS 51.6580	gS 51.2570	6.8mm
6	gS 51.6590	gS 51.2580	8.8mm

Brun Curette

9"

oval cups, hex handle

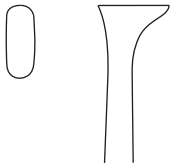


#	straight	angled	cup width
3/0	gS 51.6862	gS 51.6872	3.6mm
2/0	gS 51.6863	gS 51.6873	4.4mm
0	gS 51.6864	gS 51.6874	5.2mm
1	gS 51.6865	gS 51.6875	6.0mm

Bushe Curette

10"

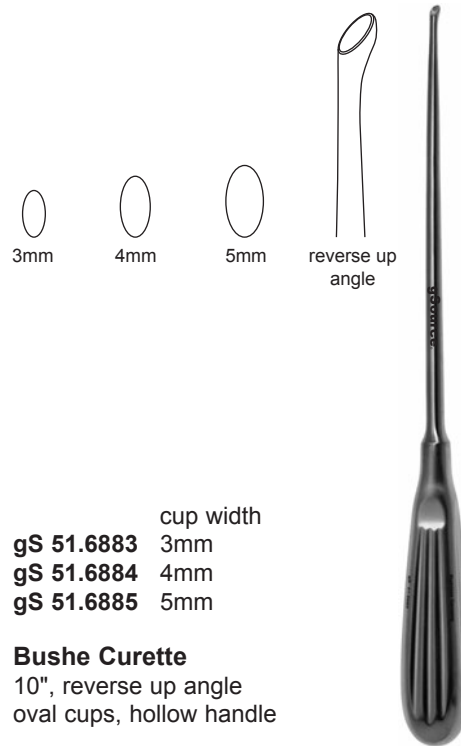
oval cups, hollow handle



gS 51.4938 9 1/2"

Youngblood Curette

reverse cup, oval
3.8mm cup width, hollow handle



cup width
gS 51.6883 3mm
gS 51.6884 4mm
gS 51.6885 5mm

Bushe Curette

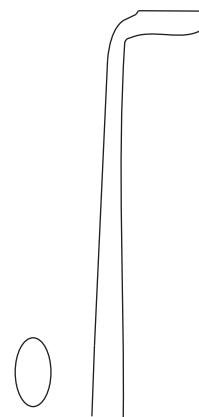
10", reverse up angle
oval cups, hollow handle



gS 51.6740 straight
gS 51.6760 down
gS 51.6780 up (reverse angle)

Scoville Curette

10"
4.7mm cup width, oval
hollow handle



gS 51.6790 10"

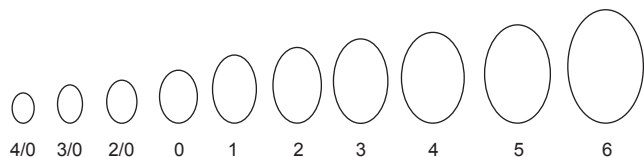
Scoville Curette

90° up (reverse angle)
4.7mm cup width, oval
hollow handle



51/6 - bone curettes

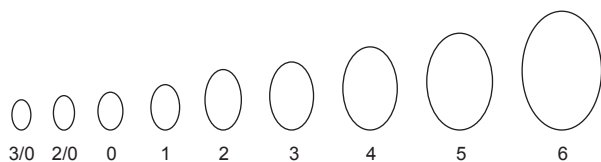
51



#		cup width
4/0	gS 51.6944	2.9mm
3/0	gS 51.6946	3.3mm
2/0	gS 51.6948	4.0mm
0	gS 51.6950	5.0mm
1	gS 51.6954	5.8mm
2	gS 51.6956	6.4mm
3	gS 51.6958	7.2mm
4	gS 51.6960	8.3mm
5	gS 51.6962	8.7mm
6	gS 51.6964	10.0mm

Volkmann Long Curette

11", straight
oval cups, phenolic handle

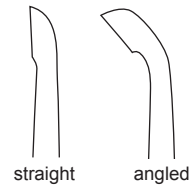
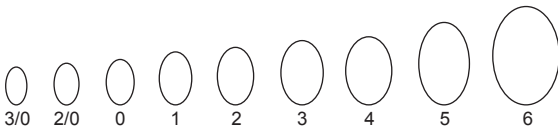


#		cup width
3/0	gS 51.5107	2.5mm
2/0	gS 51.5108	2.8mm
0	gS 51.5110	3.3mm
1	gS 51.5111	3.8mm
2	gS 51.5112	4.8mm
3	gS 51.5113	5.8mm
4	gS 51.5114	7.2mm
5	gS 51.5115	8.7mm
6	gS 51.5116	10.5mm

Spinal Fusion Curette

11", straight
oval cups, knurled hollow handle





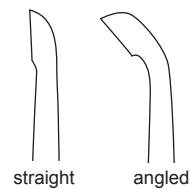
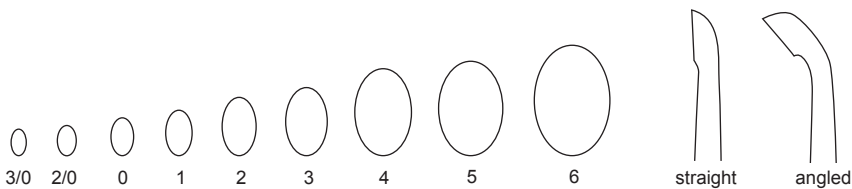
Lightweight stainless steel
handle - weighs 50% less
than our standard pattern.
(gS 51.5221 - gS 51.5411)

#	straight	angled	cup width
3/0	gS 51.5708	gS 51.5808	2.8mm
2/0	gS 51.5709	gS 51.5809	3.3mm
0	gS 51.5710	gS 51.5810	3.6mm
1	gS 51.5711	gS 51.5811	4.3mm
2	gS 51.5712	gS 51.5812	4.8mm
3	gS 51.5713	gS 51.5813	5.6mm
4	gS 51.5714	gS 51.5814	6.0mm
5	gS 51.5715	gS 51.5815	6.7mm
6	gS 51.5716	gS 51.5816	8.8mm

Cobb Curette

11"

oval cups, lightweight knurled hollow stainless steel handle



#	straight	angled	cup width
3/0	gS 51.5221	gS 51.5331	2.0mm
2/0	gS 51.5231	gS 51.5341	2.5mm
0	gS 51.5241	gS 51.5351	3.0mm
1	gS 51.5251	gS 51.5361	3.5mm
2	gS 51.5261	gS 51.5371	4.5mm
3	gS 51.5271	gS 51.5381	5.5mm
4	gS 51.5281	gS 51.5391	7.5mm
5	gS 51.5291	gS 51.5401	8.5mm
6	gS 51.5301	gS 51.5411	10.0mm

Cobb Curette

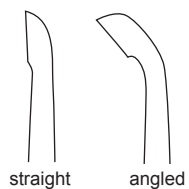
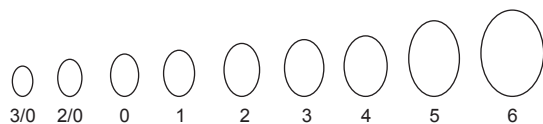
11"

oval cups, knurled stainless steel handle



51/8 - bone curettes

51

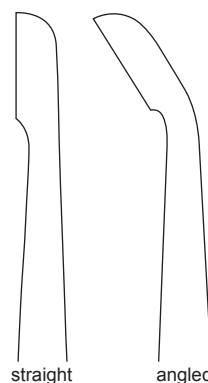
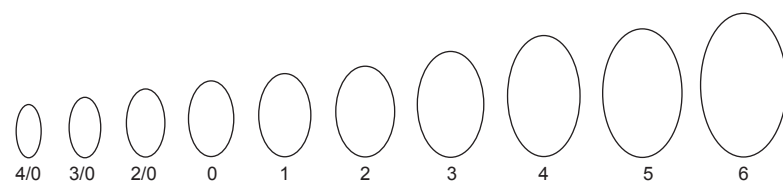


#	straight	angled	cup width
3/0	gS 51.5448	gS 51.5468	2.7mm
2/0	gS 51.5449	gS 51.5469	3.2mm
0	gS 51.5450	gS 51.5470	3.7mm
1	gS 51.5451	gS 51.5471	4.3mm
2	gS 51.5452	gS 51.5472	4.7mm
3	gS 51.5453	gS 51.5473	5.2mm
4	gS 51.5454	gS 51.5474	5.7mm
5	gS 51.5455	gS 51.5475	6.7mm
6	gS 51.5456	gS 51.5476	8.3mm

Cobb Curette

11"

oval cups, knurled aluminum handle



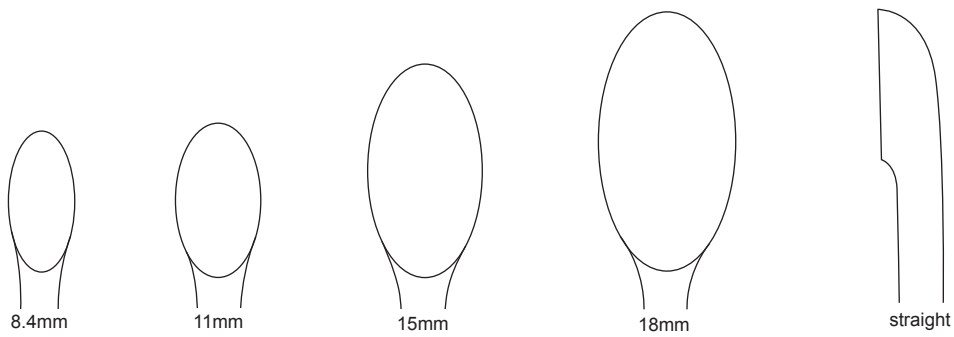
#	straight	angled	cup width
4/0	gS 51.7407	gS 51.7427	3.3mm
3/0	gS 51.7408	gS 51.7428	4.2mm
2/0	gS 51.7409	gS 51.7429	5.1mm
0	gS 51.7410	gS 51.7430	6.0mm
1	gS 51.7411	gS 51.7431	6.9mm
2	gS 51.7412	gS 51.7432	7.8mm
3	gS 51.7413	gS 51.7433	8.7mm
4	gS 51.7414	gS 51.7434	9.6mm
5	gS 51.7415	gS 51.7435	10.5mm
6	gS 51.7416	gS 51.7436	11.4mm

Bone Curette

15"

oval cups, knurled hollow handle





	cup width
gS 51.7501	8.4mm
gS 51.7502	11mm
gS 51.7503	15mm
gS 51.7504	18mm

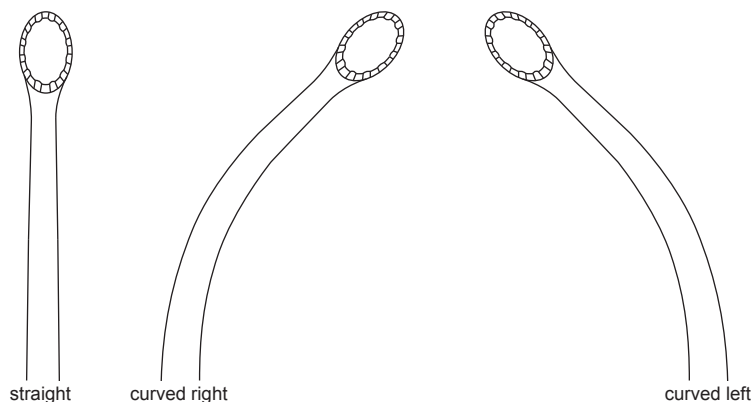
Bone Curette
 15", straight
 oval cups, double handed knurled T-handle



51/10 - bone currettes

51

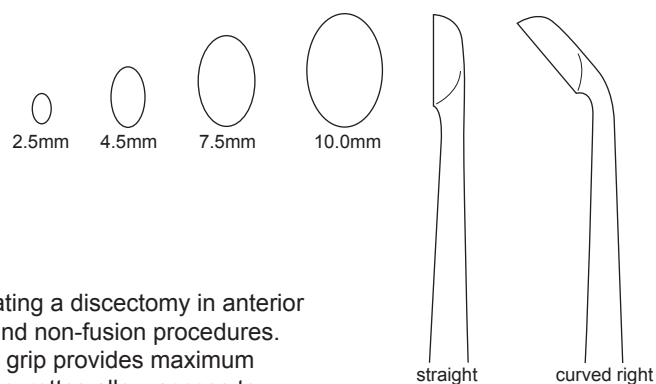
Double handed grip provides maximum control.



gS 51.4800 straight
gS 51.4801 curved right
gS 51.4802 curved left

Tooth Curette, Double Handed

17", cup width, 6.5mm
 oval toothed cups, 9" plastic handle, black



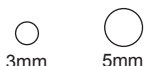
Useful in facilitating a discectomy in anterior lumbar fusion and non-fusion procedures. Double handed grip provides maximum control. Angled currettes allow access to posterolateral corners.

straight	angled	cup width
gS 51.7802	gS 51.7812	2.5mm
gS 51.7804	gS 51.7814	4.5mm
gS 51.7807	gS 51.7817	7.5mm
gS 51.7810	gS 51.7820	10.0mm

gCurette, Double Handed

17", oval cups
 9" plastic handle, black

WL = Working Length

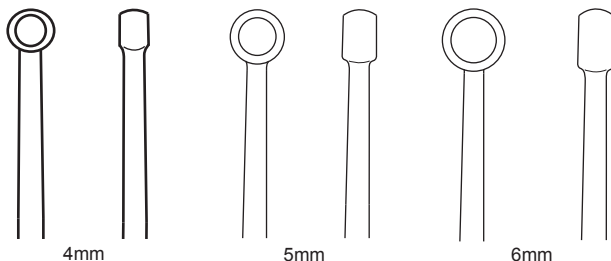
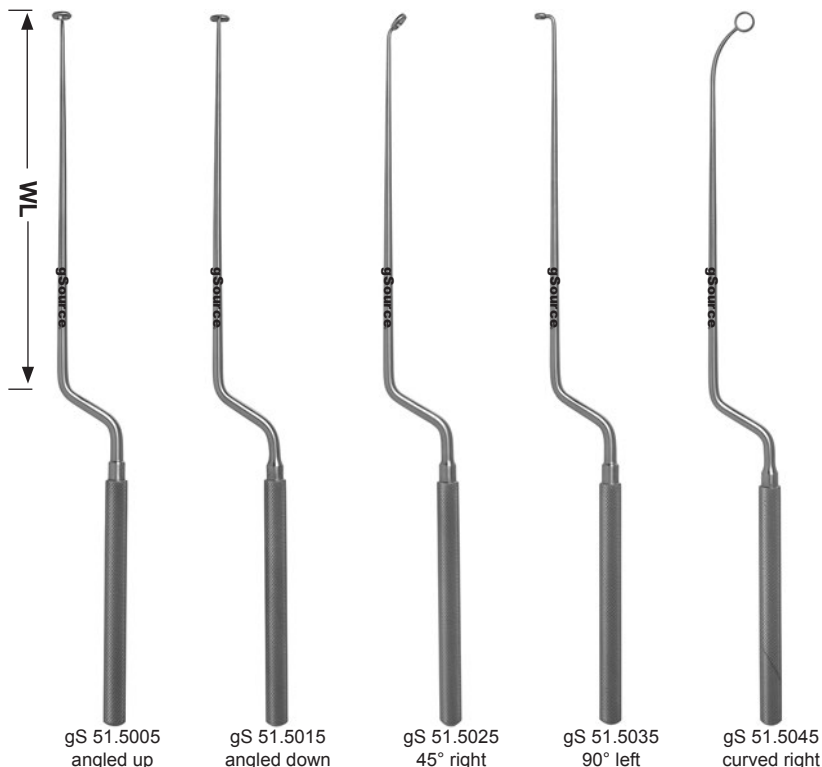


Handle is knurled on front side and flat on back side.

- gS 51.5003** 3mm angled up
- gS 51.5005** 5mm angled up
- gS 51.5013** 3mm angled down
- gS 51.5015** 5mm angled down
- gS 51.5023** 3mm 45° right
- gS 51.5025** 5mm 45° right
- gS 51.5033** 3mm 90° left
- gS 51.5035** 5mm 90° left
- gS 51.5045** 5mm curved right
- gS 51.5055** 5mm curved left

Hardy Bayonet Curette

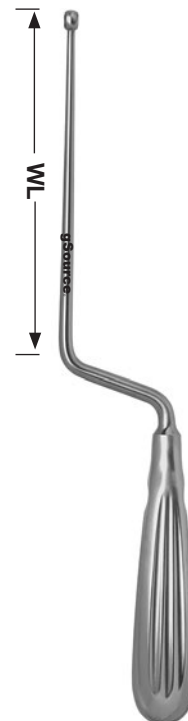
9 1/2", round fenestrated cup
sharp/sharp
knurled handle, 4 3/4" WL



- gS 51.5094** 4mm
- gS 51.5095** 5mm
- gS 51.5096** 6mm

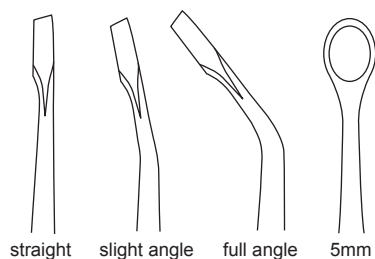
Kraemer Bayonet Ring Curette

10", straight, round fenestrated cup
sharp/sharp
hollow handle, 4 1/2" WL



51/12 - bone curettes

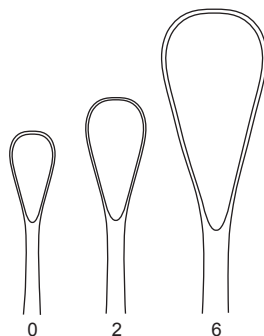
51



gS 51.5490 straight
gS 51.5492 slight angle
gS 51.5494 full angle

Semmes Ring Curette

9", oval fenestrated 5mm cup width
 sharp/blunt
 hollow handle

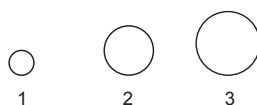


		#	cup width
gS 51.5620	10"	0	6mm
gS 51.5622	10"	2	8mm
gS 51.5626	10 1/2"	6	14mm

		#	cup width
gS 51.5630	11 1/2"	0	6mm
gS 51.5632	11 1/2"	2	8mm
gS 51.5636	12"	6	14mm

Ring Curette

straight, oval fenestrated cups
 sharp/blunt
 hollow handle

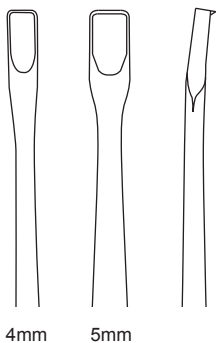


#	straight	angled	cup width
1	gS 51.5500	gS 51.5560	3mm
2	gS 51.5520	gS 51.5580	6mm
3	gS 51.5540	gS 51.5600	8mm

Cone Ring Curette

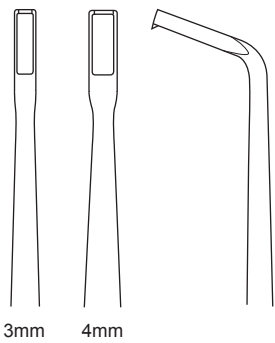
9", round fenestrated cups
 sharp/sharp
 knurled aluminum handle





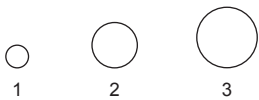
gS 51.5904 4mm
gS 51.5905 5mm

Caspar Bone Curette
10", straight, toothed
square fenestrated cup
sharp/blunt

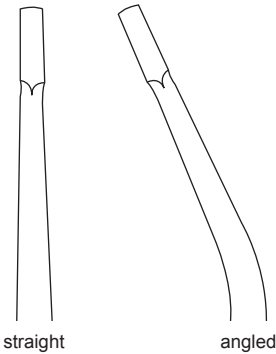


gS 51.5913 3mm
gS 51.5914 4mm

Caspar Bone Curette
10 1/2", angled, toothed
square fenestrated cup
sharp/blunt



Useful in removing excess tissue
for sampling or growths during
neurological procedures.



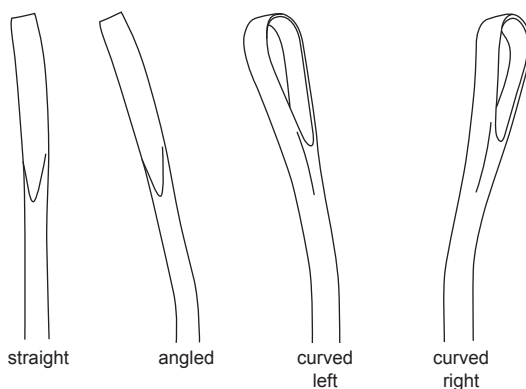
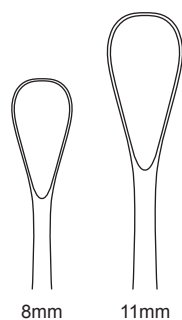
#	straight	angled	cup width
1	gS 51.5601	gS 51.5611	3mm
2	gS 51.5602	gS 51.5612	6mm
3	gS 51.5603	gS 51.5613	8mm

Cone Ring Curette
15", round fenestrated cups
sharp/sharp
knurled aluminum handle



51/14 - bone cures

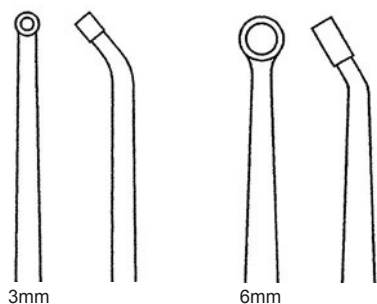
51



gS 51.5640	straight	8mm	sharp/blunt
gS 51.5645	straight	11mm	sharp/blunt
gS 51.5650	angled	8mm	sharp/sharp
gS 51.5655	angled	11mm	sharp/sharp
gS 51.5660	angled	8mm	sharp/sharp, right curved shaft
gS 51.5665	angled	11mm	sharp/sharp, right curved shaft
gS 51.5670	angled	8mm	sharp/sharp, left curved shaft
gS 51.5675	angled	11mm	sharp/sharp, left curved shaft

Zielke Ring Curette

13 1/2", oval fenestrated cups
ergonomic plastic handle

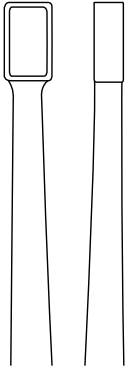


gS 51.5682	17" angled	3mm
gS 51.5684	20" angled	6mm

Cone Ring Curette

round fenestrated cups
sharp/sharp
phenolic handle

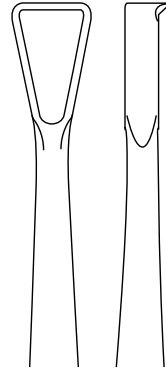




Useful in facilitating a discectomy in anterior lumbar fusion and non-fusion procedures. Double handed grip provides maximum control.

gS 51.7706 17"

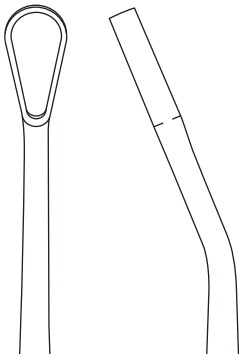
gCurette, Box, Double Handed
straight, 6mm fenestrated cup
sharp/blunt
9" plastic handle, black



Useful in facilitating a discectomy in anterior lumbar fusion and non-fusion procedures. Double handed grip provides maximum control.

gS 51.7710 17"

gCurette, Triangle, Double Handed
straight, 10mm fenestrated cup
sharp/blunt
9" plastic handle, black



Useful in facilitating a discectomy in anterior lumbar fusion and non-fusion procedures. Double handed grip provides maximum control.

gS 51.7908 17"

gCurette, Teardrop Ring, Double Handed
angled, 8mm fenestrated cup
sharp/sharp
9" plastic handle, black



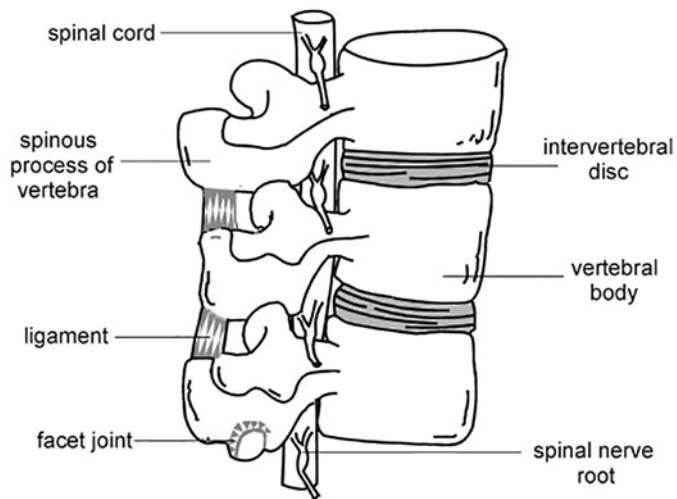
did you know... ?

Anterior lumbar interbody fusion (ALIF) is a traditional open spine surgery aimed at removing the source of neural compression in the spine and immobilizing a section of the back so that pain triggered by movement (mechanical pain) is eliminated. "Anterior" indicates that the procedure is performed through the front of the body. "Lumbar" refers to the lower back, while "interbody" means the main component of the surgery takes place in the space between two adjacent vertebrae.

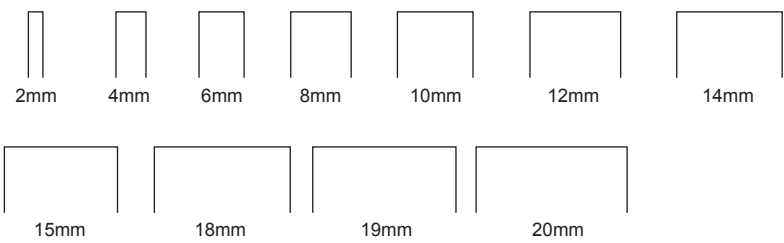
ALIF is commonly performed for a variety of painful spinal conditions, such as spondylolisthesis and degenerative disc disease, among others. As we age, the spongy discs between vertebrae begin to deteriorate, they lose water content and disc height. This causes them to "collapse" into the spine, where they can bulge or rupture into the spinal canal, exerting painful pressure on surrounding spinal nerves.

For anterior spinal fusion, an incision is made on one side of the abdomen. Organs, soft tissue, and blood vessels are moved aside so there is a wide exposure of the intervertebral disc without retraction of the spinal nerves, decreasing risk of neurologic injury.

A discectomy is performed to remove all or part of the damaged disc. The intervertebral space is widened, both to make room for a bone graft and implants and to enlarge the foramina, which are the open spaces on the sides of each vertebra through which spinal nerves pass. A bone graft and implants are inserted between the vertebral bodies and in time, the bones should completely fuse together. In some cases, the two fused vertebrae are further immobilized with rods and screws attached to the pedicles.

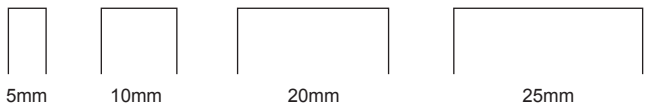


LUMBAR SPINE AND SPINAL CORD



straight		curved	
gS 52.4355	2mm	gS 52.4472	4mm
gS 52.4360	4mm	gS 52.4473	6mm
gS 52.4380	6mm	gS 52.4474	8mm
gS 52.4400	8mm	gS 52.4475	10mm
gS 52.4420	10mm	gS 52.4477	12mm
gS 52.4440	12mm	gS 52.4476	14mm
gS 52.4430	14mm	gS 52.4478	15mm
gS 52.4450	15mm	gS 52.4479	18mm
gS 52.4460	18mm	gS 52.4480	19mm
gS 52.4470	19mm		
gS 52.4350	20mm		

Mini Lambotte Osteotome
5"



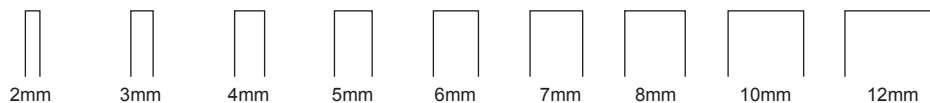
gS 52.0400	str	10mm
gS 52.0460	str	20mm
gS 52.0500	str	25mm
gS 52.0700	cvd	5mm
gS 52.0750	cvd	10mm

Long Bevel Osteotome
7" with calibration lines
long beveled cutting end



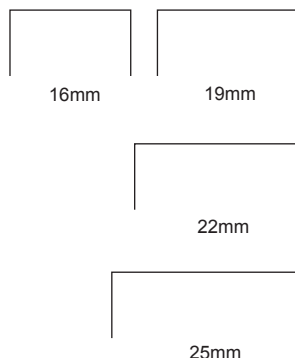
52-53/2 - osteotomes

52-53

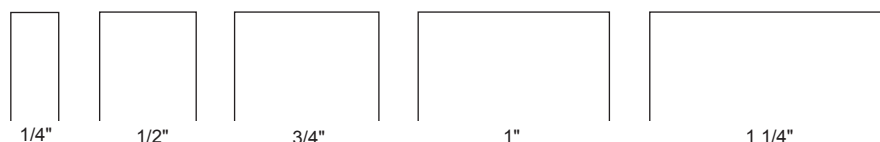


straight	
gS 52.4495	2mm
gS 52.4496	3mm
gS 52.4498	4mm
gS 52.4499	5mm
gS 52.4500	6mm
gS 52.4507	7mm
gS 52.4508	8mm
gS 52.4510	10mm
gS 52.4520	12mm
gS 52.4530	16mm
gS 52.4540	19mm
gS 52.4550	22mm
gS 52.4560	25mm

curved	
gS 52.3903	3mm
gS 52.3904	4mm
gS 52.3905	5mm
gS 52.3906	6mm
gS 52.3907	7mm
gS 52.3908	8mm
gS 52.3910	10mm
gS 52.3912	12mm
gS 52.3916	16mm
gS 52.3919	19mm
gS 52.3922	22mm
gS 52.3925	25mm



Lambotte Osteotome
7"
with calibration lines



*Fits in gS 98.6040 gRack,
Lambotte Osteotomes - see
page 98-99/9.

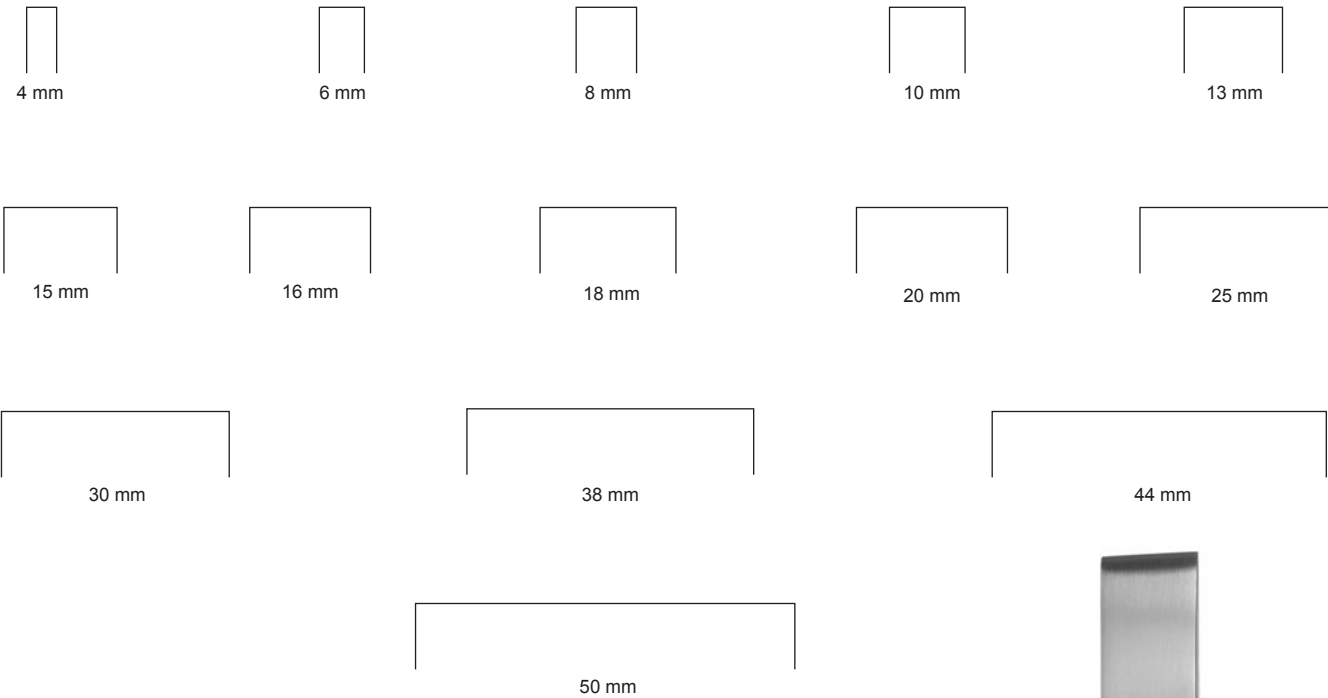


straight	
gS 52.4040	1/4" [6mm]*
gS 52.4060	1/2" [13mm]*
gS 52.4100	3/4" [19mm]*
gS 52.4140	1" [25mm]*
gS 52.4180	1 1/4" [32mm]*
gS 52.4220	1 1/2" [38mm]*

curved	
gS 52.4280	1/4" [6mm]*
gS 52.4290	1/2" [13mm]*
gS 52.4300	3/4" [19mm]*
gS 52.4310	1" [25mm]*
gS 52.4320	1 1/4" [32mm]*
gS 52.4330	1 1/2" [38mm]*

Lambotte Osteotome
9"





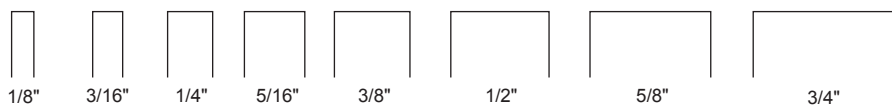
- straight**
- gS 52.5004** 4mm
 - gS 52.5006** 6mm
 - gS 52.5008** 8mm
 - gS 52.5010** 10mm
 - gS 52.5013** 13mm
 - gS 52.5015** 15mm
 - gS 52.5016** 16mm
 - gS 52.5018** 18mm
 - gS 52.5020** 20mm
 - gS 52.5025** 25mm
 - gS 52.5030** 30mm
 - gS 52.5038** 38mm
 - gS 52.5044** 44mm
 - gS 52.5050** 50mm

Lambotte Osteotome
9 3/4"



52-53/4 - osteotomes

52-53



5 1/4"

straight

gS 52.5970
gS 52.5980
gS 52.5990
gS 52.6000
gS 52.6010
gS 52.6020
gS 52.6030
gS 52.6040

5 1/4"

curved

gS 52.6053 1/8" [3mm]
gS 52.6054 3/16" [4mm]
gS 52.6056 1/4" [6mm]
gS 52.6058 5/16" [8mm]
gS 52.6060 3/8" [10mm]
gS 52.6063 1/2" [13mm]
gS 52.6066 5/8" [16mm]
gS 52.6069 3/4" [19mm]

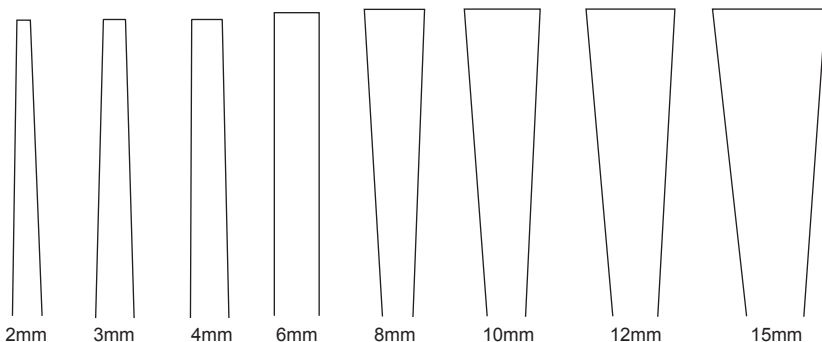
6 3/4"

straight

gS 52.6073 1/8" [3mm]
gS 52.6074 3/16" [4mm]
gS 52.6076 1/4" [6mm]
gS 52.6078 5/16" [8mm]
gS 52.6080 3/8" [10mm]
gS 52.6082 7/16" [12mm]

Hoke Osteotome

hexagonal handle



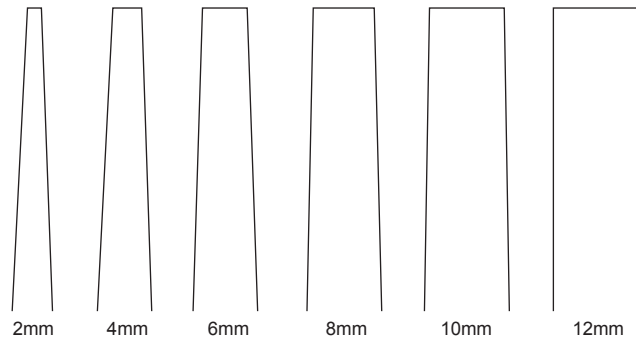
gS 52.3680 2mm
gS 52.3690 3mm
gS 52.3700 4mm
gS 52.3720 6mm
gS 52.3740 8mm
gS 52.3760 10mm
gS 52.3780 12mm
gS 52.3800 15mm

Sheehan Osteotome

6 1/4" straight

hexagonal handle, with cross serrations on handle end





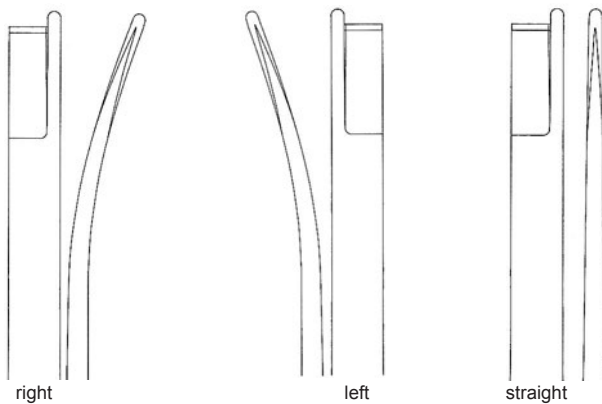
- gS 52.4902** 2mm
- gS 52.4904** 4mm
- gS 52.4906** 6mm
- gS 52.4908** 8mm
- gS 52.4910** 10mm
- gS 52.4912** 12mm

Converse Osteotome

7"
straight



52-53



- gS 52.1220** curved right guard
- gS 52.1222** curved left guard
- gS 52.1318** straight with guard

Anderson-Neivert Osteotome

8" with single guard
7mm

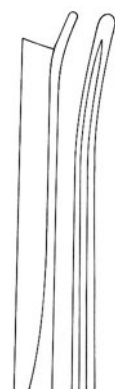


52-53/6 - osteotomes

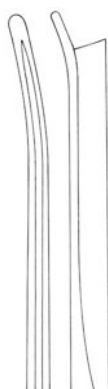
52-53



straight



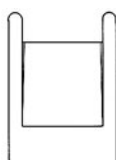
curved right



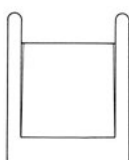
curved left

- gS 52.0300** straight
- gS 52.0301** curved right
- gS 52.0302** curved left

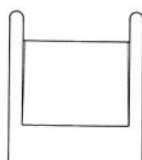
Silver Osteotome
7" with single guard



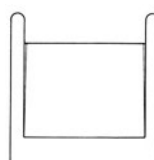
10mm



12mm



14mm

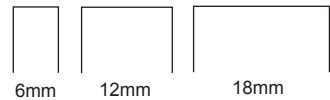


16mm

- gS 52.0310** 10mm
- gS 52.0311** 12mm
- gS 52.0312** 14mm
- gS 52.0313** 16mm

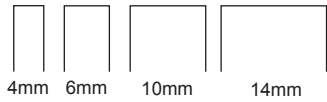
Cinelli Osteotome
6 1/2" with double guard
straight





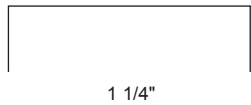
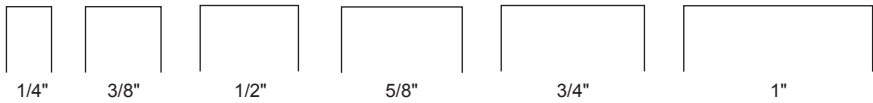
- gS 52.3840** 6mm
- gS 52.3860** 12mm
- gS 52.3880** 18mm

Army Pattern Osteotome
7"
straight



- gS 52.1008** 4mm
- gS 52.1010** 6mm
- gS 52.1020** 10mm
- gS 52.1040** 14mm
- gS 52.1060** 18mm
- gS 52.1080** 22mm

Stille Osteotome
8"
straight



- | | straight | |
|-------------------|----------|--------|
| gS 52.5480 | 1/4" | [6mm] |
| gS 52.5490 | 3/8" | [10mm] |
| gS 52.5500 | 1/2" | [13mm] |
| gS 52.5510 | 5/8" | [16mm] |
| gS 52.5520 | 3/4" | [19mm] |
| gS 52.5530 | 1" | [25mm] |
| gS 52.5540 | 1 1/4" | [32mm] |

Smith Peterson Osteotome
8"
solid handle

- | | curved | |
|-------------------|--------|--------|
| gS 52.5570 | 1/4" | [6mm] |
| gS 52.5580 | 3/8" | [10mm] |
| gS 52.5590 | 1/2" | [13mm] |
| gS 52.5600 | 5/8" | [16mm] |
| gS 52.5610 | 3/4" | [19mm] |
| gS 52.5620 | 1" | [25mm] |
| gS 52.5630 | 1 1/4" | [32mm] |

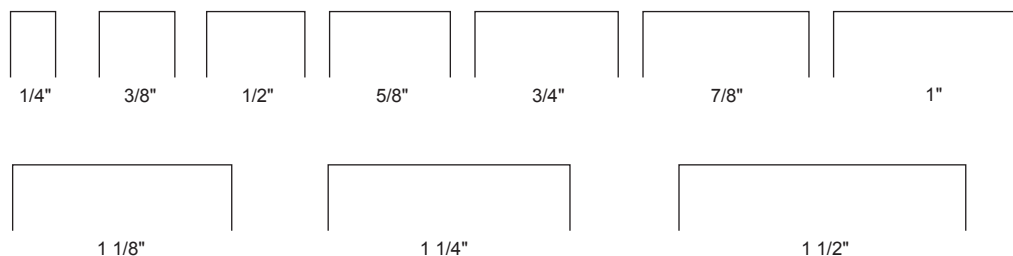
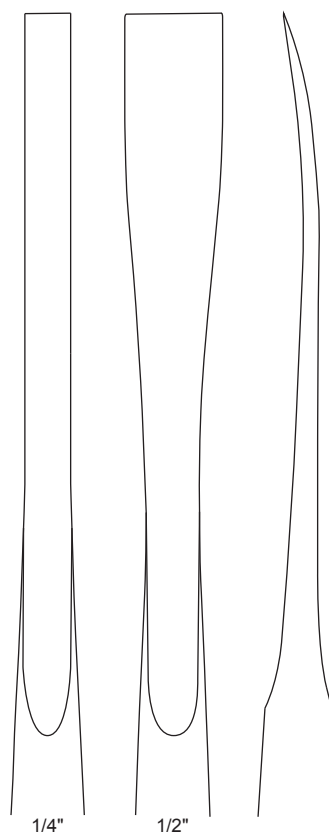


52-53/8 - osteotomes

52-53

gS 52.4870 1/4" [6mm]
gS 52.4873 1/2" [13mm]

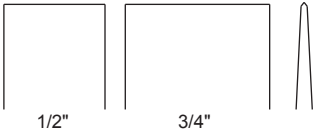
gOsteotomes, Hibbs
 9 1/2" curved
 hollow hexagonal handle



straight			curved		
gS 52.4590	1/4"	[6mm]	gS 52.4730	1/4"	[6mm]
gS 52.4600	3/8"	[10mm]	gS 52.4760	3/8"	[10mm]
gS 52.4610	1/2"	[13mm]	gS 52.4770	1/2"	[13mm]
gS 52.4620	5/8"	[16mm]	gS 52.4780	5/8"	[16mm]
gS 52.4630	3/4"	[19mm]	gS 52.4790	3/4"	[19mm]
gS 52.4640	7/8"	[22mm]	gS 52.4800	7/8"	[22mm]
gS 52.4650	1"	[25mm]	gS 52.4810	1"	[25mm]
gS 52.4660	1 1/8"	[29mm]	gS 52.4820	1 1/8"	[29mm]
gS 52.4670	1 1/4"	[32mm]	gS 52.4830	1 1/4"	[32mm]
gS 52.4680	1 1/2"	[38mm]	gS 52.4840	1 1/2"	[38mm]

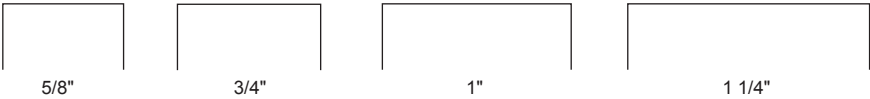
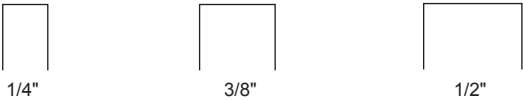
Hibbs Osteotome
 9 1/2"
 solid hexagonal handle





gS 53.0012 1/2" [13mm]
gS 53.0019 3/4" [19mm]

Osteotome
8" straight
knurled stainless steel handle



straight
gS 53.4500 1/4" [6mm]
gS 53.4510 3/8" [10mm]
gS 53.4520 1/2" [13mm]
gS 53.4530 5/8" [16mm]
gS 53.4540 3/4" [19mm]
gS 53.4550 1" [25mm]
gS 53.4560 1 1/4" [32mm]

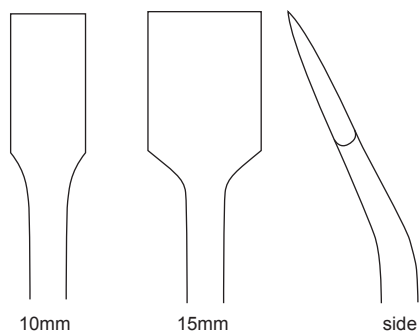
curved
gS 53.4570 1/4" [6mm]
gS 53.4580 3/8" [10mm]
gS 53.4590 1/2" [13mm]
gS 53.4600 5/8" [16mm]
gS 53.4610 3/4" [19mm]
gS 53.4620 1" [25mm]
gS 53.4630 1 1/4" [32mm]

Cobb Osteotome
11"
knurled stainless steel handle



52-53/10 - osteotomes

52-53



gS 53.4410 10mm

gS 53.4415 15mm

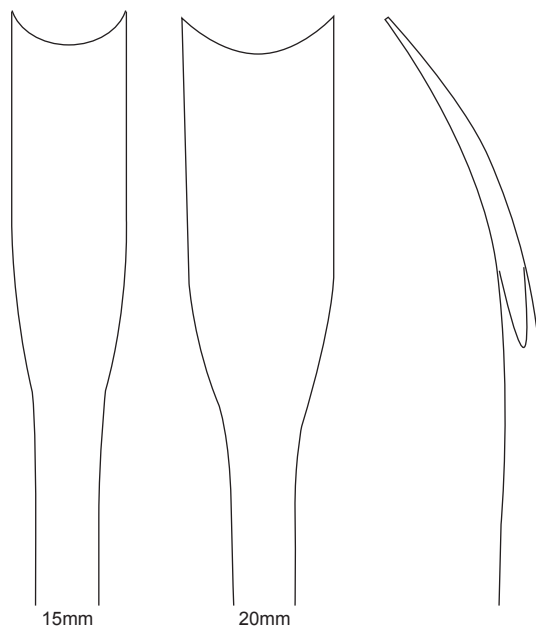
Lexer Osteotome

11"

angled shaft, phenolic handle



Stainless steel
end cap on
handle.



gS 53.4715 15mm

gS 53.4720 20mm

Pelvic Osteotome

12" curved

plastic handle, black





Useful in facilitating a discectomy in anterior lumbar fusion and non-fusion procedures. Double handed grip provides maximum control.

gS 53.7918 18mm
gS 53.7925 25mm

gOsteotome, Double Handed
 17" straight
 9" plastic handle, black



52-53/12 - osteotomes

52-53

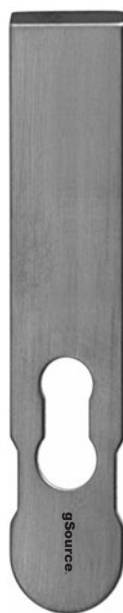
Plastic handle is autoclavable to
250° F [121° C].



5mm



10mm



16mm



25mm



60mm radius



3 1/4" hex key

5 1/4" hex key

chisel blade, straight

gS 52.0105 5mm

gS 52.0106 10mm

gS 52.0107 16mm

gS 52.0108 25mm

osteotome blade, straight

gS 52.0110 5mm

gS 52.0111 10mm

gS 52.0112 16mm

gS 52.0113 25mm

gouge blade

gS 52.0160 60mm radius

gS 52.0100 handle only

gS 52.0101 key only, 3 1/4" 3.0mm hex

gS 52.0103 key only, 5 1/4" 3.0mm hex

knurled aluminum handle

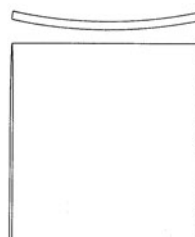
gS 52.0102 replacement screw only



chisel



osteotome



gouge

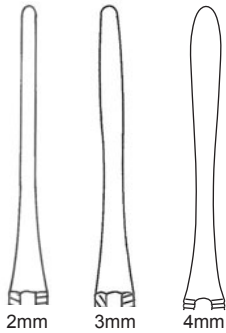


handle

Interchangeable Osteotome, Chisel and Gouge

7"

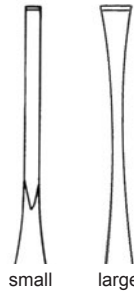
plastic handle, black



gS 54.6240 2mm
gS 54.6280 3mm
gS 54.6290 4mm

Nucleus Knife

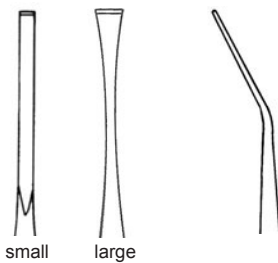
5 1/4" straight, single ended
 blunt blade



gS 54.6570 #59 small
gS 54.6600 #61 large

Nail Splitter

5" straight, single ended
 sharp blade



gS 54.6620 #60 small
gS 54.6680 #62 large

Nail Splitter

5" angled, single ended
 sharp blade



gS 54.7500

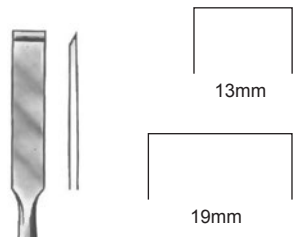
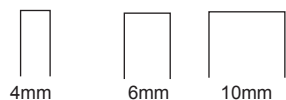
Chisel Spade

5 1/4" curved edge
 single ended



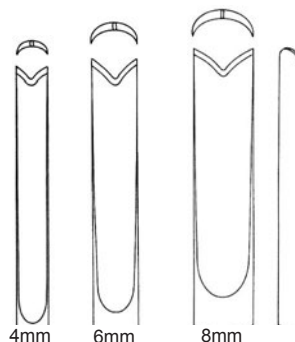
54/2 - chisels

54



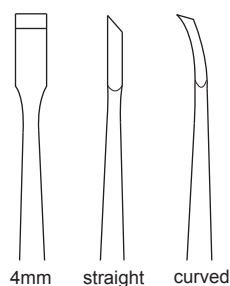
- gS 54.6050** 4mm
- gS 54.6060** 6mm
- gS 54.6070** 10mm
- gS 54.6080** 13mm
- gS 54.6090** 19mm

Hoke Chisel
5 1/4" straight



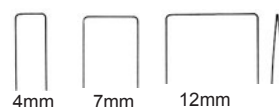
- gS 54.1090** 4mm
- gS 54.1092** 6mm
- gS 54.1094** 8mm

Hajek Septum Chisel
6" straight
sharp "V" edge



- gS 54.1060** straight
- gS 54.1070** curved

Freer Septum Chisel
6 1/2"
4mm



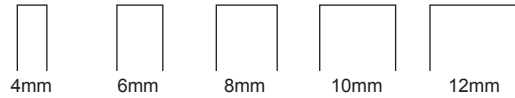
Tapered osteotome
end.

Serrated tamp end.

- gS 54.1085** 4mm
- gS 54.1086** 7mm
- gS 54.1087** 12mm

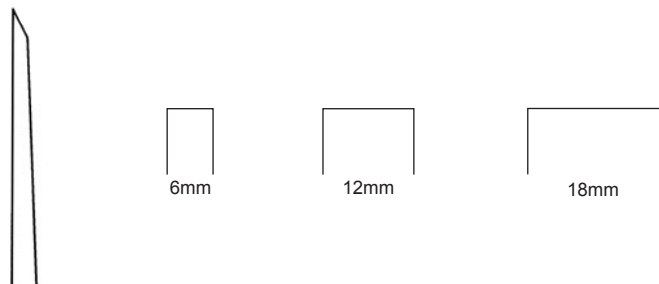
Cottle Septum Chisel
7" straight tapered end
graduation lines





- gS 54.3600** 4mm
- gS 54.3620** 6mm
- gS 54.3640** 8mm
- gS 54.3660** 10mm
- gS 54.3680** 12mm

Mini Lexer Chisel
 7" straight
 phenolic handle

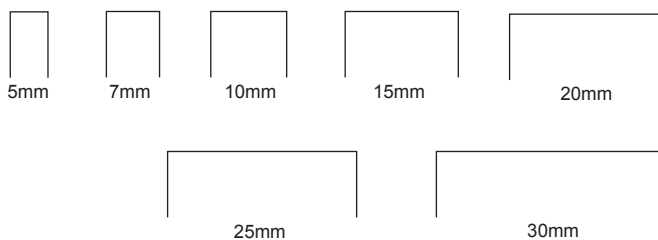


- gS 54.3890** 6mm
- gS 54.3900** 12mm
- gS 54.3910** 18mm

Army Pattern Chisel
 7"

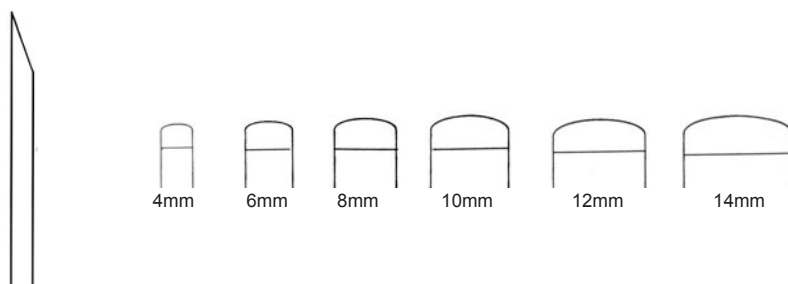


54/4 - chisels



- gS 54.3460** 5mm
- gS 54.3480** 7mm
- gS 54.3500** 10mm
- gS 54.3520** 15mm
- gS 54.3540** 20mm
- gS 54.3560** 25mm
- gS 54.3580** 30mm

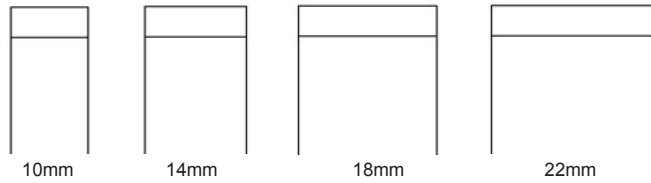
Lexer Chisel
8 1/2" straight
phenolic handle



- gS 54.1400** 4mm
- gS 54.1410** 6mm
- gS 54.1420** 8mm
- gS 54.1430** 10mm
- gS 54.1440** 12mm
- gS 54.1450** 14mm

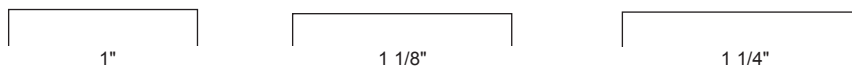
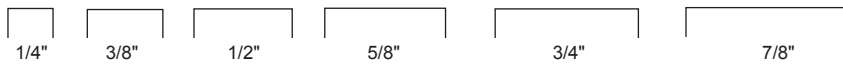
Alexander Chisel
7" straight chisel
rounded edge





gS 54.1100 10mm
gS 54.1120 14mm
gS 54.1140 18mm
gS 54.1160 22mm

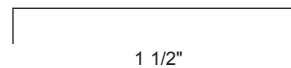
Stille Type Chisel
 8"
 straight edge



straight
gS 54.1590 1/4"
gS 54.1600 3/8"
gS 54.1610 1/2"
gS 54.1620 5/8"
gS 54.1630 3/4"
gS 54.1640 7/8"
gS 54.1650 1"
gS 54.1660 1 1/8"
gS 54.1670 1 1/4"
gS 54.1680 1 1/2"

curved
gS 54.1730 1/4"
gS 54.1740 3/8"
gS 54.1750 1/2"
gS 54.1760 5/8"
gS 54.1770 3/4"
gS 54.1780 7/8"
gS 54.1790 1"
gS 54.1800 1 1/8"
gS 54.1810 1 1/4"
gS 54.1820 1 1/2"

Hibbs Chisel
 9"
 solid hexagonal handle





gS 54.1906 6mm

Spinal Fusion Chisel

9 1/2" straight
knurled handle



did you know... ?

Spinal fusion is one of the surgical procedures that have been performed for many years to treat chronic painful spinal conditions, in both the neck and the lower back. Additionally, spinal fusions have been performed to correct spinal deformities such as scoliosis, or curvature of the spine, and instability or abnormal movement between adjoining vertebrae. Spinal fusion is the linking of adjacent vertebra through the process of bone formation. Usually, this procedure is augmented with the addition of metal implants such as rods and screws or hooks and rods. Newer intervertebral implants that are cylindrical shapes can actually be placed into the area where the intervertebral disc joins one vertebra to the other. The hallmark of spinal fusion requires that bone grow between one vertebra and the other. Until very recently, this has been accomplished with the use of bone graft material. The gold standard, which all other graft materials are compared to, is the patient's own bone. To use the patient's own bone requires taking bone from one site in the patient's body, usually the pelvic bone or the iliac bone. This bone is "harvested" using chisels, gouges and other bone cutting instruments. That bone is then packed between the vertebrae or around the vertebra in such a way to stimulate bone growth and ultimately fuse the vertebra together.

did you know... ?

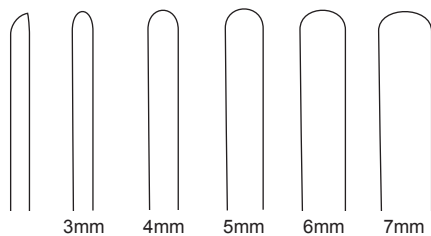
Dr. Michael Hoke was among the earliest orthopedic surgeons in the South and a leader in charitable institutions for crippled children. He was born in 1874 in Lincolnton, North Carolina. He completed his medical degree at the University of Virginia and then interned at the Johns Hopkins University. In 1897 he began a general surgery practice in Atlanta. In 1900 he spent a year in Boston for post-graduate study in orthopedics and then returned to Atlanta to become the South's first specialist in orthopedics. While there, he developed a keen interest in crippled children, often caring for those unable to pay. He devised a procedure performed on the feet of polio victims which became known as the "Hoke operation".

The Scottish Rite Convalescent Hospital for Crippled Children was founded in 1915 through the dedication of Mrs. Bertie Wardlow and Dr. Michael Hoke. The two-cottage Decatur facility gave indigent, crippled children a place to recover after having surgery at Piedmont Hospital and Wesley Memorial Hospital (now Emory University Hospital). Three years later, in 1918, a new 50 bed building was opened on West Hill Street with the facilities to become a full orthopedic surgical hospital for those who could not afford to pay for care, and featured a natural light surgical suite. The new hospital focused on treating Georgia children crippled by polio, and was the first hospital in the United States devoted to the orthopedic care of

children. The Oakhurst hospital served as a model for the 19 Shriner's Hospitals for Crippled Children which were later opened around the nation. After returning back to North Carolina he was the first principal surgeon at the North Carolina Orthopedic Hospital, opened in 1921.

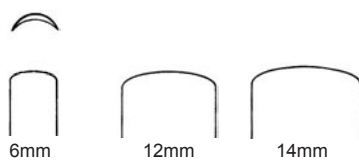
President Franklin D. Roosevelt, himself a polio victim, took a special interest in Dr. Hoke's work. In 1931 he persuaded Dr. Hoke to leave his Atlanta practice and take a post as surgeon-in-chief at the Georgia Warm Springs Foundation (now known as Roosevelt Warm Springs Institute). The operations were paid for by the Foundation for Infantile Paralysis, which later became the March of Dimes. President Roosevelt's first visit to Warm Springs was in 1924 when he heard about improvements made by polio victims as a result of swimming in the 88-degree natural spring at the Georgia resort. President Roosevelt purchased the property in 1927 and turned it into a polio treatment center. Dr. Hoke and his wife occupied the "Little White House" at Warm Springs, as it became known, vacating it when President Roosevelt was in residence. Dr. Hoke was not the President's personal physician, but had his respect and trust. Declining in health, Dr. Hoke was forced to retire to Beaufort, South Carolina in 1937. He died in 1944.

The Hoke Chisel is shown on page 2 in this section.



- gS 56.0003** 3mm
- gS 56.0004** 4mm
- gS 56.0005** 5mm
- gS 56.0006** 6mm
- gS 56.0007** 7mm

Partsch Gouge
5 1/2" straight
rounded edge

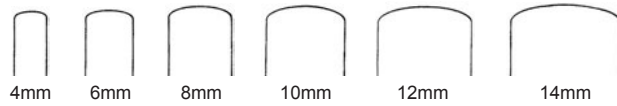


- gS 56.3920** 6mm
- gS 56.3930** 12mm
- gS 56.3940** 14mm

Army Pattern Gouge
6 1/2" straight
rounded edge

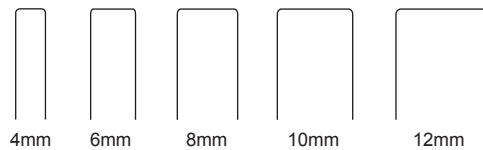


56/2 - gouges



gS 56.1500 4mm
gS 56.1510 6mm
gS 56.1520 8mm
gS 56.1530 10mm
gS 56.1540 12mm
gS 56.1550 14mm

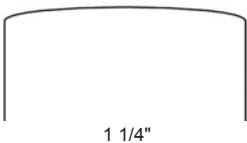
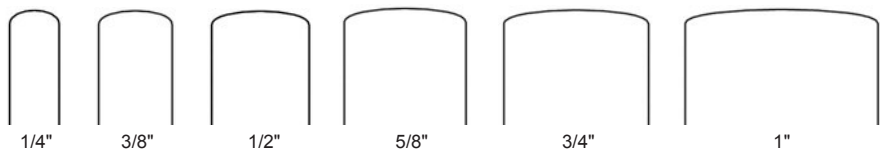
Alexander Gouge
7" straight
rounded edge



gS 56.0104 4mm
gS 56.0106 6mm
gS 56.0108 8mm
gS 56.0110 10mm
gS 56.0112 12mm

Mini Lexer Gouge
7" straight
phenolic handle





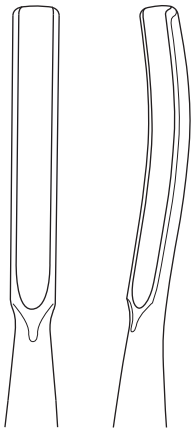
	straight
gS 56.5660	1/4"
gS 56.5670	3/8"
gS 56.5680	1/2"
gS 56.5760	5/8"
gS 56.5770	3/4"
gS 56.5780	1"
gS 56.5790	1 1/4"

	curved
gS 56.5870	1/4"
gS 56.5880	3/8"
gS 56.5890	1/2"
gS 56.5900	5/8"
gS 56.5910	3/4"
gS 56.5930	1"
gS 56.5950	1 1/4"

Smith Peterson Gouge
8"
rounded edge



gS 56.0190 3mm
Shoulder Penetrating Gouge
8 1/2" straight

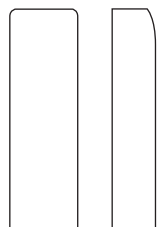


gS 56.1020 6mm
gGouge, Tanaka
9 1/2" curved
phenolic handle



56/4 - gouges

56



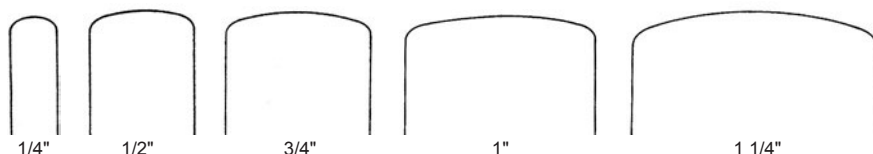
gS 56.1009 9mm

Screw Removal Gouge
9" straight
phenolic handle



gS 56.1280 25mm

Swan Neck Gouge
9" curved
solid hexagonal handle

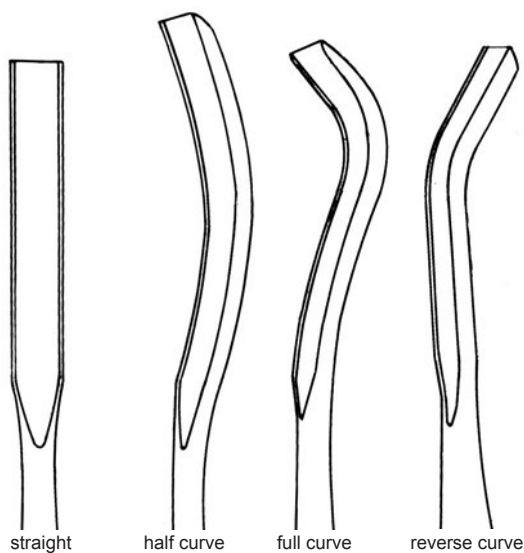


	straight
gS 56.4870	1/4"
gS 56.4880	3/8"
gS 56.4890	1/2"
gS 56.4900	5/8"
gS 56.4910	3/4"
gS 56.4920	7/8"
gS 56.4930	1"
gS 56.4940	1 1/8"
gS 56.4950	1 1/4"
gS 56.5010	1 1/2"

	curved
gS 56.5020	1/4"
gS 56.5030	3/8"
gS 56.5040	1/2"
gS 56.5050	5/8"
gS 56.5070	3/4"
gS 56.5080	7/8"
gS 56.5090	1"
gS 56.5100	1 1/8"
gS 56.5110	1 1/4"
gS 56.5120	1 1/2"

Hibbs Gouge
9 1/2"
solid hexagonal handle





- gS 56.1300** straight
- gS 56.1320** half curve
- gS 56.1340** full curve
- gS 56.1360** reverse curve

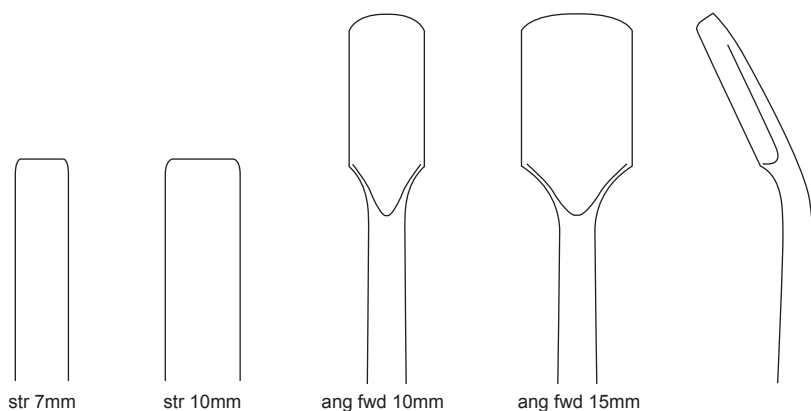
Cobb Gouge

11"

knurled stainless steel handle



56



- gS 56.5970** str 7mm
- gS 56.5972** str 10mm
- gS 56.5980** ang fwd 10mm
- gS 56.5982** ang fwd 15mm

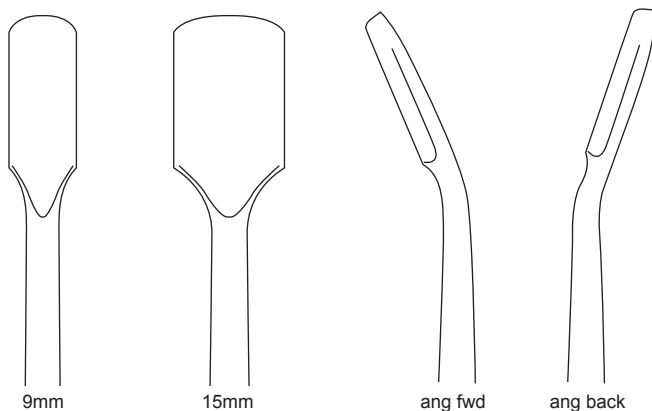
Lexer Gouge

11"

phenolic handle



56/6 - gouges



- gS 56.6018** str 9mm
- gS 56.6020** str 15mm
- gS 56.6010** ang fwd 9mm
- gS 56.6014** ang fwd 15mm
- gS 56.6012** ang back 9mm
- gS 56.6016** ang back 15mm

Wagner Gouge
13 1/2"
phenolic handle



did you know... ?

Gouges are used to scoop away strips of soft bone and are often used during bone grafting procedures. Bone grafting is a surgical procedure that places new bone or replacement material into spaces between or around broken bone due to fractures, or in holes in bone due to defects, in order to aid in healing. It is used to repair bone fractures that are complex and pose risk to the patient, or fail to heal properly. Also, it is used to help fusion between vertebrae, correct deformities, or provide structural support for fracture of the spine. Defects in bone caused by congenital disorders, traumatic injury, or surgery for bone cancer, as well as facial or cranial reconstruction, can also be treated.

A bone graft can help repair a defect in three ways:

- Osteogenesis, the formation of new bone by the cells contained within the graft.
- Osteoinduction, a chemical process in which molecules contained within the graft (bone morphogenetic proteins - BMP) convert the patient's cells into cells capable of forming bone.
- Osteoconduction, a physical effect where the graft matrix configures a scaffold on which cells in the recipient form new bone.

The word "graft" commonly refers to an autograft or an allograft. An autograft is a graft made of bone from a patient's own body, normally taken from the hip bones or ribs. A graft using bone from a cadaver which has been frozen and stored in a tissue bank is an allograft. Allografts are used if there is an inadequate amount of autograft material available, and the limited size and shape of a patient's bone. Allograft bone is used in reconstructive surgery of the hip, knee, and long bones, as well as in cases of bone loss due to trauma or tumors. Once the bone graft is accepted by the body, the transplanted bone slowly converts into new living bone or soft tissue.

Bone tissue is a matrix-like structure primarily composed of a protein called collagen. It is strengthened by hydroxyapatite, deposits of calcium and phosphate salts. Four types of bone cells are located within and around this matrix and together are responsible for building the bone matrix, maintaining it, and remodeling the bone as needed. They are:

- Osteoblasts, which produce the bone matrix.
- Osteocytes, mature osteoblasts that maintain the bone.
- Osteoclasts, which break down and remove bone tissue.
- Bone lining cells, which cover bone surfaces.

Solid stainless steel.
Convex head.

gS 59.7010 6 1/2"

Mini Mallet
weight: 4oz [113g]
head diameter: 20mm



Lead-filled head should
only be used to strike flat
surfaces.

Stainless steel handle.

gS 59.7014 6 1/2"

Mini Mallet
weight: 5oz [142g]
head diameter: 20mm



Solid stainless steel.

gS 59.7018 7"

Mini Mallet
weight: 4oz [113g]
head diameter: 20mm



Small round contact surface
useful in areas where
access is limited.

Stainless steel head with
phenolic handle.

gS 59.7120 8"

Narrow Tip Mallet
weight: 6oz [170g]
head diameter: 7mm



59/2 - mallets

Lead-filled head should only be used to strike flat surfaces.

Stainless steel handle.

gS 59.7560 7 3/4"

Mallet #49

weight: 7oz [198g]
head diameter: 22mm



Solid stainless steel.
Convex/convex head.

gS 59.7590 7 1/2"

Lucae Mallet

weight: 7oz [198g]
head diameter: 19mm



Solid stainless steel.
Convex/flat head.

gS 59.7600 8"

Lucae Mallet

weight: 8oz [227g]
head diameter: 25mm



Solid stainless steel.
Convex/convex head.

gS 59.7595 7 1/2"

Lucae Mallet

weight: 9oz [255g]
head diameter: 25mm



Solid stainless steel.

gS 59.7615 7"

Partsch Mallet
weight: 6oz [170g]
head diameter: 22mm



Solid stainless steel.

gS 59.7870 8"

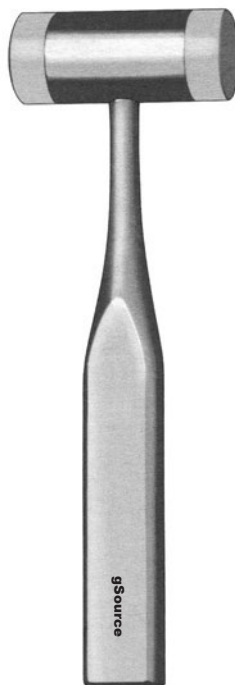
Hajek Mallet
weight: 7oz [198g]
head diameter: 27mm



Stainless steel head with replaceable nylon caps and aluminum handle.

gS 59.7620 7 1/2" mallet
gS 59.7621 nylon cap only

Nylon Mallet
weight: 7oz [198g]
head diameter: 25mm



Combination mallet with one replaceable nylon capped end and one stainless steel end. Aluminum handle.

gS 59.7860 7 1/2" mallet
gS 59.7621 nylon cap only

Combination Mallet
weight: 8oz [227g]
head diameter: 25mm



59/4 - mallets

59



Solid stainless steel.

gS 59.7818 7 1/2"

Cloward-style Mallet
weight: 8oz [227g]
head diameter: 20mm



Solid stainless steel.

gS 59.8600 8"

Collin Mallet
weight: 8oz [227g]
head diameter: 30mm



Phenolic head and handle.

gS 59.7876 10"

Phenolic Lightweight Mallet
weight: 9oz [255g]
head diameter: 43mm



Replaceable double nylon
caps with green silicone
handle.

gS 59.8800 8 1/2"
gS 59.7621 nylon cap only

gMallet
weight: 9oz [255g]
head diameter: 25mm



Lead-filled head should only be used to strike flat surfaces.

Stainless steel handle.

gS 59.7610 7 1/2"

Gerzog Mallet

weight: 10oz [284g]
head diameter: 25mm



Stainless steel head with replaceable nylon caps.

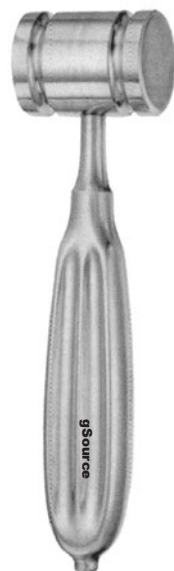
Stainless steel handle.

gS 59.7570 7 1/2" mallet

gS 59.7571 nylon cap only

Mead Mallet

weight: 11oz [311g]
head diameter: 20mm



Solid stainless steel.
Short handle.

gS 59.7840 6 1/2"

Crane Mallet

weight: 11oz [311g]
head diameter: 32mm



Stainless steel head with aluminum handle.

Convex/flat surfaces.

gS 59.7605 7 1/4"

Cottle Mallet

weight: 12oz [340g]
head diameter: 30mm

59/6 - mallets

Stainless steel head with smooth phenolic handle.

gS 59.7641 9"

Phenolic Handle Mallet
weight: 12oz [340g]
head diameter: 30mm



Phenolic head and handle.

gS 59.7873 9 1/2"

Phenolic Mallet
weight: 14oz [397g]
head diameter: 60mm



Solid stainless steel.

gS 59.7821 9"

Cloward-style Mallet
weight: 14oz [397g]
head diameter: 25mm



Stainless steel head with aluminum handle.

gS 59.8660 9 1/2"

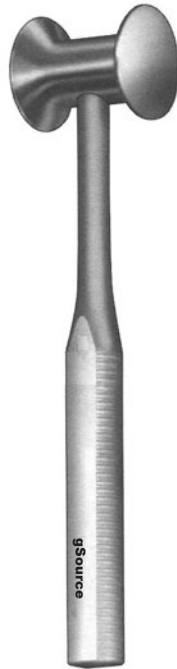
Bergman Mallet
weight: 15oz [425g]
head diameter: 30mm



Stainless steel head with
aluminum handle.

gS 59.8670 9 1/2"

Bergman Mallet
weight: 1lb 1oz [482g]
head diameter: 45mm



Replaceable double nylon
caps with aluminum handle.

Nylon cap diameter is 37mm.

gS 59.8710 9 1/2" mallet
gS 59.8711 replacement key
gS 59.8712 nylon cap only

Nylon Mallet
weight: 1lb 1oz [482g]
steel head diameter: 35mm



Solid stainless steel.

gS 59.7624 7"

Ortho Short Mallet
weight: 1lb 2oz [510g]
head diameter: 30mm



Stainless steel head
with aluminum handle.

gS 59.7710 9 1/2"

Ortho Mallet
weight: 1lb 2oz [510g]
head diameter: 30mm/40mm



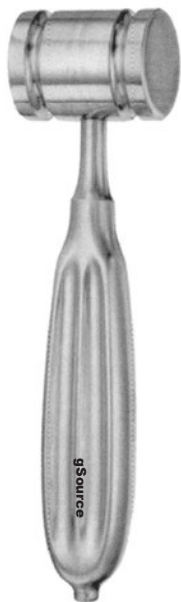
59/8 - mallets

Solid stainless steel.
Short handle.

gS 59.7845 7"

Crane Mallet

weight: 1lb 3oz [538g]
head diameter: 38mm



Stainless steel head with
one nylon cap/one solid
end and 13mm slot.
Green silicone handle.

gS 59.8810 8 1/2"

gMallet Slotted

weight: 1lb 5oz [595g]
head diameter: 35mm



Dead blow mallet with one
replaceable nylon cap/
one solid end. Black plastic
handle. Repercussion free.

gS 59.7878 10 1/2" mallet
gS 59.7879 nylon cap only

Repercussion Free Mallet

weight: 1lb 5oz [595g]
head diameter: 30mm



Stainless steel head with
smooth phenolic handle.

gS 59.7642 9"

Phenolic Handle Mallet

weight: 1lb 4oz [570g]
head diameter: 35mm





Solid stainless steel.

gS 59.7580 8"

Kirk Mallet

weight: 1lb 6oz [624g]
head diameter: 38mm



Stainless steel head with
grooved phenolic handle.

gS 59.7885 10 1/2"

Phenolic Handle Mallet

weight: 1lb 8oz [680g]
head diameter: 32mm



Stainless steel head with
aluminum handle.

gS 59.7650 9 1/2"

Ombredanne Mallet

weight: 1lb 9oz [708g]
head diameter: 40mm



Stainless steel head with
smooth phenolic handle.

gS 59.7644 9"

Phenolic Handle Mallet

weight: 1lb 11oz [770g]
head diameter: 40mm

59/10 - mallets

Stainless steel head with
black plastic handle.

gS 59.7880 10 1/2"

Plastic Handle Mallet
weight: 1lb 10oz [737g]
head diameter: 35mm



Aluminum head and handle.

gS 59.7910 9"

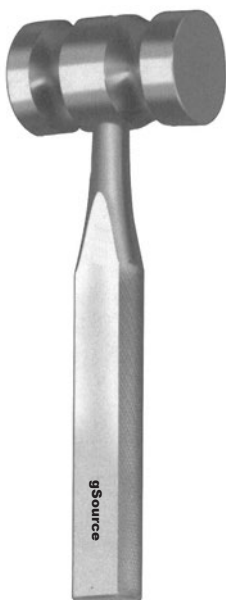
Meyerding Mallet
weight: 1lb 12 oz [792g]
head diameter: 51mm



Solid stainless steel.

gS 59.7626 7 1/2"

Ortho Heavy Short Mallet
weight: 1lb 14oz [850g]
head diameter: 38mm



Solid stainless steel.

gS 59.7628 7 1/4"

Heath Mallet
weight: 1lb 15oz [879g]
head diameter: 40mm





Stainless steel head
with aluminum handle.

gS 59.7629 7 1/4"

Heath Mallet

weight: 2lbs [906g]
head diameter: 45mm



Stainless steel head with
grooved phenolic handle.

gS 59.8900 11"

He-Man Mallet

weight: 2lbs [906g]
head diameter: 38/33/24mm



Solid stainless steel.

gS 59.7660 11"

Ortho Mallet

weight: 2lbs 2oz [964g]
head diameter: 35mm



Solid stainless steel.

gS 59.7627 10"

Ortho Mallet

weight: 2lbs 3oz [1000g]
head diameter: 38mm

59/12 - mallets

Stainless steel head with grooved phenolic handle.

gS 59.7890 10 1/2"

Phenolic Handle Heavy Mallet

weight: 2lbs 9oz [1162g]
head diameter: 45mm



Solid stainless steel.

gS 59.7670 10 1/2"

Ortho Heavy Mallet

weight: 3lbs 3oz [1446g]
head diameter: 50mm

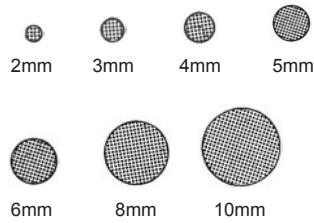


did you know... ?

A mallet is a kind of hammer with a relatively large head. The term is descriptive of the overall size and proportions of the tool, but not the materials it may be made of. The main function is to drive instruments and exert force on osteotomes, chisels, gouges, etc. It is mostly used in orthopedic surgery, particularly bone grafting.

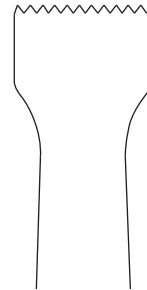
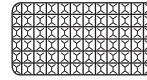
Repercussion can be a problem, especially when using a heavy mallet to strike metal objects. The Repercussion Free Mallet, gS 59.7878 on page 59/8, is a specialized mallet helpful in minimizing damage to the struck surface and in controlling striking force with minimal rebound from the struck surface. The minimal rebound is helpful in avoiding accidental damage to precision work, especially in tight locations.

Dead blow mallets typically have an internal cavity partially filled with steel shot. This modification evens out the time-impulse curve of the impact, enabling a more powerful blow to be delivered without risk of marring the target. Compared to a conventional mallet, the dead blow mallet conveys less peak force spread over a longer time interval. Be sure to select the proper mallet size as failure to do so may cause separation of handle and head or breakage of head.



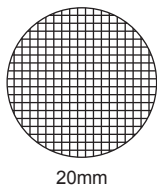
gS 60.9930 2mm
gS 60.9940 3mm
gS 60.9950 4mm
gS 60.9960 5mm
gS 60.9970 6mm
gS 60.9980 8mm
gS 60.9990 10mm

Bone Tamp
6 1/2"
cross serrated end



gS 60.0600 6 1/4"

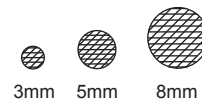
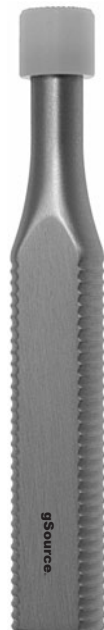
gImpactor, Hibbs Bone
3/8" x 3/4"
cross serrated end



Tap grafts into place with minimal bone trauma. Grid pattern on nylon cap helps prevent slippage.

gS 60.0800 impactor
gS 60.0801 nylon cap only

Bone Impactor
6 1/2" with nylon cap
aluminum handle

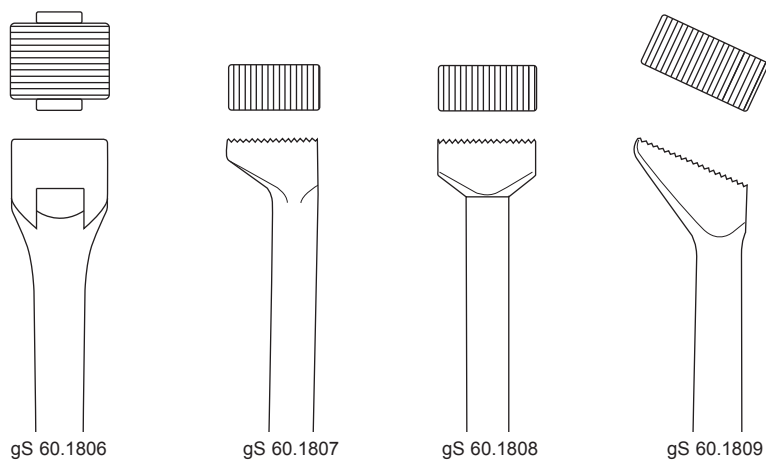
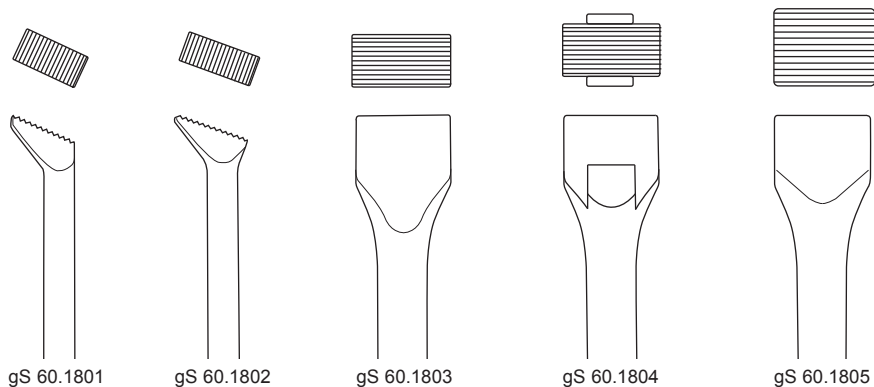


gS 60.7503 3mm
gS 60.7505 5mm
gS 60.7508 8mm

Caspar Bone Tamp
8" cross serrated end
plastic handle, black



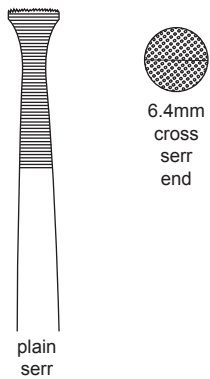
60/2 - tamps



gS 60.1801	7"	10mm x 4.3mm micro offset
gS 60.1802	7"	10mm x 4.3mm micro lateral
gS 60.1803	8 1/2"	7mm x 12.5mm standard
gS 60.1804	8 1/2"	7mm x 12.5mm standard guarded
gS 60.1805	8 1/2"	10mm x 13mm wide
gS 60.1806	8 1/2"	10mm x 13mm wide guarded
gS 60.1807	8 1/2"	11.5mm x 6.5mm offset
gS 60.1808	8 1/2"	12.5mm x 6mm narrow
gS 60.1809	8 1/2"	16mm x 6.5mm angled

Lumbar and Cervical Impactor
serrated end

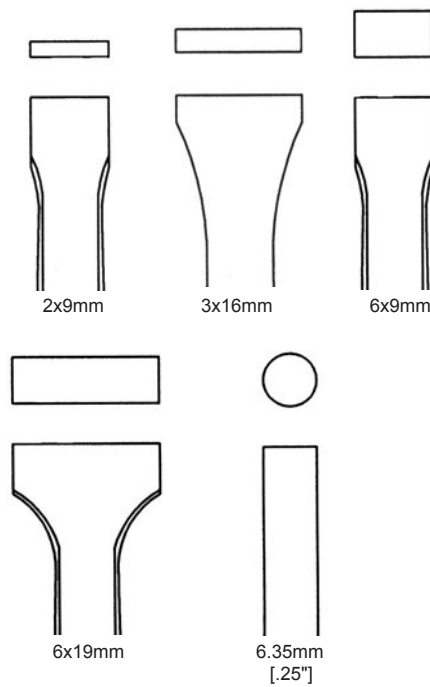




gS 60.2764 10"

gGraft Holder/Impactor Forceps, Bone

6.4mm
cross serrated end



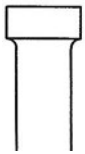
gS 60.8510 2mm x 9mm
gS 60.8500 3mm x 16mm
gS 60.8520 6mm x 9mm
gS 60.8530 6mm x 19mm
gS 60.8540 6.35mm [.25"] diameter

Bone Chip Packer

10"



60/4 - tamps



60

gS 60.8743 17"

Bone Tamp

9.5mm [.375"] cross tapered end



bone files and rasps - 61-62/1



gS 61.6338 6"

Bone File #92A

2mm plain serrated delicate
angled down



gS 61.6340 6"

Bone File #92B

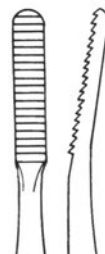
2mm plain serrated delicate
angled up



gS 61.6380 6 3/4"

Nail Rasp #93

2mm plain serrated delicate
angled up and down



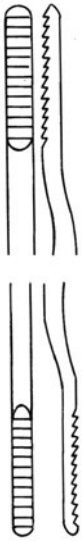
gS 61.1700 7"

Bone Rasp #64

3mm and 4mm plain serrated
slight angle and straight



61-62/2 - bone files and rasps



gS 62.6398 7"

Polokoff Rasp

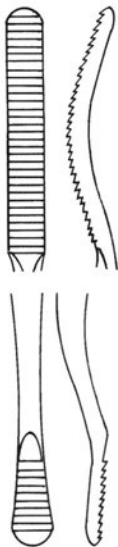
3mm and 4mm plain serrated straight



gS 62.6400 8 1/2"

Polokoff Rasp

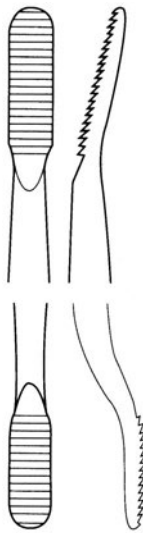
6mm plain serrated straight



gS 61.6420 7"

Bone File #10

5mm plain serrated curved up and straight



gS 61.6455 7"

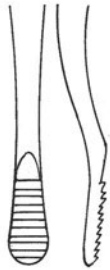
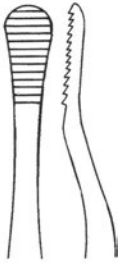
Bone File #33

6mm and 5mm plain serrated angled up and straight



61-62

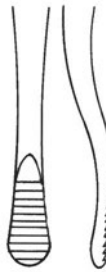
bone files and rasps - 61-62/3



gS 61.6430 7"

Bone File #12 (Miller)

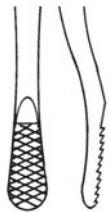
5mm and 7mm plain serrated
straight



gS 61.6440 7"

Bone File #12A

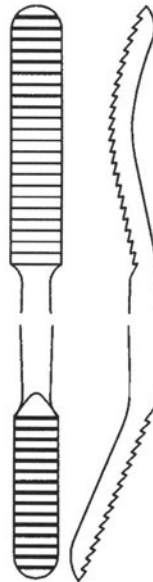
5mm plain and cross serrated
straight



gS 61.6450 7"

Bone File #12CA

5mm and 7mm cross serrated
straight



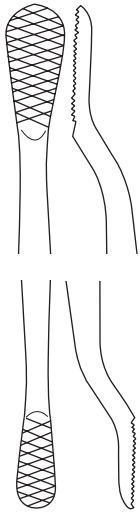
gS 61.6475 7 1/4"

Bone File #45

5mm and 6mm plain serrated
curved up and angled up

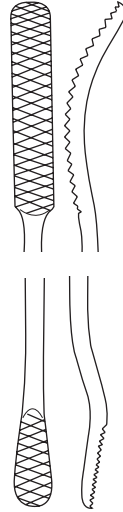


61-62/4 - bone files and rasps



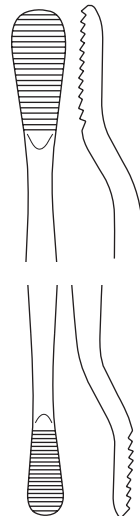
gS 61.6511 7"

Miller Colburn Bone File #1
5mm and 7mm cross serrated
straight



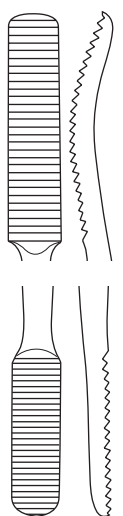
gS 61.6512 7 1/2"

Miller Colburn Bone File #2
5mm and 4.5mm cross serrated
curved up and straight



gS 61.6501 7"

Miller Colburn Bone File #1
5mm and 7mm plain serrated
straight, downward cutting



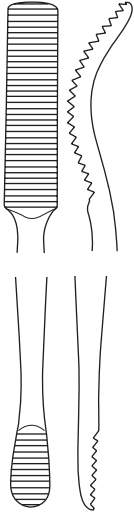
gS 61.6502 7"

Miller Colburn Bone File #2
7mm and 6mm plain serrated
curved up and straight, downward cutting



61-62

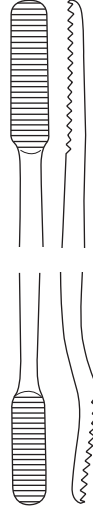
bone files and rasps - 61-62/5



gS 61.6503 7"

Miller Colburn Bone File #3

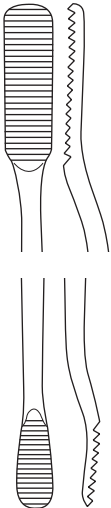
7mm and 5mm plain serrated
curved up and straight, downward cutting



gS 61.6504 7 1/2"

Miller Colburn Bone File #4

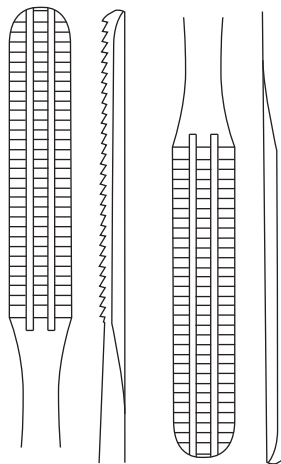
5mm and 4mm plain serrated
straight, downward cutting



gS 61.6505 7 1/2"

Miller Colburn Bone File #5

6mm and 5.5mm plain serrated
straight, downward cutting



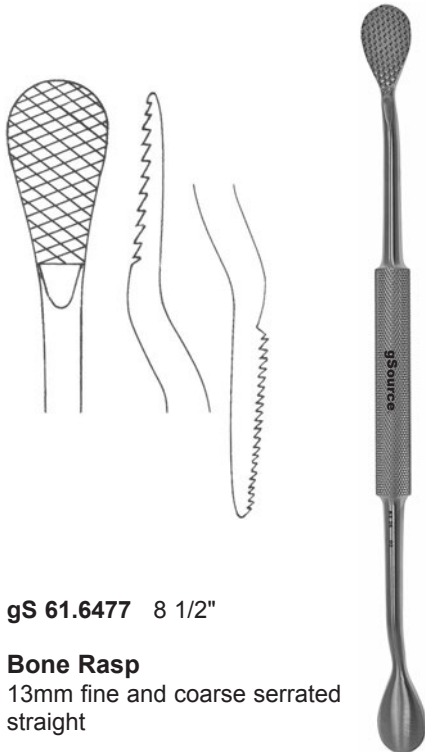
gS 62.1670 8 1/2"

Maltz Rasp

8mm coarse plain serrated
straight up and downward cutting



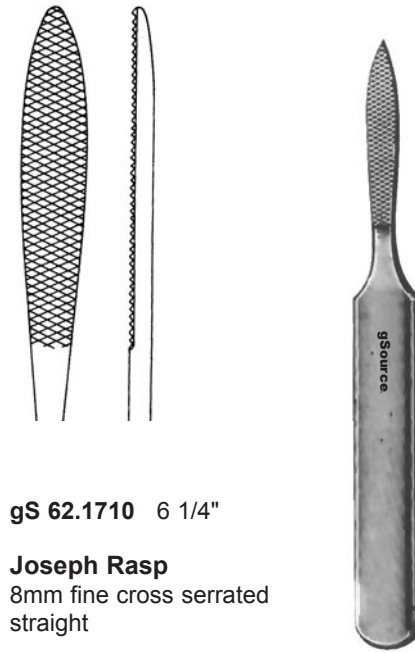
61-62/6 - bone files and rasps



gS 61.6477 8 1/2"

Bone Rasp

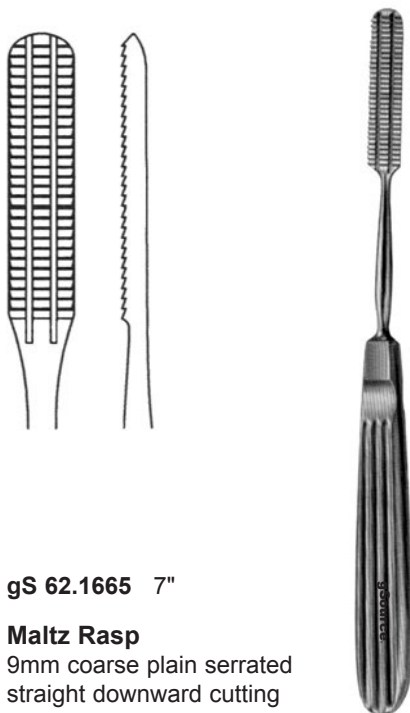
13mm fine and coarse serrated
straight



gS 62.1710 6 1/4"

Joseph Rasp

8mm fine cross serrated
straight



gS 62.1665 7"

Maltz Rasp

9mm coarse plain serrated
straight downward cutting

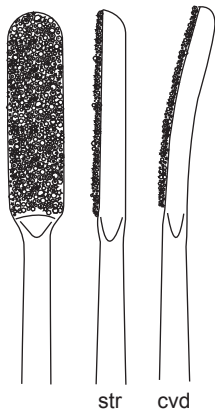


gS 62.1720 fine serrated
gS 62.1730 coarse serrated

Lewis Rasp

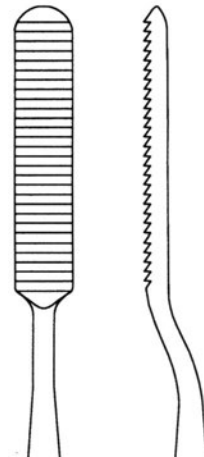
7 1/2", 8mm
straight

61-62



gS 61.6725 str
gS 61.6726 cvd

Diamond Nose Rasp
7 1/2"
7mm



gS 62.1660 8"

Cottle Rasp
7mm plain serrated
straight downward cutting



gS 62.1500 8"

Aufricht Rasp
9mm coarse serrated
curved up forward cutting



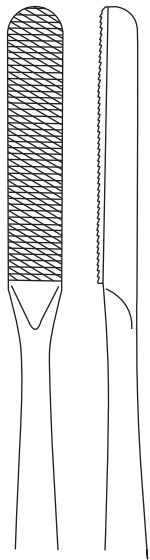
gS 62.1520 8"

Aufricht Rasp
9mm coarse serrated
curved up downward cutting

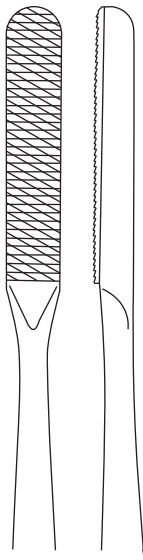


61-62/8 - bone files and rasps

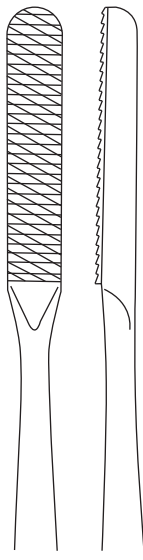
TC = Tungsten Carbide



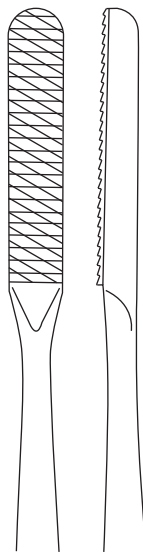
gS 61.6841



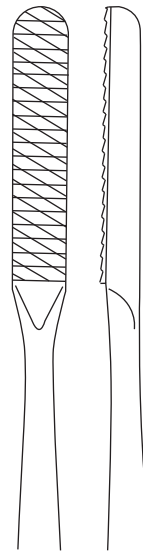
gS 61.6842



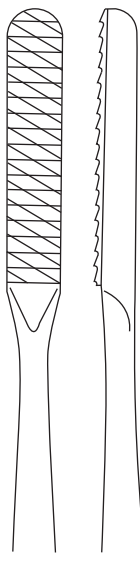
gS 61.6843



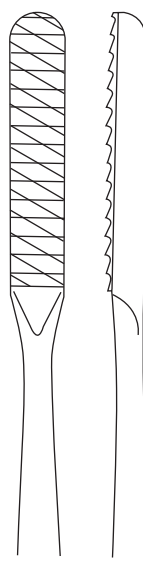
gS 61.6844



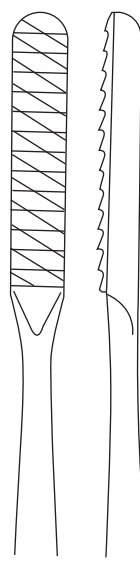
gS 61.6845



gS 61.6846



gS 61.6847



gS 61.6848



61-62

	#
gS 61.6841	1 very fine
gS 61.6842	2 fine
gS 61.6843	3 fine
gS 61.6844	4 coarse
gS 61.6845	5 coarse
gS 61.6846	6 coarse
gS 61.6847	7 coarse
gS 61.6848	8 very coarse

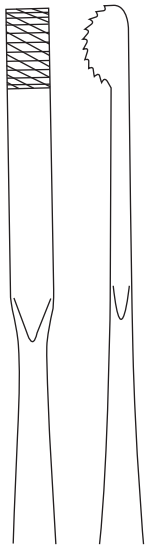
Rasp

8 1/2" TC

7mm downward cutting serrated

bone files and rasps - 61-62/9

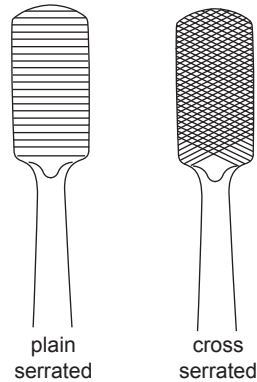
TC = Tungsten Carbide



Useful for bone contouring in nasal reconstructive procedures.

gS 61.6855 8 1/2" TC

Glabella Rasp
5.5mm straight
downward cutting, serrated



Useful in facilitating a discectomy in anterior lumbar fusion and non-fusion procedures. Double handed grip provides maximum control.

One side of rasp is plain serrated and other side is cross serrated.

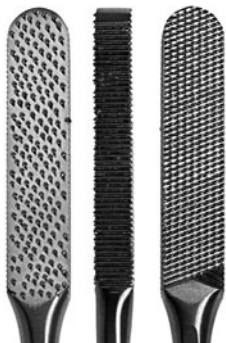
gS 62.9910 17"

gRasp, Double Handed
10mm plain and cross serrated
straight, 9" plastic handle, black



61-62

61-62/10 - bone files and rasps



Four sided rasp with convex and flat blades.

gS 62.7548 8 1/2"

Fomon Rasp

8mm fine serrated straight

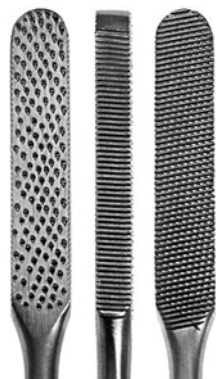


Four sided rasp with convex and flat blades.

gS 62.7550 8 1/2"

Fomon Rasp

8mm coarse serrated straight

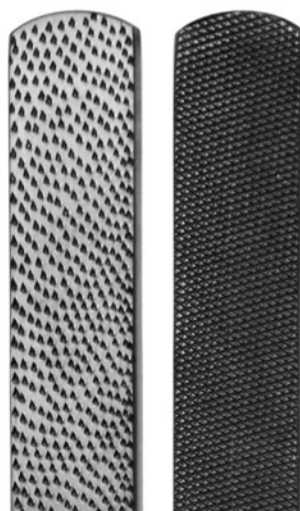


Four sided rasp with convex and flat blades.

gS 62.7680 8 1/2"

Kleinert Kutz Rasp

8mm fine and coarse serrated straight, serrated handle



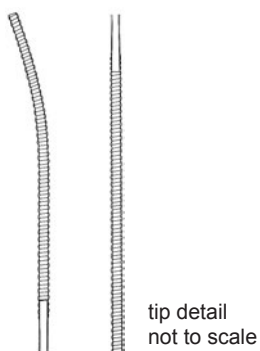
gS 62.7720 8 1/2"

Bone File Rasp

18mm fine and coarse serrated straight



bone files and rasps - 61-62/11

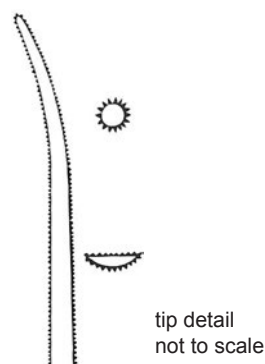


One end curves up, one end curves sideways.

gS 62.7540 10 1/2"

Putti Bone Rasp

18mm flat blades tapers to 4mm

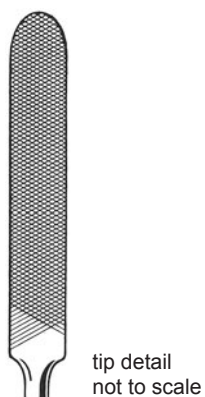


One round 10mm blade tapers to 4mm. One half round 15mm blade tapers to 5mm.

gS 62.7520 12"

Putti Bone Rasp

one round, one half-round blade



Half round blade with fine serrations.

gS 62.7500 9 1/2"

Bone File

15mm fine serrated bayonet handle



Convex and flat blade.

gS 62.8050 11"

Bone File

23mm blade tapers to 6mm



did you know... ?

Rhinoplasty describes an array of operative techniques that can be used to alter the aesthetic and functional properties of the nose. Surgical access to the nose can be gained via incisions placed inside the nose (endonasal approaches) or via incisions placed inside the nose combined with incisions placed outside the nostrils (external approach), usually on the columella, the strip of skin running from the tip of the nose to the upper lip which separates the nostrils.

War related injuries were a driving force behind most plastic surgery developments during the late 1800's and early 1900's. World War I catapulted plastic surgery into a new and higher realm. Previously physicians did not treat so many and such extensive facial and head injuries. Shattered jaws, blown-off noses and lips, and gaping skull wounds caused by modern weapons required innovative restorative procedures. Some of the best medical talent in Britain, France, Germany, Russia, Austria, and Hungary devoted themselves to restoring the faces of those injured during and after World War I. In the United States, plastic surgeons like Varaztad Kazanjian of Boston, and Vilray Blair of St. Louis served many in need during those years.

The first published account of a modern endonasal rhinoplasty can be traced to an American otolaryngologist, John Orlando Roe. His original article published in 1887 was titled "The deformity termed 'pug-nose' and its correction, by a simple operation" and described the treatment of saddle nose deformities. In 1892, Robert F. Weir, another American surgeon, also published his techniques for correcting the saddled nose.

In 1898, Jacques Joseph, an orthopedic surgeon by training, presented his concepts of nasal surgery to the Medical Society of Berlin. Many aspiring rhinoplasty surgeons traveled to Germany to watch Dr. Joseph perform his rhinoplasties. His general reputation as the father of modern rhinoplasty is

supported by his influence in shaping many rhinoplasty concepts and techniques. Dr. Joseph was well-known for developing and teaching the endonasal rhinoplasty procedure. His rhinoplasties were so popular, among Berliners he was known as "Nasen-Joseph" (Nose-Joseph) or "Noseph". Many of the basic rhinoplasty maneuvers remain essentially the same today as when Dr. Joseph first described them. Dr. Joseph's concepts and techniques were further disseminated, especially in the United States, by surgeons such as Gustav Aufricht, Joseph Safian, and Samuel Fomon. Samuel Fomon disseminated Dr. Joseph's techniques in the United States in the 1950's and helped educate many early modern rhinoplasty surgeons, such as Maurice Cottle of Chicago and Irving Goldman of New York.

Born in Königsberg, Prussia in 1865, Dr. Joseph was a student of medicine at the Friedrich Wilhelm University in Berlin from 1885 to 1889. In 1892 he joined the staff of the Berlin University Clinic for Orthopaedic Surgery. In 1904, he published his first report on the simultaneous, intranasal correction of a hump nose with the correction of the front nasal septum. In 1916, he was appointed head of the newly founded Department of Facial Plastic Surgery at the Ear, Nose and Throat Clinic at the Charité by the Prussian Ministry of Education and Cultural Affairs. In 1928 and 1929 the first two sections of his book on 'Nasal plastic surgery' were published and in 1931 he published his most notable work 'Nasenplastik und Sonstige Gesichtsplastik Nebst Mammoplastik' which revolutionized the surgical approach to aesthetic deformities of the nose. This book is considered a milestone in plastic surgery. He passed away in 1934.

The Joseph Rasp, gS 62.1710, is shown on page 6 in this section. The Aufricht Rasps, gS 62.1500 and gS 62.1520 are shown on page 7, along with the Cottle Rasp, gS 62.1660. The Fomon Rasps are shown on page 10, gS 62.7550 and 62.7548.



gS 63.4811 6"
gS 63.4812 6 3/4"

Cleveland Bone Cutting Forceps
 angled
 delicate

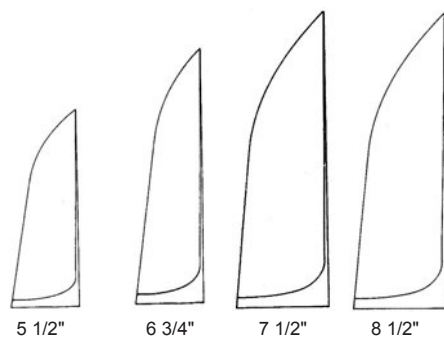


gS 63.4801 6"

Littauer Bone Cutting Forceps
 straight

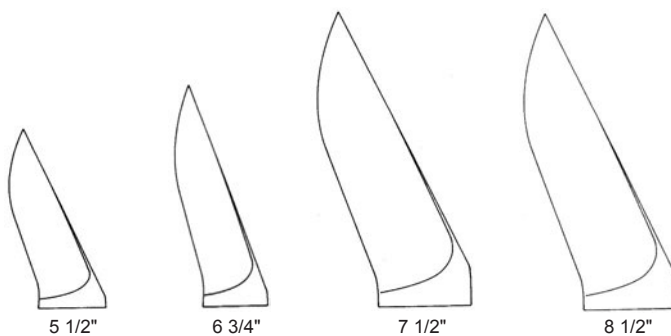


63/2 - bone cutters



- gS 63.4980** 5 1/2"
- gS 63.4981** 6 3/4"
- gS 63.4982** 7 1/2"
- gS 63.4983** 8 1/2"

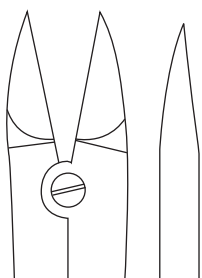
Liston Bone Cutting Forceps
straight



- gS 63.5100** 5 1/2"
- gS 63.5101** 6 3/4"
- gS 63.5102** 7 1/2"
- gS 63.5103** 8 1/2"

Liston Bone Cutting Forceps
angled

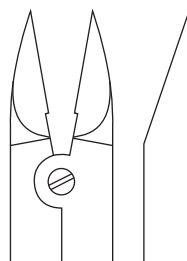




gS 63.4821 5 3/4"

Boehler Bone Cutting Forceps

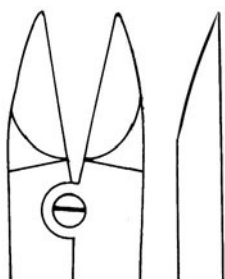
curved, delicate jaw



gS 63.6560 5 3/4"

Ruskin Liston Bone Cutting Forceps

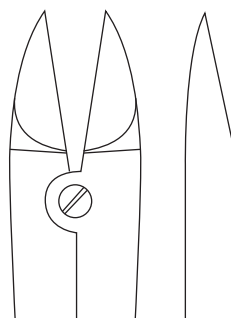
straight, delicate jaw



gS 63.6570 6"

Ruskin Liston Bone Cutting Forceps

(Kleinert-Kutz) straight



gS 63.6580 6"

Ruskin Liston Bone Cutting Forceps

angled

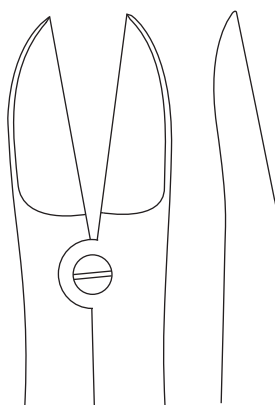


63/4 - bone cutters



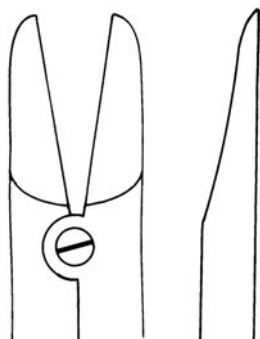
gS 63.6380 7 1/2"

**Ruskin Liston Bone
Cutting Forceps**
straight



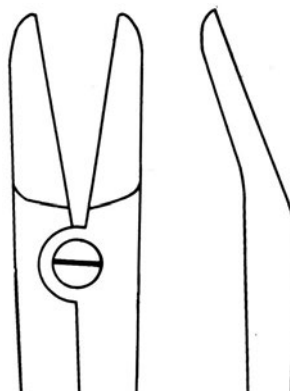
gS 63.6420 7 1/4"

**Ruskin Liston Bone
Cutting Forceps**
angled on flat



gS 63.4831 6 3/4"

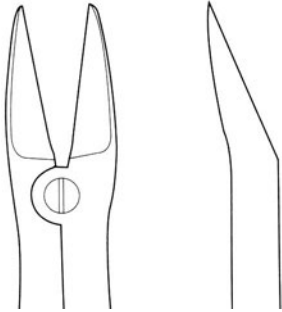
**Ruskin-Rowland Bone
Cutting Forceps**
straight, delicate jaw



gS 63.4832 7 1/4"

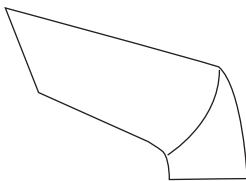
**Ruskin-Rowland Bone
Cutting Forceps**
angled, delicate jaw





gS 63.6460 7"

McIndoe Bone Cutting Forceps
angled, very delicate jaw



gS 63.4740 10"

Stille-Horsley Bone Cutting Forceps
angled



63/6 - bone cutters



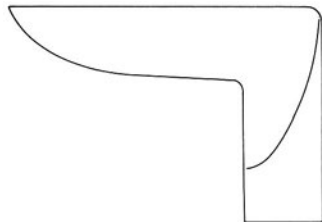
gS 63.4660 11"

**Stille-Liston Bone
Cutting Forceps**
straight



gS 63.4700 11"

**Stille-Liston Bone
Cutting Forceps**
angled on flat



gS 63.4661 10 1/2"

Stille-Liston Bone Cutting Forceps
90° angled jaw





gS 64.4890 13"

Roos First Rib Shears
right angled jaw
with hook



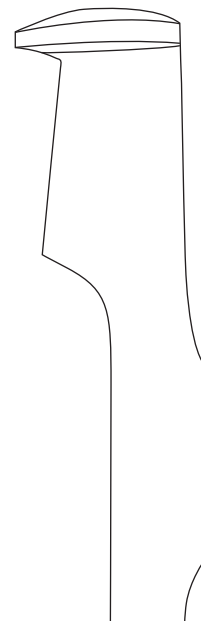
gS 64.5000 13 1/2"

Bethune Rib Shears
S-shaped handles



gS 64.5100 9 1/2"

Giertz-Stille Rib Shears



gS 64.8024 9 1/2"

Lebsche Sternum Chisel
T-handle



did you know... ?

The Bethune Rib Shears, as shown on page 1 in this section, were designed by Dr. Norman Bethune, a Canadian thoracic surgeon. He provided medical services to the poor in Canada, to the Republicans in the Spanish Civil War, and to the Chinese during their invasion by Japan.

Dr. Bethune was born in Gravenhurst, Ontario in 1890. He left medical school at the University of Toronto in 1914 to enlist in the Canadian Army. Wounded in action in France in 1915, he went back to the university to complete his medical studies. After graduation he joined the Royal Navy and then the Canadian Air Force. During the early 1920's, he pursued postgraduate studies in medicine in London and Edinburgh, where he was elected a Fellow of the Royal College of Surgeons in 1922. In 1924 he opened a private medical practice in Detroit, Michigan. Two years later he contracted tuberculosis (TB) in both lungs, and sought treatment at the Trudeau Sanatorium in Saranac Lake, New York. In the 1920's the established treatment for TB was total bed rest in a sanatorium. There he learned of a radical new treatment for TB called pneumothorax, which involved artificially collapsing the tubercular (diseased) lung, thus allowing it to rest and heal itself. The physicians at Trudeau thought this procedure was too new and risky, but Dr. Bethune insisted and eventually persuaded his reluctant doctors to perform the potentially fatal operation. Its success and his rapid recovery inspired him to give up private practice and join the medical search for a cure of the disease.

In 1928 he became the first assistant of Dr. Edward Archibald, the Canadian pioneer in thoracic surgery at McGill University in Montreal, Quebec. Over the next eight years, Dr. Bethune's invention of numerous operating instruments, his writings in medical journals, and his daring surgical techniques raised him to prominence in the international medical community. In the early 1930's, as the Depression deepened in Montreal, Dr. Bethune became more conscious of the relationship between social and economic conditions and the incidence of tuberculosis. Through his concern for the welfare of those who were unable to afford medical treatment, he opened a free clinic. In 1935 he attended the International Physiological Congress in Moscow. His purpose was to examine the system of socialized medicine in operation in the U.S.S.R. Upon returning to Canada, he organized a campaign to promote the introduction of a state medical care system. His open and persistent advocacy of his views alienated him from many of his professional colleagues and in 1936 he joined the Communist Party. Shortly after the outbreak of the Spanish Civil War in 1936, he resigned his hospital position and offered his services to the Spanish Republican government. Dr. Bethune accepted an

invitation from the Committee to Aid Spanish Democracy to head the Canadian Medical Unit in Madrid. He joined the Mackenzie-Papineau Battalion which was composed of Canadian communists and other leftists. Following a tour, he found a frequent cause of death on the battlefield was from medical shock brought on by loss of blood. Dr. Bethune conceived the idea of administering blood transfusions on the spot and developed the world's first mobile medical unit. The unit contained dressings for 500 wounds, and enough supplies and medicine for 100 operations. He organized a service to collect blood from donors and deliver the bottled blood in refrigerated trucks to the wounded at the front which saved many lives.

Dr. Bethune returned to Canada in 1937 after feeling that he could no longer function within the bureaucracy organized by the military medical forces in Republican Spain. He then set off on a North American tour to raise money for the blood transfusion service. During the tour, Japanese forces escalated an earlier invasion of China. This prompted Dr. Bethune to travel to Yan'an in the Shanbei region of Shaanxi province in China where he joined the Chinese Communists led by Mao Zedong in their struggle against the Japanese invaders. In the mountainous area west of Beijing he put together a medical field service and constructed makeshift hospitals throughout the region, wrote textbooks on elementary medicine and surgery, and began training young Chinese in medical techniques. He led his mobile medical unit through the Wu Tai mountains of Shaanxi province and across the Hebei plains to inspect personnel, revamp hospitals, and treat the wounded. During much of the time Dr. Bethune's unit was behind Japanese lines. They were frequently called to battles and sometimes needed to set up their operating theater within three miles of where the firing was taking place. During an operation in the field, he nicked his finger. Because there were no surgical gloves, the wound became infected, quickly leading to blood poisoning and his death in 1939.

During the time of the Cultural Revolution (1966-1976) the Chinese Communist leadership used Dr. Bethune as a symbol of selflessness, dedication, and responsibility -- characteristics that they wanted the Chinese people to adopt. They published hundreds of millions of copies of an essay written by Mao Zedong called "In Memory of Norman Bethune". Everyone was expected to read it, and many committed it to memory. Since the 1960's through books, movies, and study in the schools, Dr. Bethune became a national hero in China. In 1972 in Canada, the federal government declared him "a Canadian of national historical significance". A portion of the home in which he was born was converted into a museum and opened in 1976 as the Bethune Memorial Home.

ID = Inside Diameter
OD = Outside Diameter

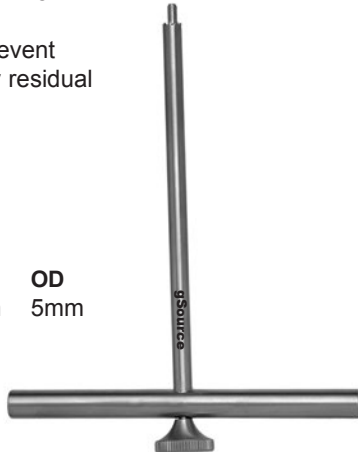


Cutter removes a tiny cylinder of bone around tip of wire.

Obturator helps to prevent potential blockage by residual tissue.

gS 65.3380 ID 3mm OD 5mm

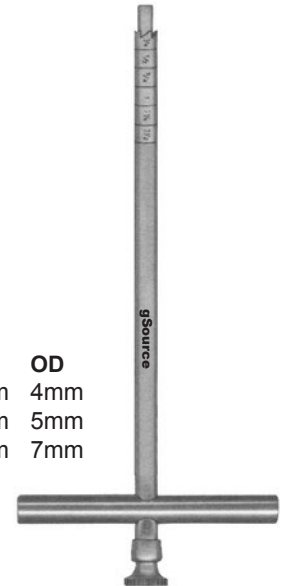
Bone Plug Cutter
4 1/2"



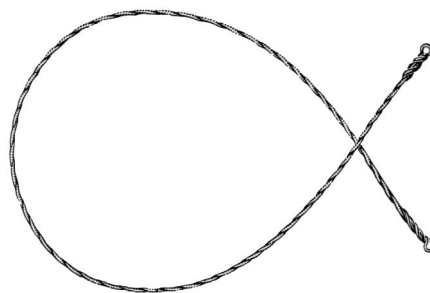
Designed for bone biopsy. Can also be used to help remove broken bone screws and buried K-wire.

		ID	OD
gS 65.3390	small	3mm	4mm
gS 65.3392	medium	4mm	5mm
gS 65.3394	large	6mm	7mm

Michele Trephine
7"



Gigli chain saws are intended for single use only due to flesh and bone which can become embedded in the chain saw.



gS 65.7120



gS 65.7175

gS 65.7120 chain saw 9" [23cm]
gS 65.7130 chain saw 12" [30cm]
gS 65.7135 chain saw 16" [40cm]
gS 65.7140 chain saw 20" [50cm]
gS 65.7150 chain saw 28" [70cm]

gS 65.7170 T-handle 2 1/2"
gS 65.7175 loop style handle 3 1/2"

Gigli Saw Blades and Handles



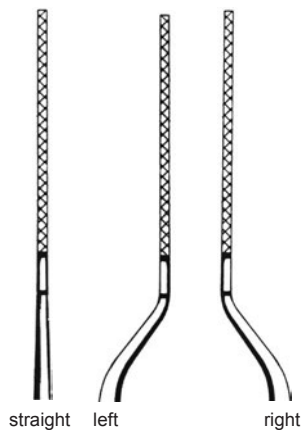
gS 65.7170

65/2 - trephines - bone saws

65

gS 65.7213 13"

Poppen Gigli Saw Guide



gS 65.3610 straight
gS 65.3620 bayonet left
gS 65.3630 bayonet right

Joseph Bone Saw
7"



gS 65.7010 9"

Langenbeck Metacarpal Saw



gS 65.8120 6 3/4" blade
gS 65.8125 8" blade

Liston Amputation Knife



gS 65.7440 11 1/2"

Charriere Amputation Saw
chrome ring handle
8" stainless steel blade



gS 65.7431 13"

Satterlee Amputation Saw
chrome ring handle
10" stainless steel blade



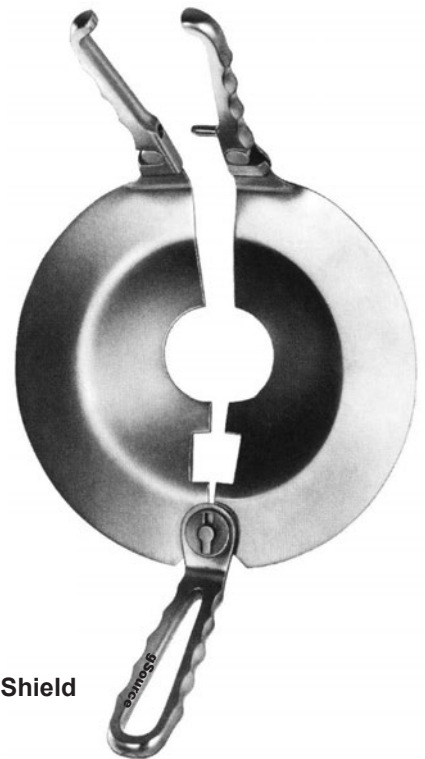
gS 65.7450 14" handle & 2 blades
gS 65.7452 10mm blade only
gS 65.7454 14mm blade only

Charriere Amputation Saw
chrome ring handle
stainless steel blades



gS 65.8100 12"

Percy Amputation Shield



did you know... ?

The Liston Amputation Knife, as shown on page 65/2, is a type of knife used in surgical amputation, the intentional removal of a limb or body part. It is performed to remove diseased tissue, malignant tumors, or as a result of severe trauma to a body part, such as an arm, leg, hand, foot, finger or toe.

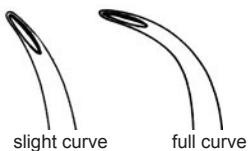
The knife was named after Robert Liston, a Scottish surgeon noted for his skill and speed. In an era prior to anesthetics, having these skills made a difference in terms of a patient's pain and survival. He is said to have been able to perform removal of a limb in an amputation in 28 seconds.

Born in 1794 in Scotland, he attended medical school at Edinburgh University. He became a surgeon at the Royal Infirmary and a lecturer at the University in 1818. He earned a reputation not only in Scotland, but in Europe and America as a daring and successful surgeon. It is said that "the gleam of his knife was followed so instantaneously by the sounds of sawing as to make the two actions appear almost simultaneous". In 1835, he became professor of clinical surgery at University College, London. In 1846 he used an anesthetic in a public operation in London in 1846, the first time this had been done. He passed away in 1847.

The Gigli Saw, as shown on page 65/1, is named for Leonardo Gigli, a nineteenth-century Italian physician who used it while performing surgery. It is a flexible wire saw used by surgeons for bone cutting, mainly during amputations where bones have to be cut smoothly at the level of amputation. It consists of long thin tempered steel blades arranged in an oval shape, with finger rings at either end. Gigli saws were also known to be kept hidden in the clothing of British secret agents during World War II who used them as an escape device when needed.

Born in Florence in 1863, Dr. Gigli also received his degree in medicine and surgery in Florence in 1889. He worked in Florence as an assistant to the professor of clinical pediatric surgery, and then as an assistant in obstetrics and gynecology under Professor Domenico Chiara. After Professor Chiara's death in 1891, Dr. Gigli left Italy and went to Paris to work under Étienne Stéphane Tarnier, an obstetrician. He then went to London and Wrocław, Poland, where he worked under Professor Henry Fritsch from 1892 to 1893. While in Wrocław he was able to attend surgery with Jan Mikulicz-Radecki. During this successful and rewarding period, Dr. Gigli proposed the lateralized pubiotomy (Gigli's operation) for safe delivery of a fetus in cases of maternal pelvic deformities. Inspired by the sight of a jagged knife, he conceived his wire saw to simplify the procedure. In 1894 he successfully tested a modified saw type with a whalebone guide for the preparation of osteoplastic cranial flaps.

He returned to Florence in 1894 to work at the Hospital of Santa Maria Nuova, and continued as a proponent of the lateral pubiotomy using the wire saw, although he did not receive the support of his colleagues in Italy. He described the use of his saw for cutting other bones, except the skull, in 1897. Professor Alfred Obalinski of Kraków also described its use for craniotomy during the same year. In 1899 Dr. Gigli became director of the Santa Maria Nuovo Hospital. He resigned in 1901 and worked in private practice until he passed away in 1908.



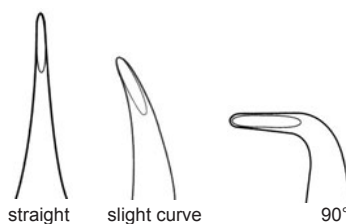
gS 66.3520 slight curve
gS 66.3530 full curve

Stellbrink Rongeur
 6 3/4" delicate jaws
 2mm bite



gS 66.3528 6 3/4"

Stellbrink Rongeur
 delicate jaws
 full curve 2mm bite



Delicate jaws for soft tissue
 and cancellous bone only.

gS 66.3602 straight
gS 66.3604 slight curve
gS 66.3606 90°

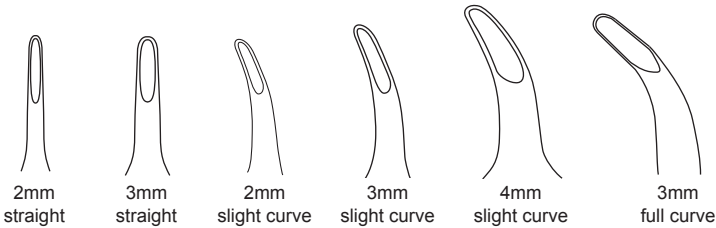
Friedman Rongeur Micro
 5 1/2"
 1.7mm bite



66/2 - single action bone rongeurs



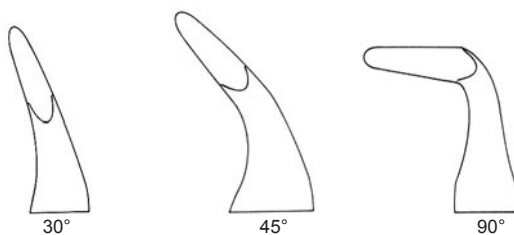
gS 66.3610 4 3/4"
Friedman Rongeur
curved
3mm bite



		bite
gS 66.3630	straight	2mm
gS 66.3619	straight	3mm
gS 66.3616	slight curve	2mm
gS 66.3617	slight curve	3mm
gS 66.3620	slight curve	4mm
gS 66.3621	full curve	3mm

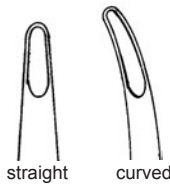
Friedman Rongeur
5 1/2"





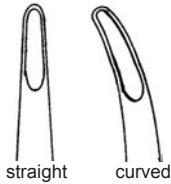
gS 66.3660 30°
gS 66.3670 45°
gS 66.3680 90°

Blumenthal Rongeur
6"
3mm bite



gS 66.3580 straight
gS 66.3600 curved

Lempert Rongeur
6"
3mm bite



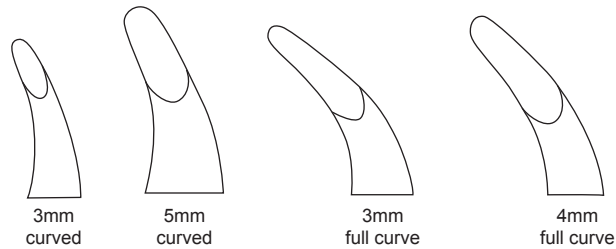
gS 66.3540 straight
gS 66.3560 curved

Lempert Rongeur
7 1/2"
3mm bite



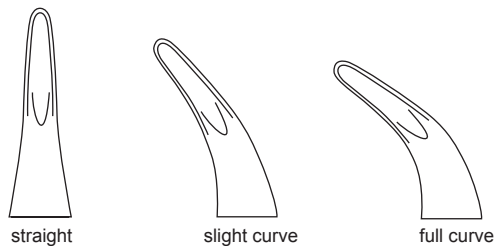
66/4 - single action bone rongeurs

66



		bite
gS 66.3771	curved	3mm
gS 66.3765	curved	5mm
gS 66.3772	full curve	3 mm
gS 66.3773	full curve	4mm

Luer Rongeur
6"



gS 66.3691	straight
gS 66.3692	slight curve
gS 66.3693	full curve

Luer Rongeur
6 1/2"
3mm bite





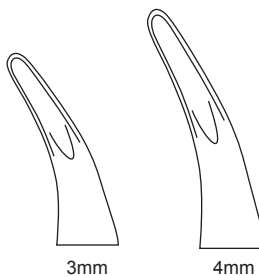
gS 66.3404 5 1/2"
Cleveland Rongeur
curved
3mm bite



gS 66.3760 6 1/4"
Mead Rongeur
curved
4mm bite



gS 66.3414 6 3/4"
Cleveland Rongeur
curved
4mm bite

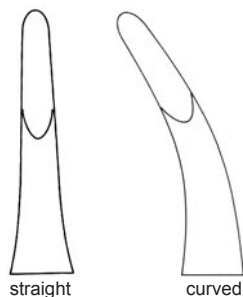


bite
gS 66.3703 3mm
gS 66.3704 4mm
Reiner Rongeur
7"
curved



66/6 - single action bone rongeurs

66



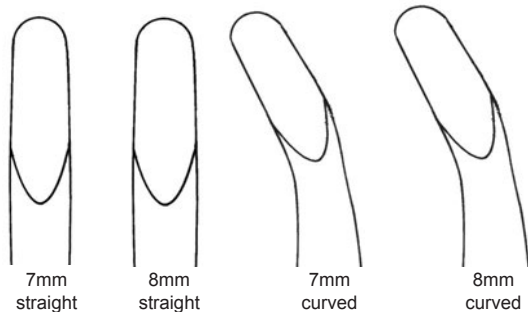
gS 66.3531 straight
gS 66.3532 curved

Jansen Rongeur
7"
4mm bite



gS 66.3850 7 1/4"

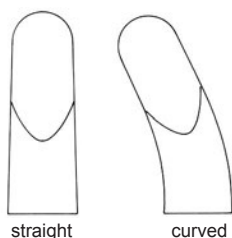
Hartmann Rongeur
curved
5mm bite



gS 66.4020	straight	bite
gS 66.4028	straight	7mm
gS 66.4060	curved	8mm
gS 66.4068	curved	7mm
		8mm

Adson Rongeur
8"





gS 66.3780 straight
gS 66.3840 curved

Luer Rongeur
6 3/4"
8mm bite



gS 66.4040 8"
Rat Tooth Rongeur
straight
8mm bite with teeth



gS 66.3880 7 1/4"
Luer Rongeur
straight
11mm bite



did you know... ?

Rongeurs are also called bone biters or bone nibblers, as their main function is to cut or remove small pieces of tissue or bone. Their hollowed, cup like, sharp working ends are similar to a curette. They are available in varying sizes and styles, in straight or curved patterns, with a single-action or double-action joint. Selection of size and style is related to the size and type of bone, as certain rongeurs are designed for use on soft tissue and cancellous bone only.

Popular types include Beyer (page 8), Ruskin (pages 9-11), and Leksell (pages 11-12). Double-action models, such as the Ruskin and Leksell, provide the surgeon with much more power, causing less hand fatigue.

Because bone is living tissue, it is important that these instruments be properly maintained, as jagged cutting surfaces could damage the bone and delay proper healing.

66/8 - double action bone rongeurs

66



gS 66.6600 6"

Kleinert-Kutz Rongeur
slightly curved
2mm bite



gS 66.6580 6"

Kleinert-Kutz Rongeur
fully curved
3mm bite



gS 66.6620 6"

Kleinert-Kutz Rongeur
curved
3mm bite

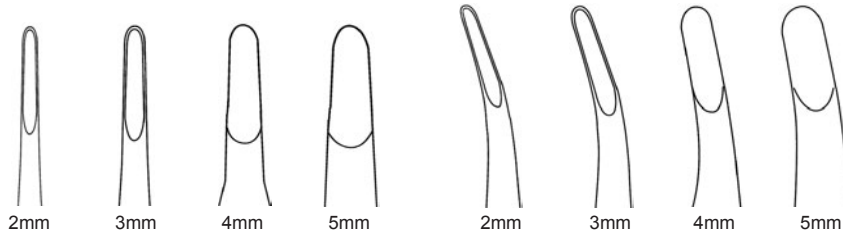


gS 66.6200 7"

Beyer Rongeur
curved
3mm bite



double action bone rongeurs - 66/9



		bite
gS 66.6230	straight	2mm
gS 66.6250	straight	3mm
gS 66.6252	straight	4mm
gS 66.6253	straight	5mm
gS 66.6255	curved	2mm
gS 66.6256	curved	3mm
gS 66.6257	curved	4mm
gS 66.6258	curved	5mm

Ruskin Rongeur
(Boehler)
6"



gS 66.6220 7"

Zaufal-Jansen Rongeur
curved
4mm bite



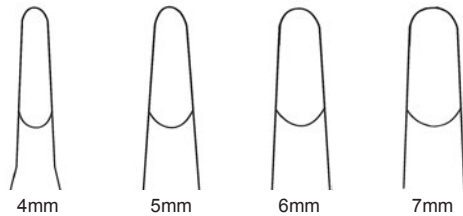
gS 66.6573 7"

Mayfield Rongeur
curved
3mm bite



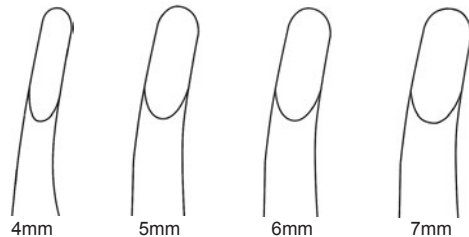
66/10 - double action bone rongeurs

66



		bite
gS 66.6260	7 1/2"	4mm
gS 66.6265	7 1/2"	5mm
gS 66.6280	7 1/2"	6mm
gS 66.6267	7"	7mm

Ruskin Rongeur
straight

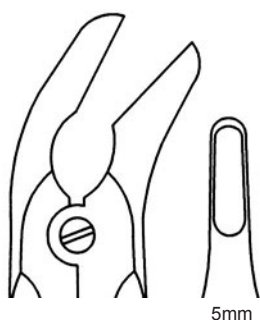


		bite
gS 66.6270	7 1/2"	4mm
gS 66.6275	7 1/2"	5mm
gS 66.6310	7 1/2"	6mm
gS 66.6277	7"	7mm

gS 66.6335	9"	5mm
gS 66.6336	9"	6mm
gS 66.6337	9"	7mm

Ruskin Rongeur
curved



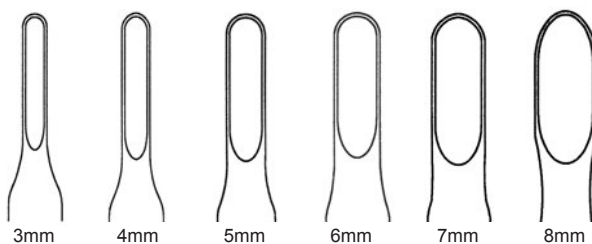
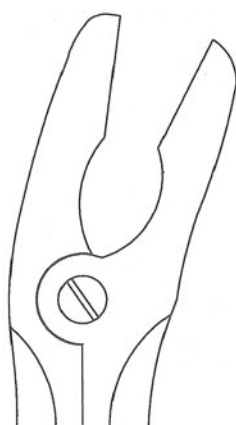


bite
gS 66.6339 5mm
gS 66.6340 6mm

Ruskin Rongeur
 7"
 angled



gS 66.6344 8"
 slightly curved
 3mm bite



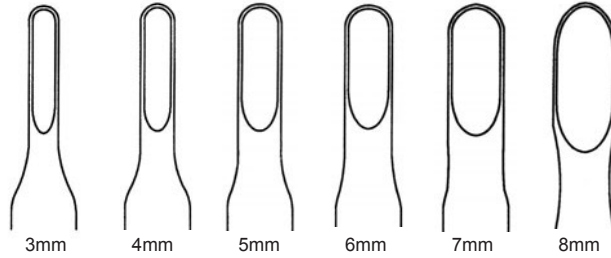
bite
gS 66.5859 3mm
gS 66.5860 4mm
gS 66.5870 5mm
gS 66.5880 6mm
gS 66.5890 7mm
gS 66.5900 8mm

Leksell-Stille Rongeur
 9 1/2"
 slightly angled jaw



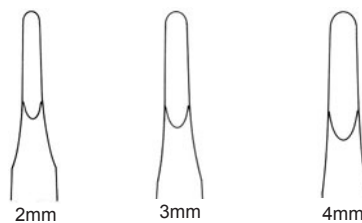
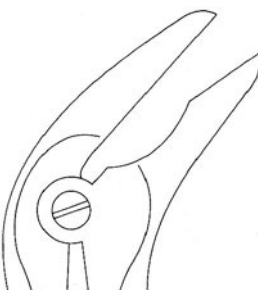
66/12 - double action bone rongeurs

66



	bite
gS 66.5940	3mm
gS 66.5950	4mm
gS 66.5970	5mm
gS 66.5980	6mm
gS 66.5990	7mm
gS 66.5991	8mm

Leksell Rongeur
9 1/2"
strongly angled jaw



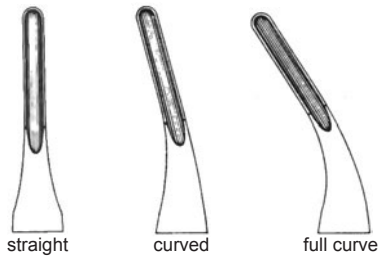
	bite
gS 66.5800	2mm
gS 66.5820	3mm
gS 66.5840	4mm

Echlin Duckbill Rongeur
9"
angled jaw



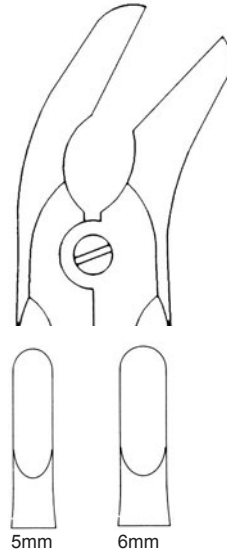
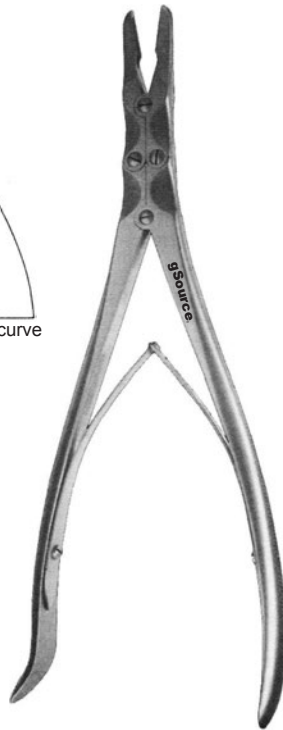
double action bone rongeurs - 66/13

66



gS 66.5740 straight
gS 66.5760 curved
gS 66.5780 full curve

Smith Peterson Rongeur
 9 1/2"
 3mm bite



bite
gS 66.5715 5mm
gS 66.5720 6mm

Stille-Luer Rongeur
 9"
 angled



gS 66.4960 14"
Dale Rongeur
 curved
 3mm bite

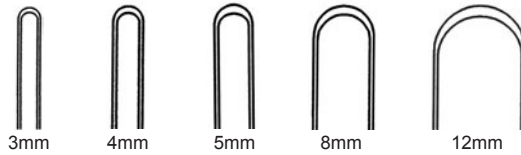
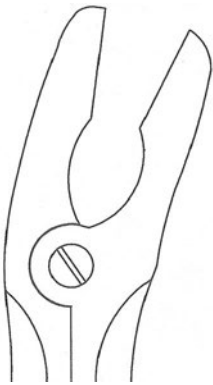


gS 66.6348 9 1/2"
Stille Ruskin Rongeur
 curved
 8mm bite



66/14 - double action bone rongeurs

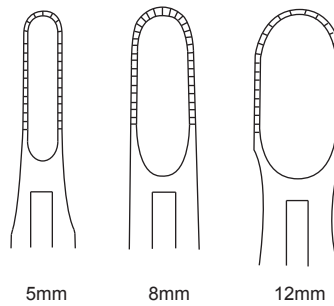
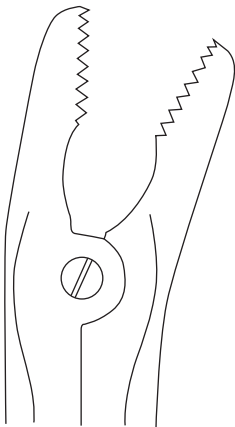
66



	bite
gS 66.4790	3mm
gS 66.4800	4mm
gS 66.4820	5mm
gS 66.4840	8mm
gS 66.4860	12mm

Sypert Rongeur

14 1/2"
without teeth



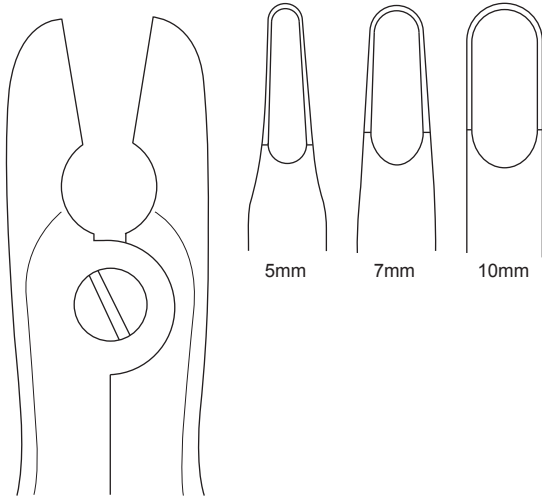
	bite
gS 66.4870	5mm
gS 66.4880	8mm
gS 66.4890	12mm

Sypert Rongeur

14 1/2"
with teeth



double action bone rongeurs - 66/15

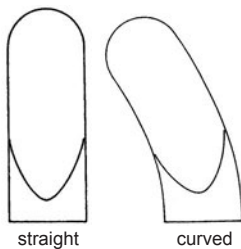


bite
gS 66.6705 5mm
gS 66.6707 7mm
gS 66.6710 10mm

Ortho Rongeur
 10"



66



gS 66.5580 straight
gS 66.5600 curved
Stille-Luer Rongeur
 8 1/2"
 10mm bite

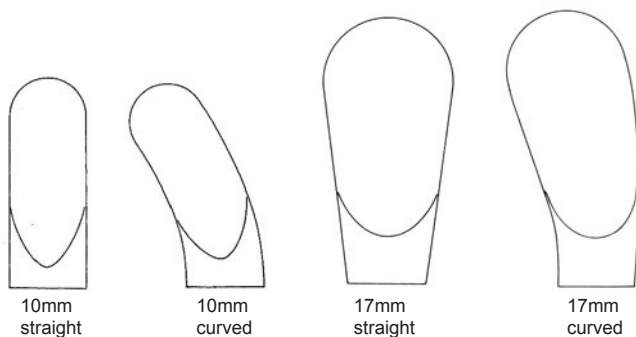


gS 66.6357 9"
Semb Rongeur
 curved
 round 17mm bite



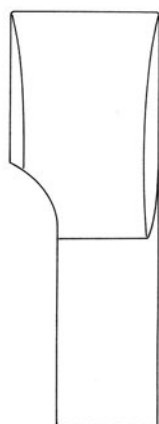
66/16 - double action bone rongeurs

66

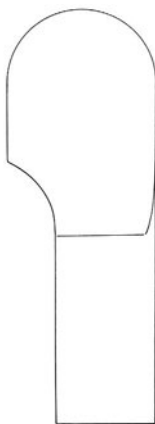


			bite
gS 66.5611	9 1/2"	straight	17mm
gS 66.5612	9 1/2"	curved	17mm
gS 66.5620	10 1/2"	straight	10mm
gS 66.5640	10 1/2"	curved	10mm
gS 66.5651	10 1/2"	straight	17mm
gS 66.5652	10 1/2"	curved	17mm

Stille-Luer Rongeur



square



oval

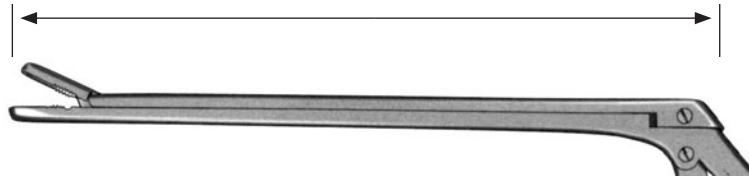
gS 66.6358	square
gS 66.6359	oval

Sauerbruch Rongeur

12"
20mm bite



graspers and spinal rongeurs identification chart - 67-68/1



Shaft Length



straight



up



down

Jaw bite styles for rongeurs



Finger Ring Handle
handle height: 4"



**Ferris-Smith-Kerrison
Ring Handle**
handle height: 5"



**Ferris-Smith-Kerrison
Handle**
handle height: 5"

gSource spinal rongeurs and punches have bite size etched on handles.

Handle styles

Refer to Sections 69-72 for gSource spinal punches.

Please inquire about the availability of any size and style not shown in this section.

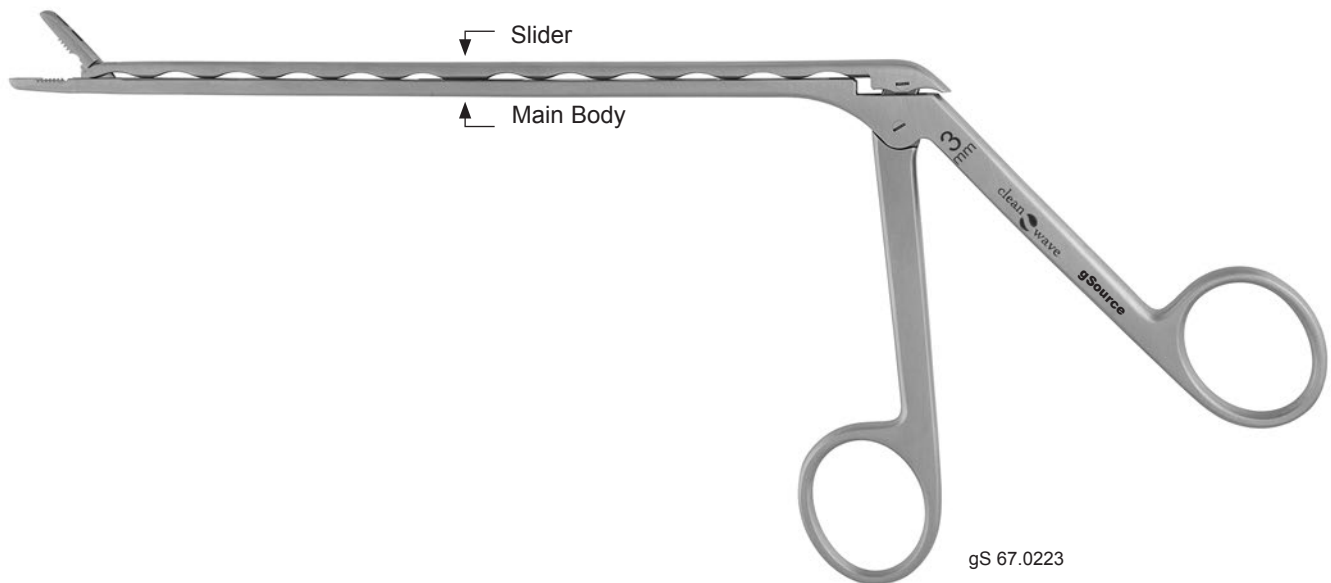
67-68/2 - clean wave spinal rongeurs

Catch a new wave to easy cleaning.

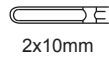
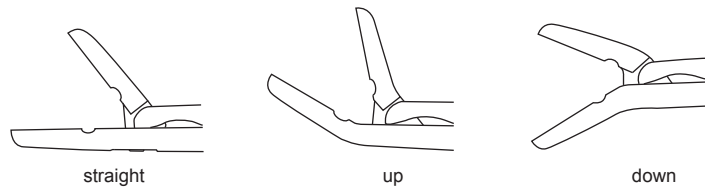
In most spinal rongeurs, tissue and debris can collect and remain trapped between the main body and slider. This build-up can impede the smooth function of the instrument and prevent proper sterilization as a result of not being completely cleaned prior to sterilization.

The Clean Wave spinal rongeurs have a slider with a wavelike shaped design which allows cleaning utensils to easily reach through the recesses and openings between the slider and the main body for cleaning prior to sterilization.

- Wavelike shape also helps to reduce friction between the slider and main body, providing a smooth function.
- Straight, up or down bite styles.
- Caspar, Cushing, Love-Gruenwald and Spurling patterns available. See pages 3-4.
- Made from German stainless steel.
- Satin finish helps to reduce glare.

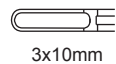
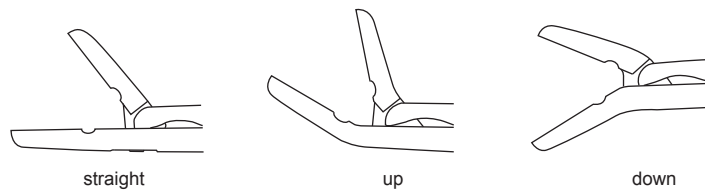


clean wave spinal rongeurs - 67-68/3



gS 67.8300 straight
gS 67.8320 up
gS 67.8340 down

Clean Wave Cushing Rongeur
7" shaft, 2x10mm bite
finger ring handle

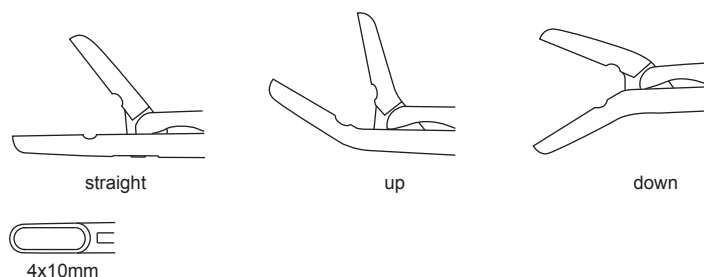


gS 67.8800 straight
gS 67.8820 up
gS 67.8840 down

Clean Wave Love Gruenwald Rongeur
7" shaft, 3x10mm bite
finger ring handle

67-68/4 - clean wave spinal rongeurs

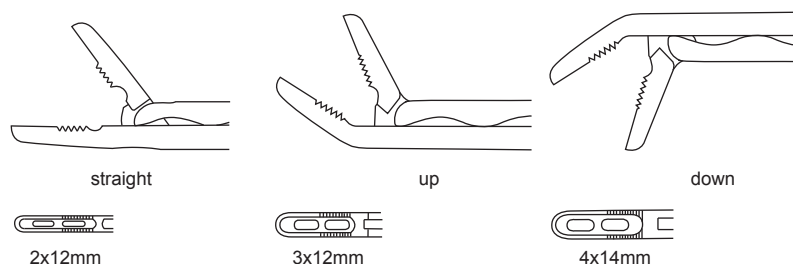
67-68



gS 67.9400 straight
gS 67.9420 up
gS 67.9440 down

Clean Wave Spurling Rongeur

7" shaft, 4x10mm bite
finger ring handle



bite	straight	up	down
2x12mm	gS 67.0222	gS 67.0242	gS 67.0232
3x12mm	gS 67.0223	gS 67.0243	gS 67.0233
4x14mm	gS 67.0224	gS 67.0244	gS 67.0234

Clean Wave Casper IVD Rongeur

7 1/4" shaft, fenestrated cups, serrated side jaw
finger ring handle





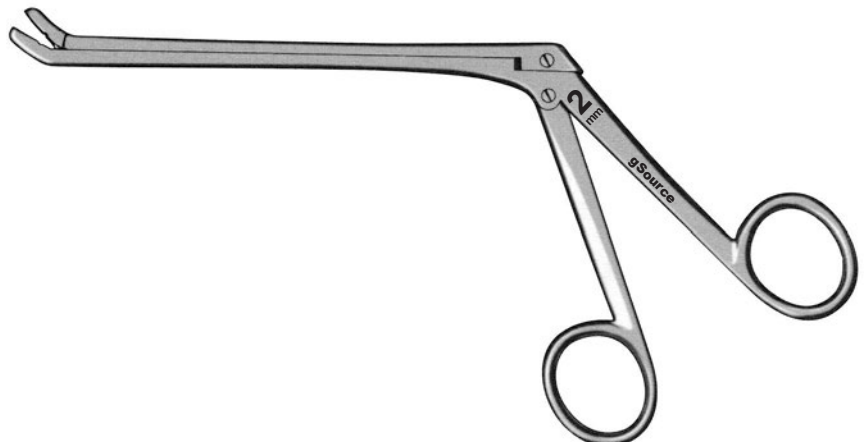
bite
gS 68.9543 2x3mm
gS 68.9545 2x6mm

Silverstone Rongeur
 6" shaft, straight
 finger ring handle



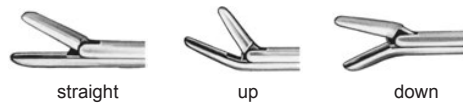
gS 68.9571 5 1/2" shaft

Peapod Rongeur
 2x6mm bite, up
 finger ring handle



67-68/6 - ivd rongeurs

67-68



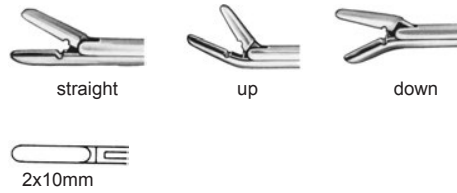
gS 68.9575 straight
gS 68.9576 up
gS 68.9577 down

Decker Rongeur
6" shaft, 2x6mm bite
finger ring handle with opening latch



bite
gS 68.9553 3x8mm
gS 68.9554 4x8mm

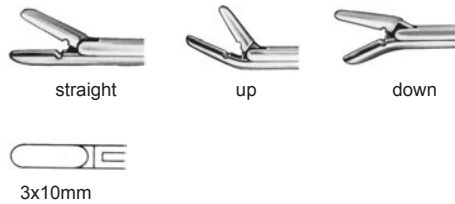
Takahashi IVD Rongeur
5" shaft, straight
finger ring handle



shaft	straight	up	down
5"	gS 68.8100	gS 68.8120	gS 68.8140
6"	gS 68.8210	gS 68.8230	gS 68.8240
7"	gS 68.8300	gS 68.8320	gS 68.8340
8"	gS 68.8402	gS 68.8404	gS 68.8406
9"	gS 68.8525	gS 68.8527	gS 68.8529
10"	gS 68.8602	gS 68.8604	gS 68.8606
12"	gS 68.8535	gS 68.8537	gS 68.8539

Cushing Rongeur

2x10mm bite
finger ring handle



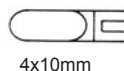
shaft	straight	up	down
5"	gS 68.8610	gS 68.8620	gS 68.8640
6"	gS 68.8702	gS 68.8704	gS 68.8706
7"	gS 68.8800	gS 68.8820	gS 68.8840
8"	gS 68.8900	gS 68.8901	gS 68.8903
9"	gS 68.8912	gS 68.8914	gS 68.8916
10"	gS 68.8922	gS 68.8924	gS 68.8926
12"	gS 68.8932	gS 68.8934	gS 68.8936

Love Gruenwald Rongeur

3x10mm bite
finger ring handle

67-68/8 - ivd rongeurs

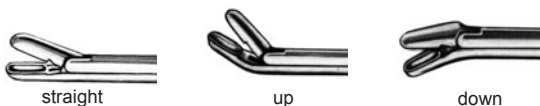
67-68



shaft	straight	up	down
5"	gS 68.9000	gS 68.9020	gS 68.9040
6"	gS 68.9202	gS 68.9204	gS 68.9206
7"	gS 68.9400	gS 68.9420	gS 68.9440
8"	gS 68.9502	gS 68.9504	gS 68.9506
9"	gS 68.9512	gS 68.9514	gS 68.9516
10"	gS 68.9522	gS 68.9524	gS 68.9526
12"	gS 68.9532	gS 68.9534	gS 68.9536

Spurling Rongeur

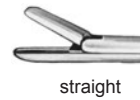
4x10mm bite
finger ring handle



gS 68.8052	straight
gS 68.8054	up
gS 68.8056	down

Cloward Rongeur
6" shaft, 6x10mm bite
finger ring handle

6" shaft bite	straight	up	down
2x10mm	gS 68.8000	gS 68.8029	gS 68.8034
3x10mm	gS 68.8020	gS 68.8030	gS 68.8035
4x10mm	gS 68.8040	gS 68.8031	gS 68.8036
5x10mm	gS 68.8050	gS 68.8032	gS 68.8037



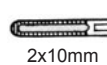
straight



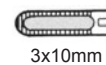
up



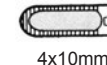
down



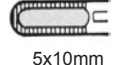
2x10mm



3x10mm



4x10mm



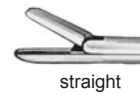
5x10mm

7" shaft bite			
2x10mm	gS 68.7702	gS 68.7732	gS 68.7762
3x10mm	gS 68.7703	gS 68.7733	gS 68.7763
4x10mm	gS 68.7704	gS 68.7734	gS 68.7764
5x10mm	gS 68.7705	gS 68.7735	gS 68.7765

9" shaft bite			
2x10mm	gS 68.7892	gS 68.7929	gS 68.7959
3x10mm	gS 68.7900	gS 68.7930	gS 68.7960
4x10mm	gS 68.7904	gS 68.7934	gS 68.7964
5x10mm	gS 68.7905	gS 68.7935	gS 68.7965

Schlesinger IVD Rongeur

serrated jaws
finger ring handle



straight



up



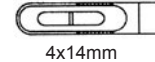
down



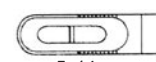
2x12mm



3x12mm



4x14mm



5x14mm



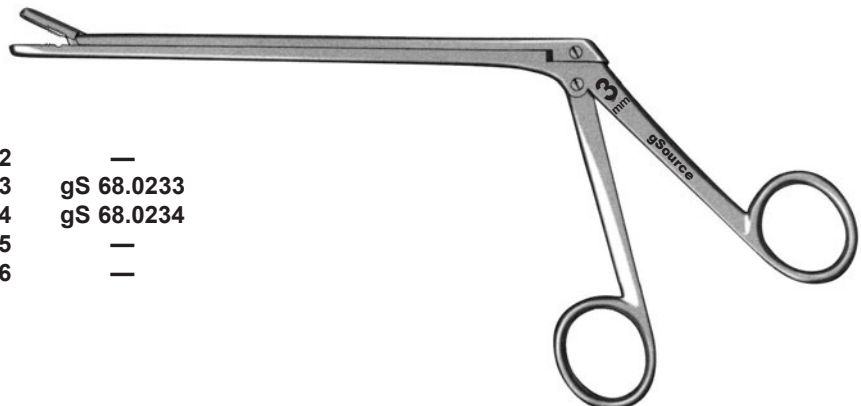
6x16mm

6" shaft bite	straight	up	down
2x12mm	gS 68.0202	gS 68.0212	—
3x12mm	gS 68.0203	gS 68.0213	—
4x14mm	gS 68.0204	gS 68.0214	—
5x14mm	gS 68.0205	gS 68.0215	—
6x16mm	gS 68.0206	gS 68.0216	—

7" shaft bite			
2x12mm	gS 68.0222	gS 68.0242	—
3x12mm	gS 68.0223	gS 68.0243	gS 68.0233
4x14mm	gS 68.0224	gS 68.0244	gS 68.0234
5x14mm	gS 68.0225	gS 68.0245	—
6x16mm	gS 68.0226	gS 68.0246	—

Caspar IVD Rongeur

fenestrated cup, serrated jaws
finger ring handle



67-68/10 - ivd rongeurs

67-68



6mm

gS 68.9560 7" shaft

Oldberg Rongeur
round 6mm bite, straight
finger ring handle



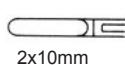
straight



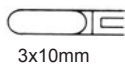
up



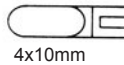
down



2x10mm



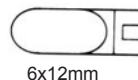
3x10mm



4x10mm



5x10mm



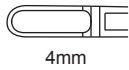
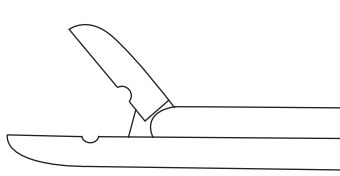
6x12mm

bite	straight	up	down
2x10mm	gS 68.9580	gS 68.9600	gS 68.9620
3x10mm	gS 68.9640	gS 68.9660	gS 68.9680
4x10mm	gS 68.9700	gS 68.9720	gS 68.9725
5x10mm	gS 68.9726	gS 68.9727	gS 68.9728
6x12mm	gS 68.9780	gS 68.9730	gS 68.9750

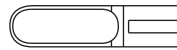
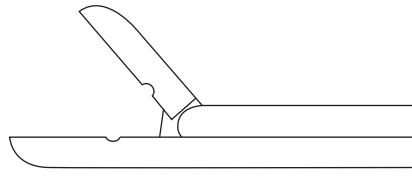
Ferris Smith Rongeur
7" shaft
Ferris-Smith-Kerrison ring handle



Useful in facilitating a discectomy in anterior lumbar fusion and non-fusion procedures.



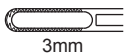
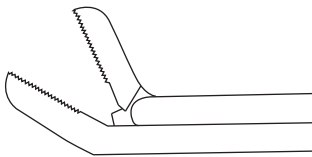
4mm



6mm

bite
gS 68.9824 4mm
gS 68.9826 6mm

gRongeur, Disc
13" shaft, straight
Ferris-Smith-Kerrison handle



3mm



4mm



8mm

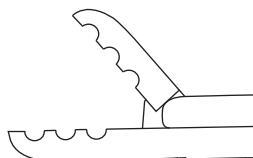
bite
gS 68.9843 3mm
gS 68.9844 4mm
gS 68.9848 8mm

gRongeur, Disc
13" shaft, up, serrated jaws
Ferris-Smith-Kerrison handle

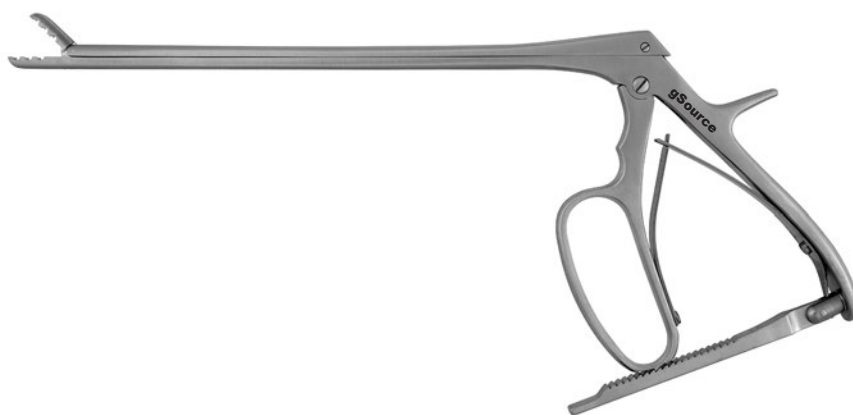


67-68/12 - graspers rongeurs

Grooved jaw and adjustable locking ratchet help to provide a fixed hold on grasped tissue.



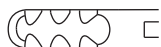
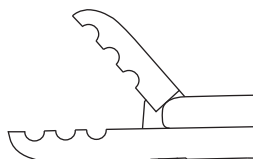
5mm



gS 68.9805 9" shaft

gGrasper Rongeur

5mm bite, straight, grooved jaw, ratchet
Ferris-Smith-Kerrison ring handle



5mm

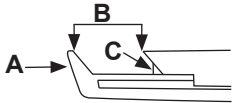


gS 68.9815 9" shaft

gGrasper Rongeur

5mm bite, straight, grooved jaw
Ferris-Smith-Kerrison ring handle

Easy2Clean Kerrison Punch identification chart - 69/1



40° Forward Bite
Thin Foot Plate

A - Foot Plate

Foot plate options are:

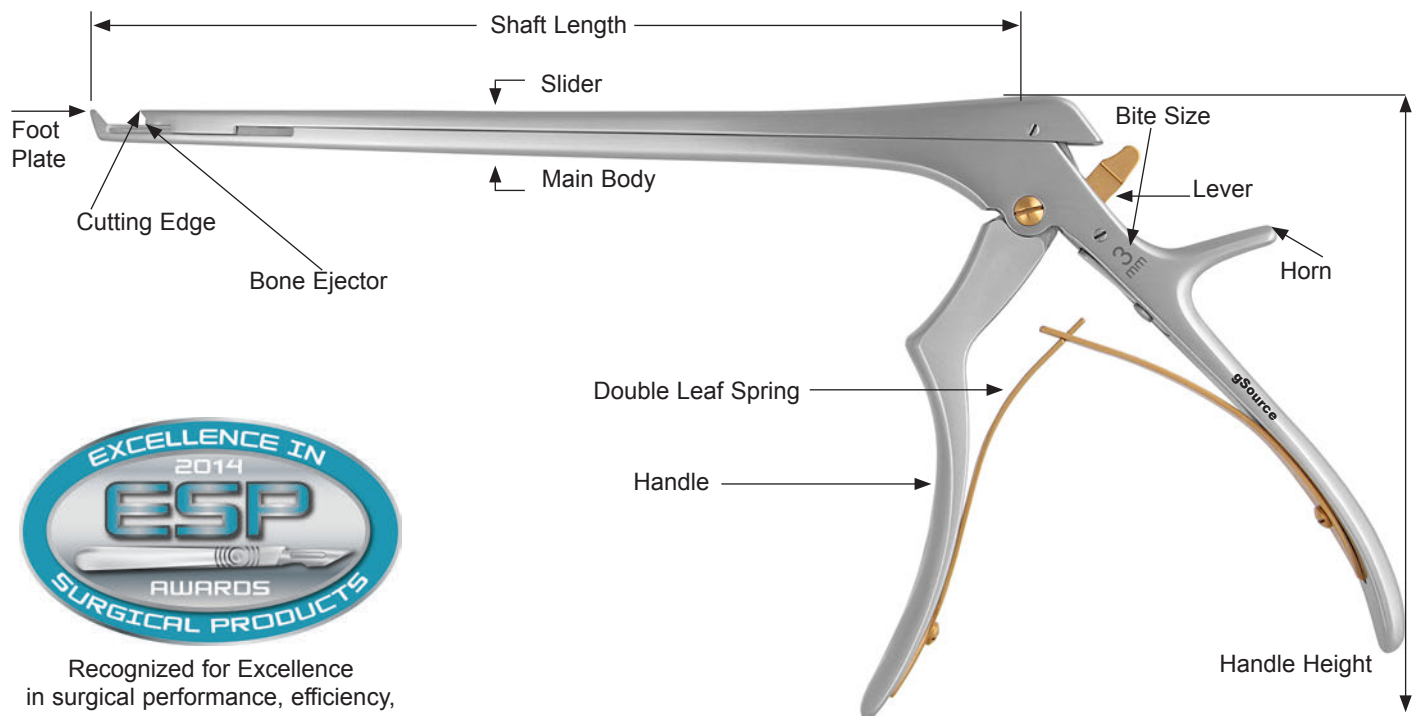
- Regular: foot plate has a greater thickness useful for lumbar procedures.
- Thin: foot plate has a reduced thickness useful for cervical and thoracic procedures.

B - Bite Opening

Size of the bite opening is the distance between the cutting edge and the foot plate when in the open position. A wider opening allows surgeon to excise more bone.

C - Bone Ejector

Easy2Clean Kerrison Punch 2mm-6mm bite sizes have a bone ejector incorporated into their design. The bone ejector helps to remove any material (bone, tissue, etc.) caught within the bite opening.



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in surgical performance, efficiency,
and safety by the readership of
Surgical Products.

69/2 - Easy2Clean Kerrison Punch

Opens for easy and complete cleaning.

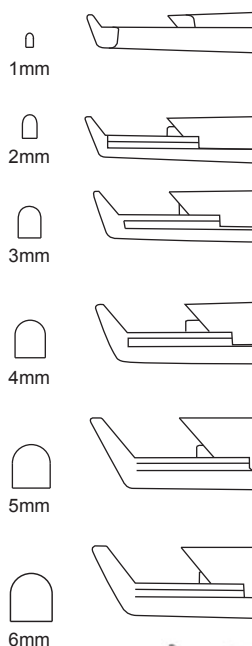
In most spinal punches, tissue and debris can collect and remain trapped between the main body and slider. This build-up can impede the smooth function of the instrument and prevent proper sterilization as a result of not being completely cleaned prior to sterilization.

The Easy2Clean Kerrison Punch has a hinged slider that opens in order to allow access for easy and complete cleaning inside the main body.

- Punch remains in one piece when opened so there are no loose instrument components.
- Forward angled foot plate provides precise and controlled cutting action.
- Features a thin foot plate design.
- Bone ejector is incorporated into the design of 2mm-6mm bite sizes.
- Made from German stainless steel.
- Satin finish helps to reduce glare.

Please inquire about the availability of any size and style not shown in this section.

69



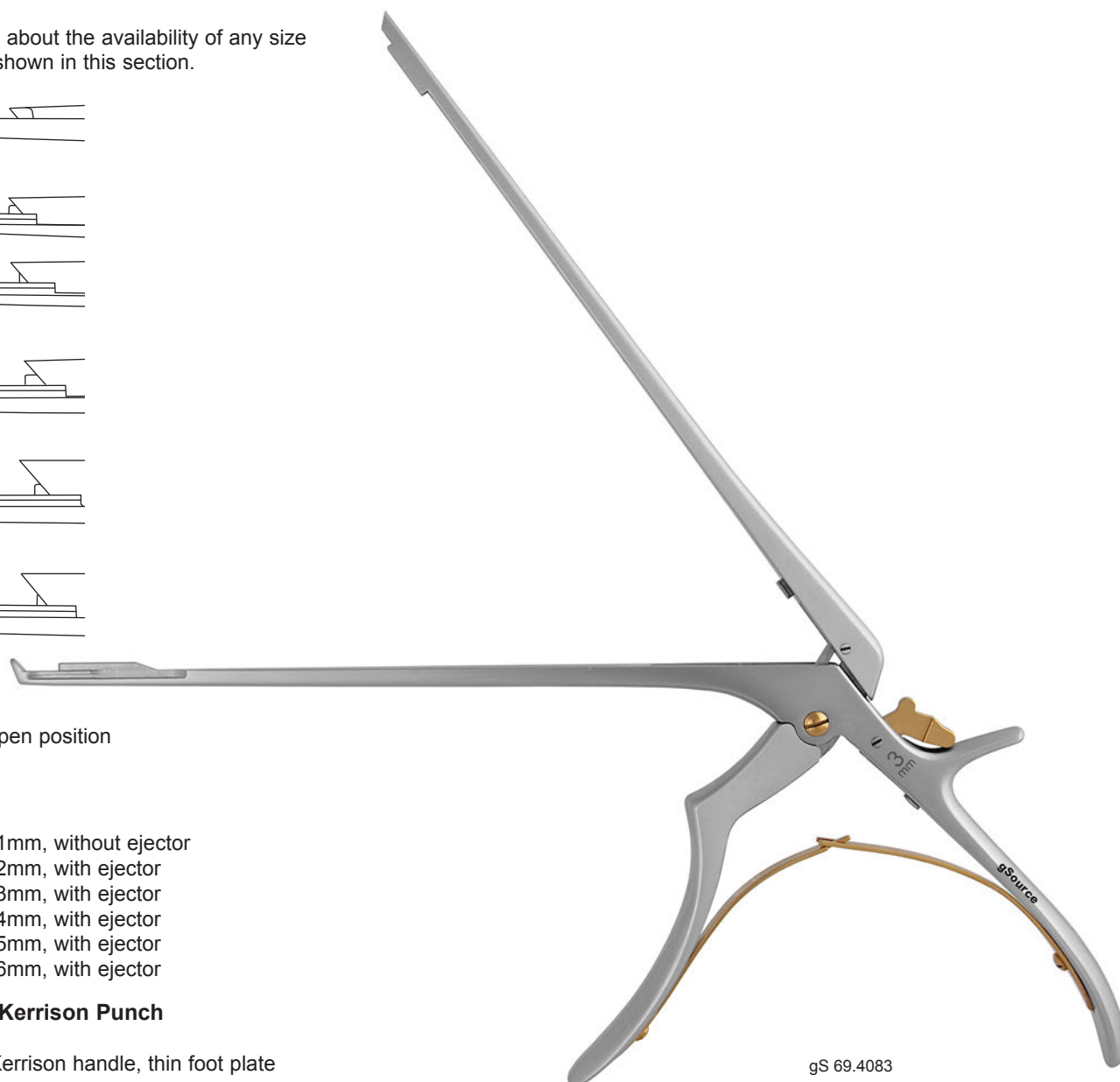
Shown in open position

- gS 69.4081** 1mm, without ejector
gS 69.4082 2mm, with ejector
gS 69.4083 3mm, with ejector
gS 69.4084 4mm, with ejector
gS 69.4085 5mm, with ejector
gS 69.4086 6mm, with ejector

Easy2Clean Kerrison Punch

8" forward

Ferris-Smith-Kerrison handle, thin foot plate



gS 69.4083

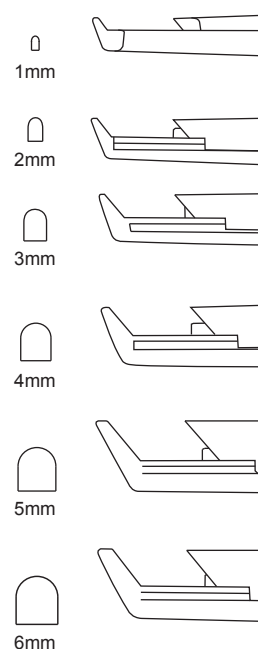
Easy2Clean Kerrison Punch - 69/3

Opens for easy and complete cleaning.

In most spinal punches, tissue and debris can collect and remain trapped between the main body and slider. This build-up can impede the smooth function of the instrument and prevent proper sterilization as a result of not being completely cleaned prior to sterilization.

The Easy2Clean Kerrison Punch has a hinged slider that opens in order to allow access for easy and complete cleaning inside the main body.

- Punch remains in one piece when opened so there are no loose instrument components.
- Forward angled foot plate provides precise and controlled cutting action.
- Features a thin foot plate design.
- Bone ejector is incorporated into the design of 2mm-6mm bite sizes.
- Made from German stainless steel.
- TiAIN ceramic coating helps to provide improved strength, increased cutting edge hardness, reduced glare and a smooth action.



Shown in open position

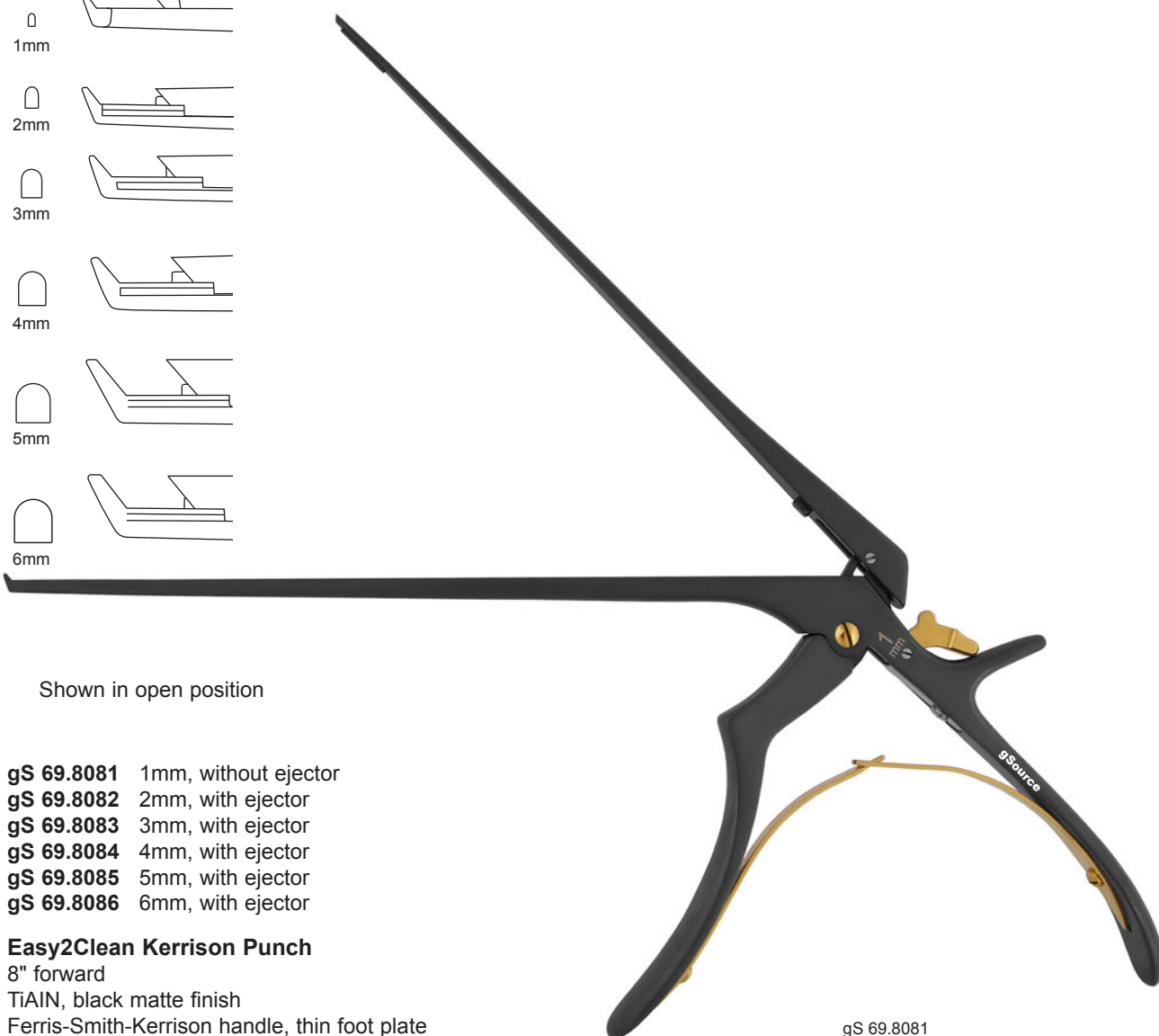
- gS 69.8081** 1mm, without ejector
- gS 69.8082** 2mm, with ejector
- gS 69.8083** 3mm, with ejector
- gS 69.8084** 4mm, with ejector
- gS 69.8085** 5mm, with ejector
- gS 69.8086** 6mm, with ejector

Easy2Clean Kerrison Punch

8" forward

TiAIN, black matte finish

Ferris-Smith-Kerrison handle, thin foot plate



gS 69.8081

69/4 - Easy2Clean Kerrison Punch

To open:



- 1) Squeeze handle together and hold.
- 2) While holding handle together, push down on the lever toward the handle horn.



- 3) Release hold on handle.
- 4) Pull back slider and lift to open.

To close:

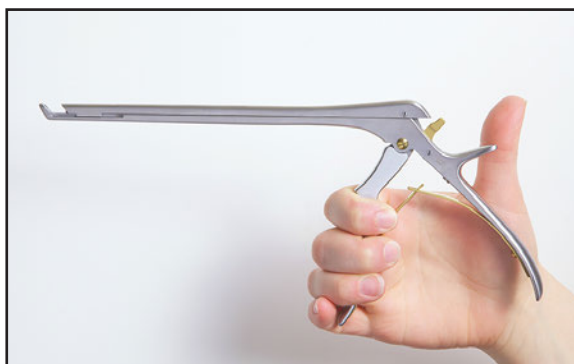
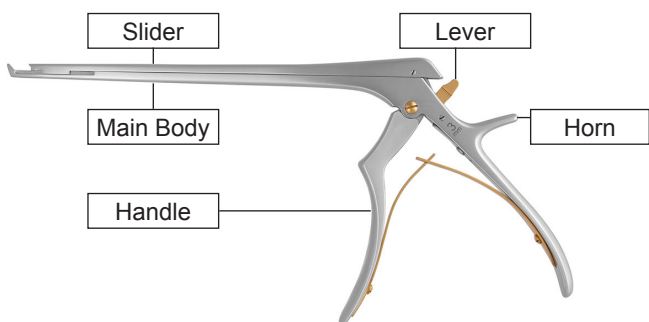


- 1) Align and engage slider in grooves on main body.



- 2) Squeeze handle together and hold.
- 3) While holding handle together, push lever up to its original position.

Identification of components:



- 4) Release hold on handle.
- 5) Check instrument function to ensure slider is engaged properly.

Shown in closed position

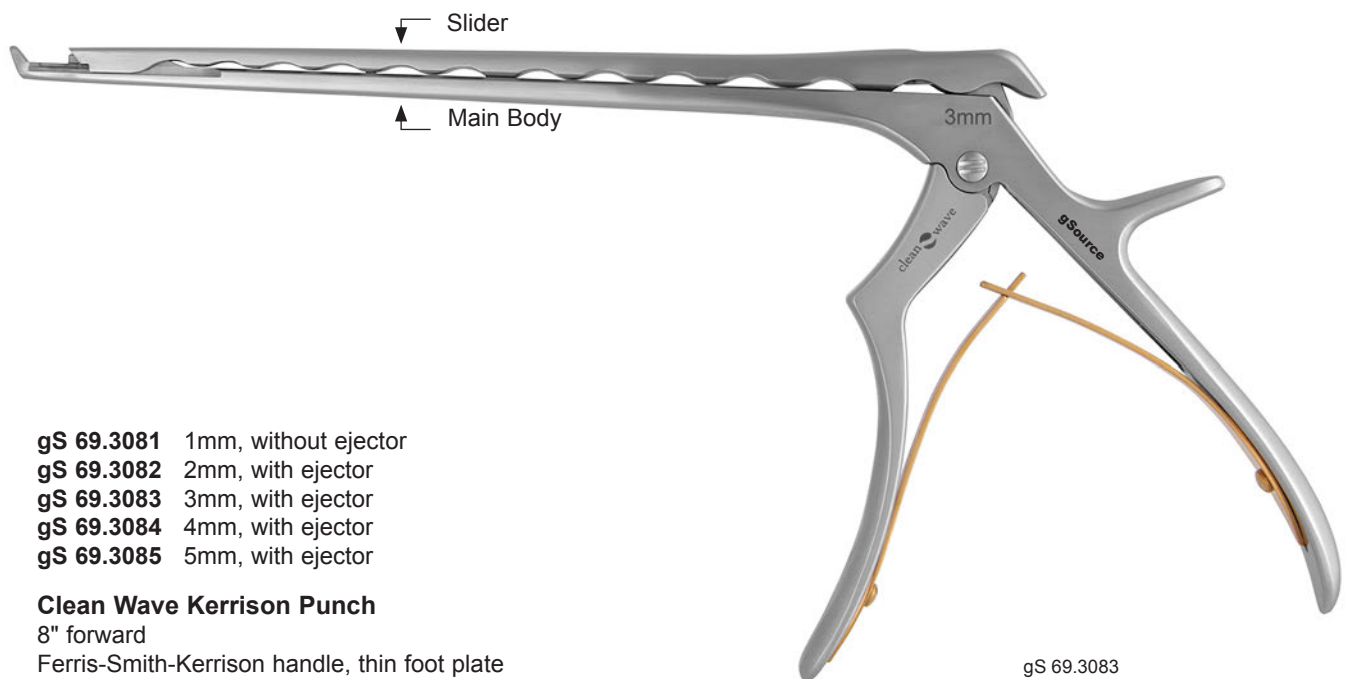
Clean Wave Kerrison Punch - 69/5

Catch a new wave to easy cleaning.

In most spinal punches, tissue and debris can collect and remain trapped between the main body and slider. This build-up can impede the smooth function of the instrument and prevent proper sterilization as a result of not being completely cleaned prior to sterilization.

The Clean Wave Kerrison Punch has a slider with a wavelike shaped design which allows cleaning utensils to easily reach through the recesses and openings between the slider and main body for cleaning prior to sterilization.

- Wavelike shape also helps to reduce friction between the slider and main body, providing a smooth function.
- Forward angled foot plate provides precise and controlled cutting action.
- Features a thin foot plate design.
- Bone ejector is incorporated into the design of 2mm-5mm bite sizes.
- Made from German stainless steel.
- Satin finish helps to reduce glare.



- gS 69.3081** 1mm, without ejector
- gS 69.3082** 2mm, with ejector
- gS 69.3083** 3mm, with ejector
- gS 69.3084** 4mm, with ejector
- gS 69.3085** 5mm, with ejector

Clean Wave Kerrison Punch

8" forward

Ferris-Smith-Kerrison handle, thin foot plate

gS 69.3083

did you know... ?

Critical items, such as surgical instruments, are associated with a high risk for infection if they are contaminated with any microorganism. Objects that enter tissue or the vascular system must be sterile because any microbial contamination could transmit disease. Meticulous cleaning must precede any sterilization or high-level disinfection. Failure to perform good cleaning can result in sterilization or disinfection failure, and outbreaks of infection can occur. An instrument must be completely cleaned in order to be sterilized properly.

“Cleaning” is the removal of foreign material (e.g., soil, and organic material) from objects and is normally accomplished using water with detergents or enzymatic products. Thorough cleaning is required before high-level disinfection and sterilization because inorganic and organic materials that remain on the surfaces of instruments interfere with the effectiveness of these processes. Also, if soiled materials dry or bake onto the instruments during autoclaving, the removal process becomes more difficult and the disinfection or sterilization process less effective or even ineffective. Surgical instruments should be presoaked or rinsed to prevent drying of blood and to soften or remove blood from the instruments.

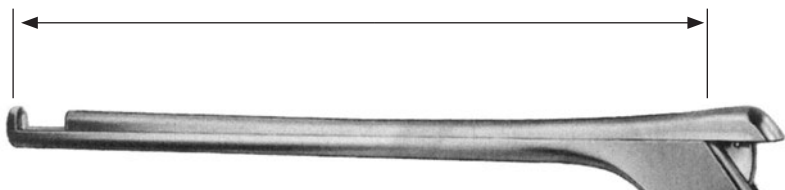
Surgical instruments with multiple components must be disassembled and equipment such as endoscopes that have crevices, joints, and channels are more difficult to clean than flat-surface equipment. Cleaning is done manually in use areas without mechanical units (ultrasonic cleaners or washer-disinfectors) or for fragile or difficult-to-clean instruments. With manual cleaning, the two essential components are friction (rubbing/scrubbing the soiled area with a brush) and fluidics (fluids under pressure), used to remove soil and debris from internal channels after brushing and when the design does not allow passage of a brush through a channel. When a washer-disinfector is used, care should be taken in loading instruments: hinged instruments should be opened fully to allow adequate contact with the detergent solution; stacking of instruments in washers should be avoided; and instruments should be disassembled as much as possible.

The issue with a standard spinal punch is that tissue and debris can collect and remain “trapped” inside the shaft between the “main body” and “slider”. This build-up can impede the smooth function and prevent proper sterilization if not completely cleaned. The instrument can also be damaged if it is scraped or struck against another object in an effort to dislodge any debris. The build-up and debris that is not completely cleaned and removed prior to disinfection and sterilization is not only unsanitary it can cause infection. The bioburden, or number of microorganisms on a contaminated item, that collects inside the shaft can form a “hard shell” which protects the microorganisms from sterilization. The bioburden can transmit infectious disease and sterilized bioburden can act as a pyrogen, or fever inducing substance. Bioburden increases risk factors for surgical site infection.

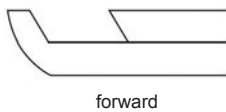
The Easy2Clean Kerrison Punch, as shown on pages 1-4 in this section, was designed to be cleaned. With a slider that opens in order to allow for easy and complete cleaning, it remains in one piece when opened for ease of reassembly, eliminating the possibility of losing or switching parts.

The Clean Wave Kerrison Punch, as shown on page 5 in this section, was also designed to be cleaned. With a wavelike shaped slider, it allows cleaning utensils to easily reach through the recesses and openings between the main body and slider for cleaning prior to sterilization.

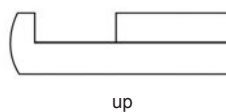
spinal punches identification chart - 70/1



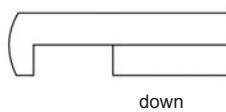
Shaft Length



forward

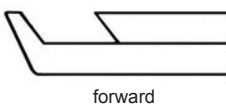


up

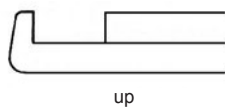


down

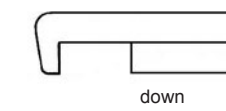
Regular foot plate bite styles



forward

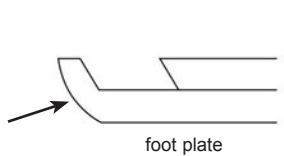


up

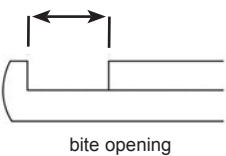


down

Thin foot plate bite styles



foot plate



bite opening



bite

Features

Refer to Section 67-68 for gSource spinal rongeurs.

Please inquire about the availability of any size and style not shown in this section.

70/2 - spinal punches identification chart



Kerrison Handle
handle height: 6"



Love-Kerrison Standard Handle
handle height: 6"



Love-Kerrison Handle
handle height: 6"

gSource spinal rongeurs and punches have bite size etched on handles.

Handle styles



Ferris-Smith-Kerrison Handle
handle height: 5"



Ferris-Smith-Kerrison Ring Handle
handle height: 5"

Wider grip improves comfort and control.

Biocompatible silicone coated stainless steel handle helps to prevent slippage and provide a secure and comfortable grip.

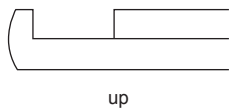
Ferris-Smith-Kerrison Handle
silicone coated stainless steel
handle height: 5"



gSource spinal rongeurs and punches have bite size etched on handles.

Handle styles

70/4 - punches with regular foot plate

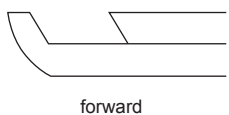


	bite
gS 70.5213	2mm
gS 70.5215	3mm
gS 70.5217	4mm
gS 70.5219	5mm
gS 70.5221	6mm

Kerrison Mastoid Punch

3 1/2" shaft, up

Kerrison handle, regular footplate

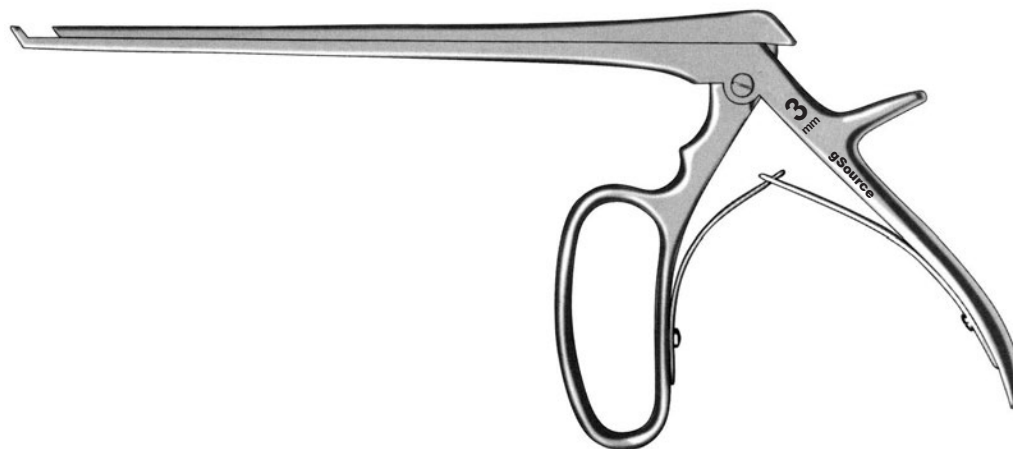


	bite
gS 70.9230	3mm
gS 70.9240	5mm

Ferris Smith Punch

8" shaft, forward

Ferris-Smith-Kerrison ring handle, regular footplate

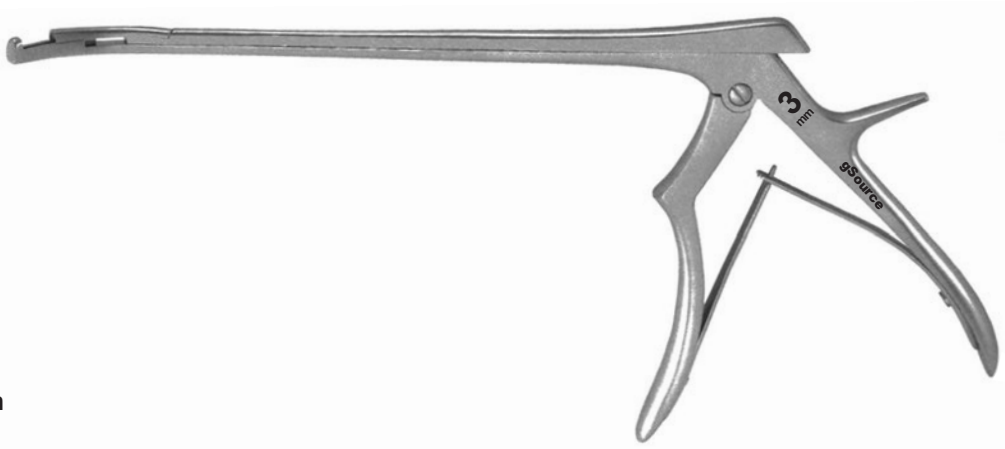


punches with regular foot plate - 70/5


3mm



up, curved left

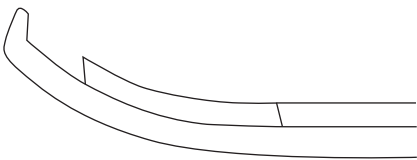


curved
gS 70.1530 left
gS 70.1630 right

Foraminotomy Punch
8" shaft, 3mm bite, up
Ferris-Smith-Kerrison handle, regular foot plate

 1mm  2mm  3mm

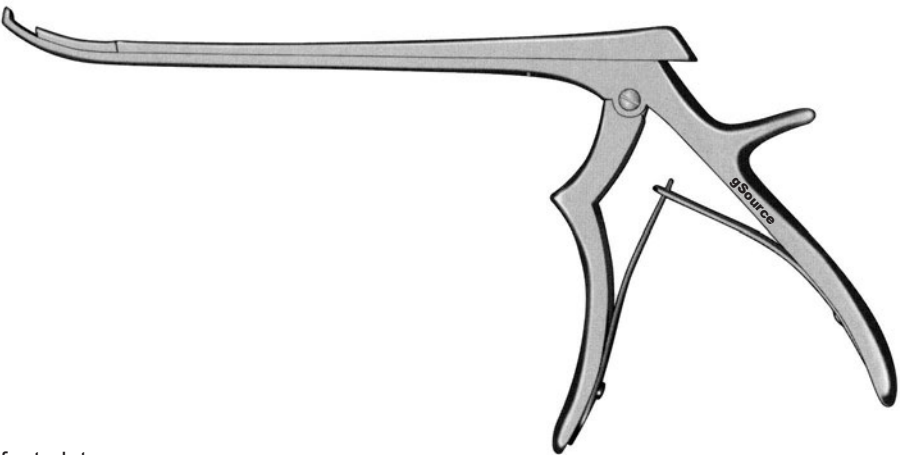
 4mm  5mm  6mm



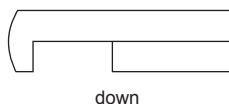
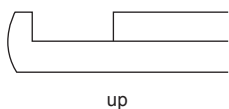
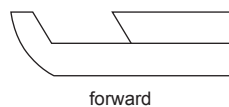
Upward curved shaft and forward angled foot plate make the underside of the foramen accessible. Hinge in upper shaft enables smooth cutting function.

bite	8" shaft	12" shaft
1mm	gS 70.1290	gS 70.2001
2mm	gS 70.1300	gS 70.2002
3mm	gS 70.1330	gS 70.2003
4mm	gS 70.1340	gS 70.2004
5mm	gS 70.1350	gS 70.2005
6mm	gS 70.1360	gS 70.2006

Foraminotomy Punch
strong curved forward
Ferris-Smith-Kerrison handle, regular foot plate



70/6 - punches with regular foot plate



70

7" shaft

bite	forward	up	down
1mm	gS 70.5711	gS 70.5721	gS 70.5701
2mm	gS 70.5712	gS 70.5722	gS 70.5702
3mm	gS 70.5713	gS 70.5723	gS 70.5703
4mm	gS 70.5714	gS 70.5724	gS 70.5704
5mm	gS 70.5715	gS 70.5725	gS 70.5705
6mm	gS 70.5716	gS 70.5726	gS 70.5706

8" shaft

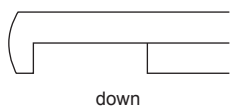
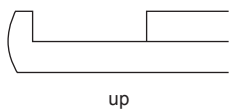
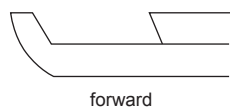
bite	forward	up	down
1mm	gS 70.5811	gS 70.5821	gS 70.5801
2mm	gS 70.5812	gS 70.5822	gS 70.5802
3mm	gS 70.5813	gS 70.5823	gS 70.5803
4mm	gS 70.5814	gS 70.5824	gS 70.5804
5mm	gS 70.5815	gS 70.5825	gS 70.5805
6mm	gS 70.5816	gS 70.5826	gS 70.5806

12" shaft

bite	forward	up	down
1mm	gS 70.9121	—	—
2mm	gS 70.9122	—	—
3mm	gS 70.9123	—	—
4mm	gS 70.9124	—	—
5mm	gS 70.9125	—	—
6mm	gS 70.9126	—	—

Spurling Kerrison Punch
 Ferris-Smith-Kerrison handle
 regular foot plate

punches with regular foot plate - 70/7



15mm bite opening

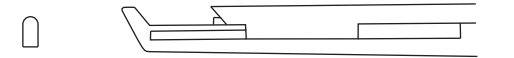


8" shaft	forward	up	down
bite			
2mm	gS 70.7812	gS 70.7822	gS 70.7802
3mm	gS 70.7813	gS 70.7823	gS 70.7803
4mm	gS 70.7814	gS 70.7824	gS 70.7804
5mm	gS 70.7815	gS 70.7825	gS 70.7805
6mm	gS 70.7816	gS 70.7826	gS 70.7806

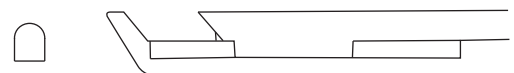
12" shaft			
bite			
2mm	gS 70.8122	—	—
3mm	gS 70.8123	—	—
4mm	gS 70.8124	—	—
5mm	gS 70.8125	—	—
6mm	gS 70.8126	—	—

Love Kerrison Punch
Love-Kerrison handle
regular foot plate

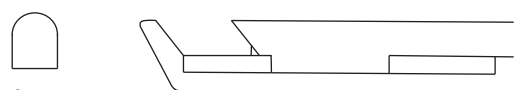
70/8 - punches with regular foot plate



2mm



4mm



6mm

Useful in facilitating a discectomy in anterior lumbar fusion and non-fusion procedures.

70

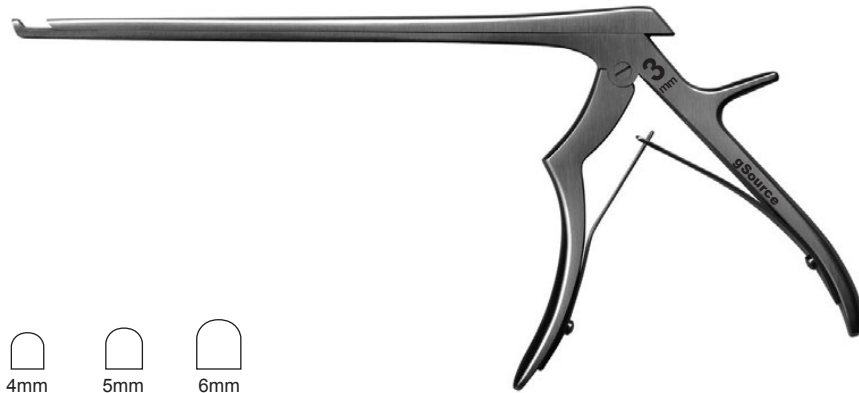
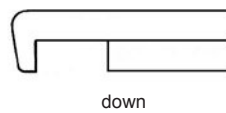
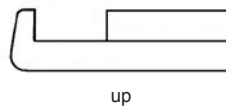
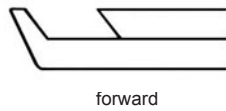


bite
gS 70.6302 2mm
gS 70.6304 4mm
gS 70.6306 6mm

gPunch, Spurling Kerrison

13" shaft, forward, with bone ejector
Ferris-Smith-Kerrison handle, regular foot plate

punches with thin foot plate - 71/1



7" shaft

bite	forward	up	down
1mm	gS 71.5711	gS 71.5721	gS 71.5701
2mm	gS 71.5712	gS 71.5722	gS 71.5702
3mm	gS 71.5713	gS 71.5723	gS 71.5703
4mm	gS 71.5714	gS 71.5724	gS 71.5704
5mm	gS 71.5715	gS 71.5725	gS 71.5705
6mm	gS 71.5716	gS 71.5726	gS 71.5706

8" shaft

bite	forward	up	down
1mm	gS 71.5811	gS 71.5821	gS 71.5801
2mm	gS 71.5812	gS 71.5822	gS 71.5802
3mm	gS 71.5813	gS 71.5823	gS 71.5803
4mm	gS 71.5814	gS 71.5824	gS 71.5804
5mm	gS 71.5815	gS 71.5825	gS 71.5805
6mm	gS 71.5816	gS 71.5826	gS 71.5806

12" shaft

bite	forward	up	down
1mm	gS 71.5951	—	—
2mm	gS 71.5952	—	—
3mm	gS 71.5953	—	—
4mm	gS 71.5954	—	—
5mm	gS 71.5955	—	—
6mm	gS 71.5956	—	—

Spurling Kerrison Punch

Ferris-Smith-Kerrison handle
thin foot plate

71/2 - punches with thin foot plate



71

8" shaft			
bite	forward	up	down
2mm	gS 71.7812	gS 71.7822	gS 71.7802
3mm	gS 71.7813	gS 71.7823	gS 71.7803
4mm	gS 71.7814	gS 71.7824	gS 71.7804
5mm	gS 71.7815	gS 71.7825	gS 71.7805
6mm	gS 71.7816	gS 71.7826	gS 71.7806

12" shaft			
bite			
2mm	gS 71.7952	—	—
3mm	gS 71.7953	—	—
4mm	gS 71.7954	—	—
5mm	gS 71.7955	—	—
6mm	gS 71.7956	—	—

Love Kerrison Punch
Love-Kerrison handle
thin foot plate

gPunch with silicone coated handle - 72/1

Get a sure grip!

- Biocompatible silicone coated stainless steel handles help to prevent slippage and provide a secure and comfortable grip.
- Made from German stainless steel with silicone coated handles.
- Colored handles provide easy bite size recognition.
- Available in five standard colors according to bite size (red, blue, lavender, turquoise, green).
- Silicone has excellent resistance to alkaline, saline and acidic solutions.
- Non-fading vibrant colors withstand repeated autoclaving.
- Forward and up bite styles available from stock.
- Quality verified and guaranteed by gSource.

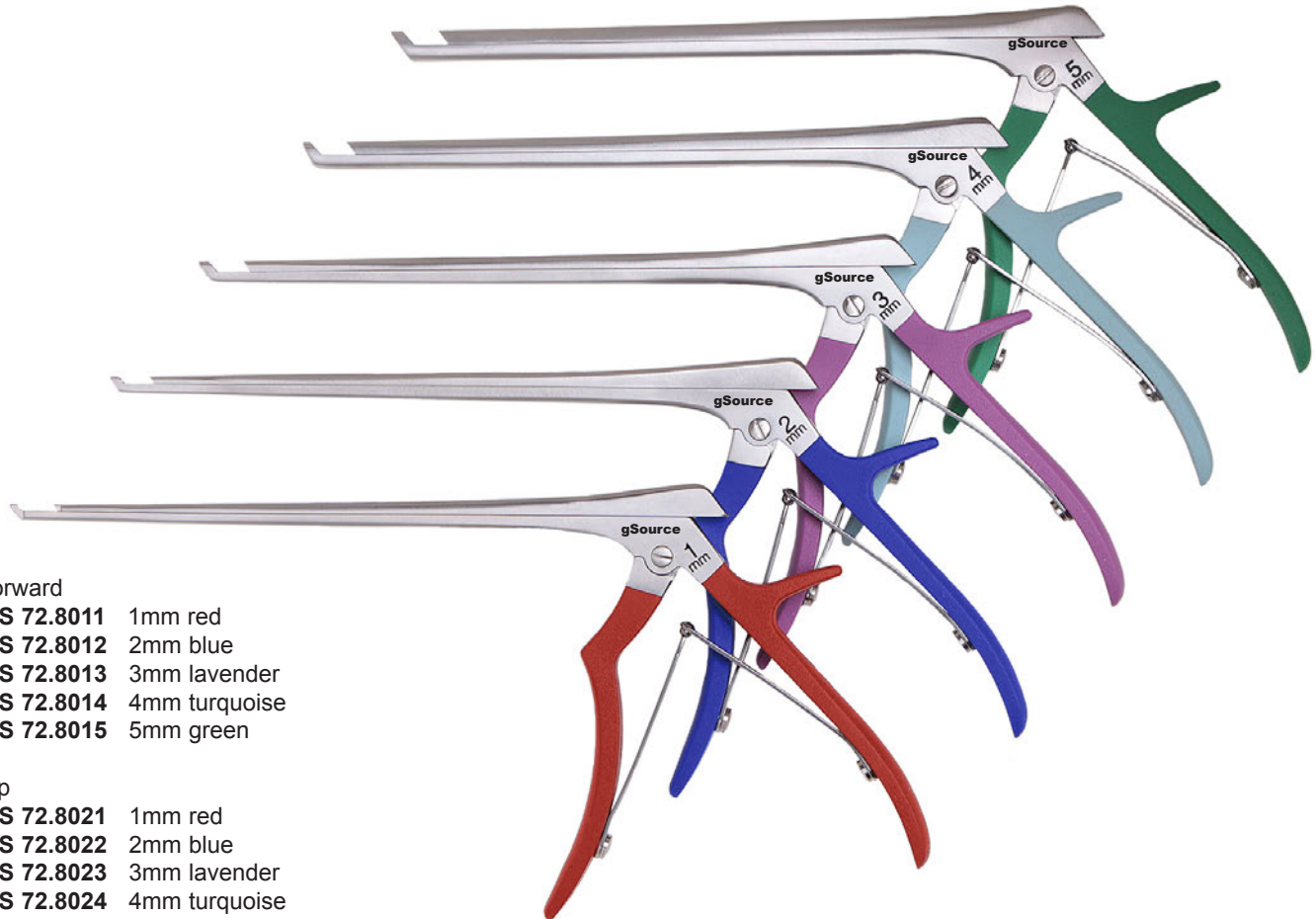
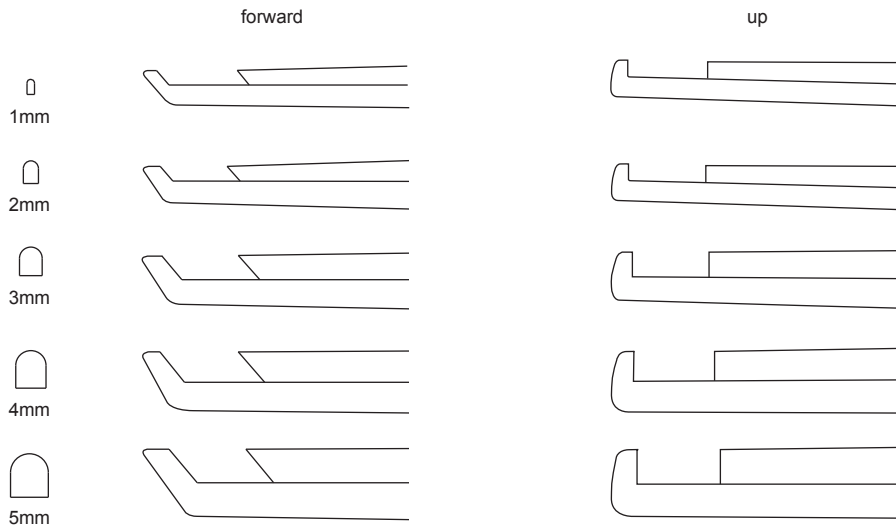
Custom options:

- Color of silicone coated handle
- Shaft length
- Down bite style



gS 72.8015 is shown.

72/2 - gPunch with silicone coated handle



forward

- gS 72.8011** 1mm red
- gS 72.8012** 2mm blue
- gS 72.8013** 3mm lavender
- gS 72.8014** 4mm turquoise
- gS 72.8015** 5mm green

up

- gS 72.8021** 1mm red
- gS 72.8022** 2mm blue
- gS 72.8023** 3mm lavender
- gS 72.8024** 4mm turquoise
- gS 72.8025** 5mm green

gPunch, Silicone Coated Handle

8" shaft

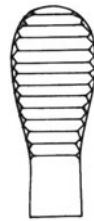
Ferris-Smith-Kerrison handle

regular foot plate

gS 73.2270 7"
Reiner Plaster Knife



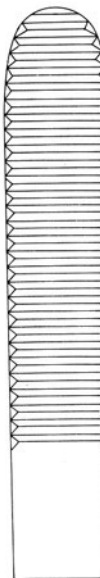
gS 73.2810 7"
Pediatric Cast Breaker



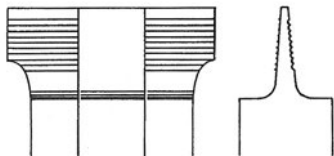
gS 73.2838 7"
Wolff Plaster Cast Breaker



gS 73.2840 9 1/2"
Wolff Plaster Cast Breaker



73/2 - cast removal



gS 73.2330 9"

Walton Cast Spreader
serrated outside blades



gS 73.2380 11"

Hennig Plaster Spreader
serrated outside blades



did you know... ?

After a bone is broken it needs rest and support to heal properly. Orthopedic doctors use casts to support and protect injured bones. Plaster casts are most often used when a fracture reduction (repositioning of the bone) is performed. The reason plaster is used after repositioning the bone is that plaster can be well molded to the patient, and therefore it can support the bone more precisely. When a bone was out of position, and is manipulated back into position, plaster may be used to help hold the bone in the proper position.

Plaster spreaders are a reverse pincer device with flat blades that are fitted down into a cut made in a plaster cast that is about to be removed. Opening the handles forces the plaster apart.

The Walton Cast Spreader, gS 73.2330 shown on this page, is our most popular casting instrument.



gS 73.2382 12"

Beeson Cast Spreader
serrated outside blades



gS 74.1000 3 1/2" str
Castroviejo Caliper
graduated from 0 to 20mm



gS 74.1010 3 1/2" cvd
Castroviejo Caliper
graduated from 0 to 20mm



gS 74.1040 6 1/2" str
Castroviejo Caliper
graduated from 0 to 40mm

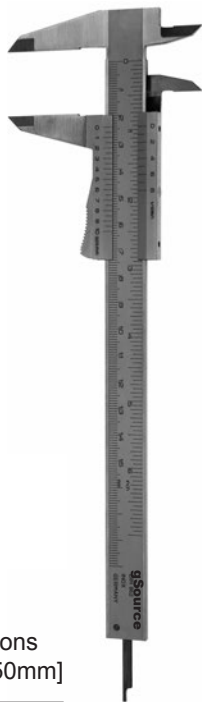


measures inside
and outside

gS 74.4140 4 1/2"
Townley Caliper
inch and mm graduations
measures up to 4" [100mm]



74/2 - measuring



gS 74.4160 8 1/2"

Caliper

inch and mm graduations
measures up to 6" [150mm]

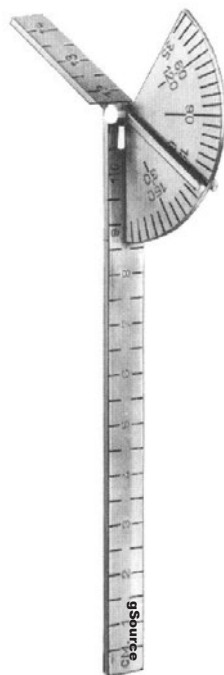


90mm long delicate blades

gS 74.4148 9"

Neuro Caliper

inch and mm graduations
measures up to 5" [127mm]



Used to measure
angles, particularly
the range of motion
for finger joints.

gS 74.2015 6"

Goniometer (Polk Finger)

inch and cm graduations



Used to measure
angles, particularly
the range of motion
for joints such as the
hip, knee, elbow or
shoulder.

gS 74.2109 9 1/2"

Moeltgen Goniometer

measures 0-180 degrees

Used to measure angles, particularly the range of motion for joints such as the hip, knee, elbow or shoulder.

gS 74.2180 8"
gS 74.2190 11 1/2"

gGoniometer
measures 0-180 degrees



gS 74.5070 7 1/2"
outside

Bone Compass
maximum opening 140mm



gS 74.5071 7" inside
Bone Compass
maximum opening 140mm



gS 74.5100 8"
Bone Compass
maximum opening 110mm



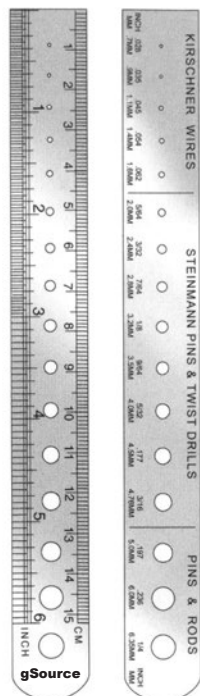
74/4 - measuring

Indispensable tool for measuring k-wires, steinmann pins, rods, and drill bits.

Gauges from diameter 0.7mm to 6.35mm
[.028" to 1/4"]

gS 74.7800 6 1/2"

K-Wire Ruler and Pin Gauge



gS 74.7920 6"
gS 74.7940 8"
gS 74.7980 12"
gS 74.8000 20"

Ruler Flexible
inch/mm graduations

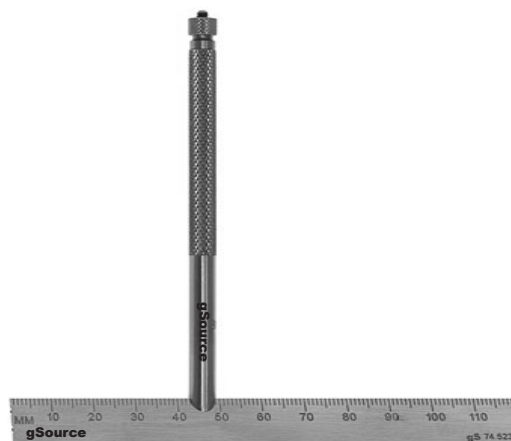


Designed to measure the femoral head/neck length.
Useful in minimally invasive surgery.



gS 74.8400 20 1/2"

X-Ray Ruler
mm graduations



gS 74.5200 handle 4" knurled
gS 74.5210 ruler 40mm [1 1/2"]
gS 74.5220 ruler 80mm [3"]
gS 74.5230 ruler 120mm [4 3/4"]

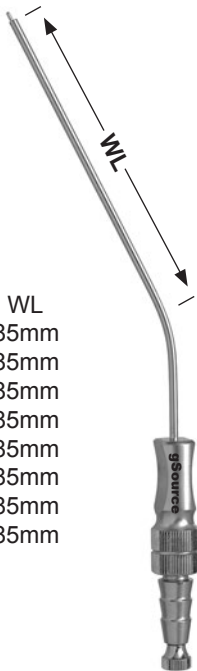
Ruler Handle
stainless steel
mm and inch graduations

OAL = Overall Length
WL = Working Length
FR = French gauge

See page 75-76/3 for
standard French gauge
(FR) illustrations.

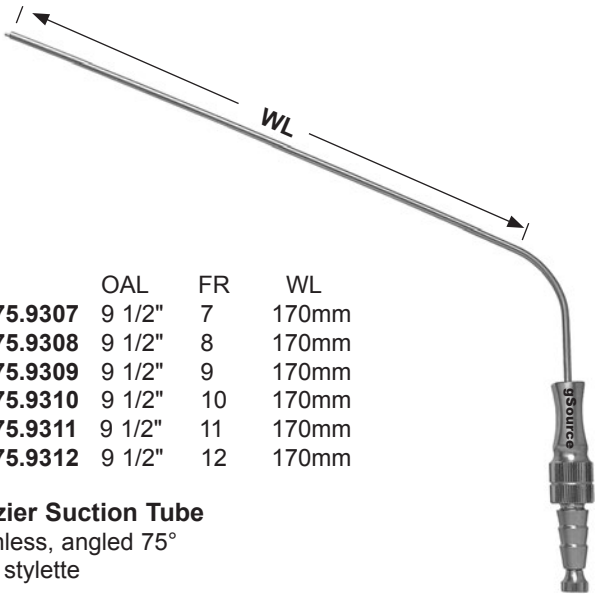
	OAL	FR	WL
gS 75.9230	7"	6	85mm
gS 75.9240	7"	7	85mm
gS 75.9250	7"	8	85mm
gS 75.9255	7"	9	85mm
gS 75.9260	7"	10	85mm
gS 75.9282	7"	11	85mm
gS 75.9300	7"	12	85mm
gS 75.9302	7"	14	85mm

Frazier Suction Tube
stainless, angled 30°
with stylette



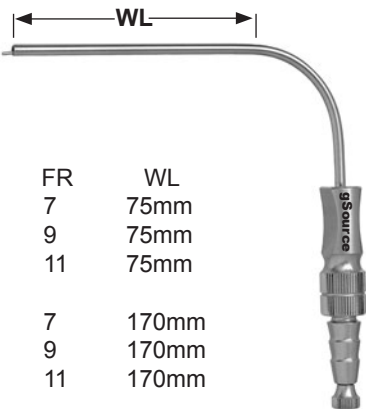
	OAL	FR	WL
gS 75.9307	9 1/2"	7	170mm
gS 75.9308	9 1/2"	8	170mm
gS 75.9309	9 1/2"	9	170mm
gS 75.9310	9 1/2"	10	170mm
gS 75.9311	9 1/2"	11	170mm
gS 75.9312	9 1/2"	12	170mm

Frazier Suction Tube
stainless, angled 75°
with stylette



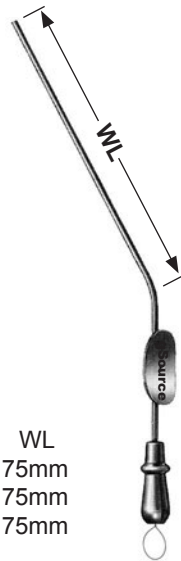
	OAL	FR	WL
gS 75.9313	6"	7	75mm
gS 75.9314	6"	9	75mm
gS 75.9315	6"	11	75mm
gS 75.9316	9"	7	170mm
gS 75.9317	9"	9	170mm
gS 75.9318	9"	11	170mm

Frazier Suction Tube
stainless, angled 90°
with stylette



	OAL	FR	WL
gS 75.9320	5 1/2"	3	75mm
gS 75.9340	5 1/2"	5	75mm
gS 75.9360	5 1/2"	7	75mm

Baron Suction Tube
stainless, angled 30°
with stylette



75-76/2 - suction tubes

OAL = Overall Length
 WL = Working Length
 FR = French gauge
 SWG = Standard Wire Gauge

	OAL	FR
gS 75.9401	8 1/2"	12
gS 75.9402	8 1/2"	15

Adson Suction Tube
 stainless, angled 20°
 with stylette

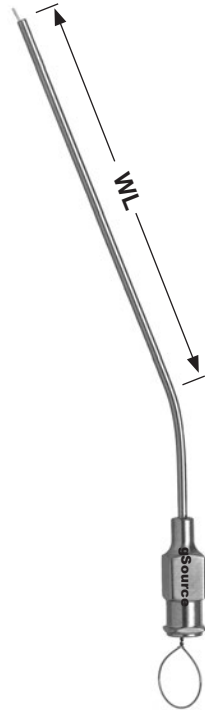


See page 75-76/3 for
 standard French gauge
 (FR) illustrations.

See page 75-76/4 for
 SWG dimensions.

	OAL	SWG	WL
gS 76.2614	4"	14	60mm
gS 76.2615	4"	15	60mm
gS 76.2616	4"	16	60mm
gS 76.2617	4"	17	60mm
gS 76.2618	4"	18	60mm
gS 76.2619	4"	19	60mm
gS 76.2620	4"	20	60mm
gS 76.2622	4"	22	60mm
gS 76.2624	4"	24	60mm
gS 76.2626	4"	26	60mm

Rosen Suction Tube
 stainless, angled 30°
 with stylette



	OAL	FR
gS 76.0990	8" angled pediatric	17
gS 76.1000	10" angled	24
gS 76.1002	9" straight	30

Poole Suction Tube
 stainless



	OAL	FR
gS 75.3124	9 1/2"	12

**Andrews-Pyncheon
 Suction Tube**
 stainless, curved



OAL = Overall Length

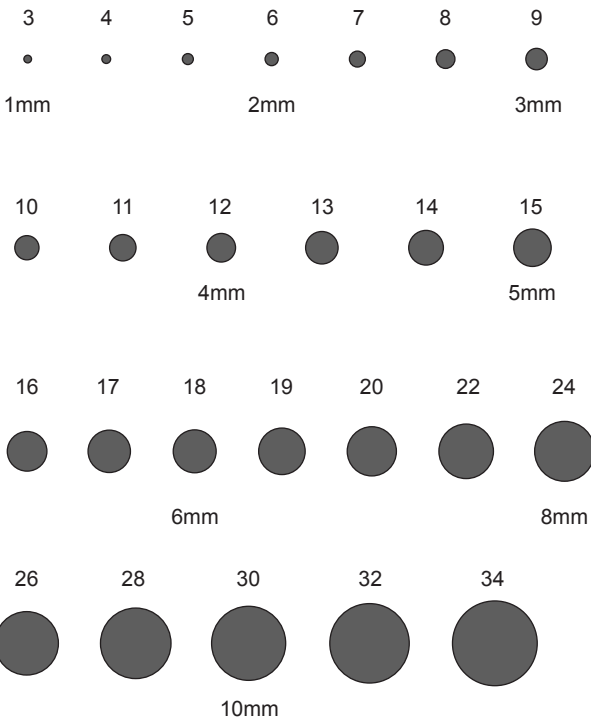
gS 75.3250 OAL 8 1/2"

Yankauer Suction Tube
stainless, pediatric
double angled



gS 75.3280 OAL 11"

Yankauer Suction Tube
stainless
double angled



French Gauge Illustrations

French Gauge Scale

FR	mm	inch
3	1.0	.039
4	1.3	.053
5	1.7	.066
6	2.0	.079
7	2.3	.092
8	2.7	.105
9	3.0	.118
10	3.3	.131
11	3.7	.144
12	4.0	.158
13	4.3	.170
14	4.7	.184
15	5.0	.197
16	5.3	.210
17	5.7	.223
18	6.0	.236
19	6.3	.249
20	6.7	.263
22	7.3	.288
24	8.0	.315
26	8.7	.341
28	9.3	.367
30	10.0	.393
32	10.7	.419
34	11.3	.445

The French Gauge System is commonly used to define the outside diameter of cylindrical medical instruments such as suction tubes. The millimeter diameter can be determined by dividing the French (FR) size by 3.

The system was developed by Joseph-Frédéric-Benoit Charrière, a 19th century Parisian maker of surgical instruments.

75-76/4 - suction tubes

75-76

SWG is the British Standard Wire Gauge, also known as Imperial Wire Gauge or British Standard Gauge.

Wire gauge is a standard for wire diameters. Each gauge has a number that represents a specific diameter of wire.

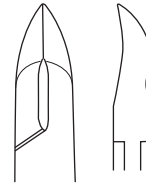
Wire gauge is measured by a device, also known as a gauge, that usually is a round circle with numbers and holes into which wires are fitted to determine their diameter.

SWG	inch	mm	SWG	inch	mm
7/0	.500	12.70	22	.0280	0.71
6/0	.464	11.79	23	.0240	0.61
5/0	.432	10.97	24	.0220	0.56
4/0	.400	10.16	25	.0200	0.51
3/0	.372	9.45	26	.0180	0.46
2/0	.348	8.84	27	.0164	0.42
1/0	.324	8.24	28	.0148	0.38
1	.300	7.62	29	.0136	0.35
2	.276	7.01	30	.0124	0.32
3	.252	6.40	31	.0116	0.30
4	.232	5.89	32	.0108	0.27
5	.212	5.39	33	.0100	0.25
6	.192	4.88	34	.0092	0.23
7	.176	4.47	35	.0084	0.21
8	.160	4.06	36	.0076	0.19
9	.144	3.66	37	.0068	0.17
10	.128	3.25	38	.0060	0.15
11	.116	2.95	39	.0052	0.13
12	.104	2.64	40	.0048	0.12
13	.092	2.34	41	.0044	0.11
14	.080	2.03	42	.0040	0.10
15	.072	1.83	43	.0036	0.09
16	.064	1.63	44	.0032	0.08
17	.056	1.42	45	.0028	0.07
18	.048	1.22	46	.0024	0.06
19	.040	1.02	47	.0020	0.05
20	.036	0.91	48	.0016	0.04
21	.032	0.81	49	.0012	0.03
			50	.0010	0.02

British Standard Wire Gauge (SWG) Dimensions

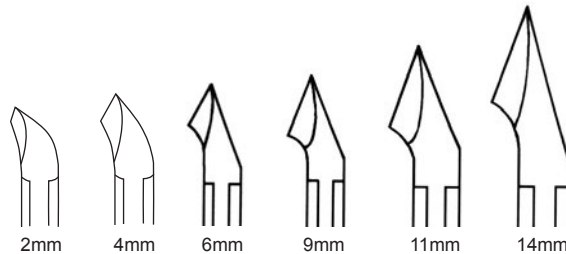
gS 77.3708 3"
gS 77.3710 4"

Cuticle Nipper
6mm
ring handle



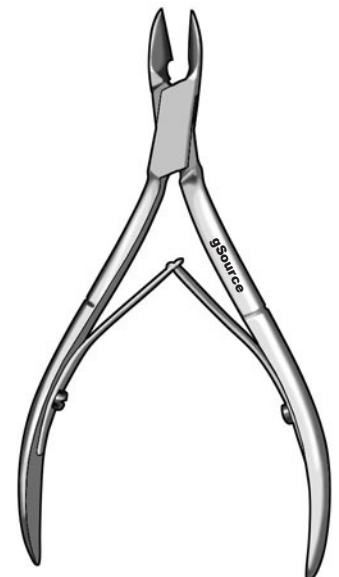
gS 77.5600 5 1/2"

Hangnail Nipper
curved concave jaw
smooth handles



gS 77.3880	4"	2mm
gS 77.3890	4"	4mm
gS 77.3900	4"	6mm
gS 77.3910	4"	9mm
gS 77.3920	4 1/2"	11mm
gS 77.3940	5"	14mm

Tissue Nipper
smooth handles



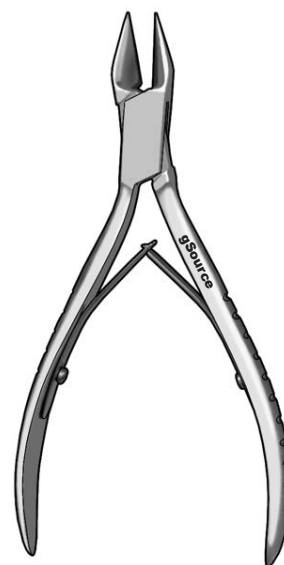
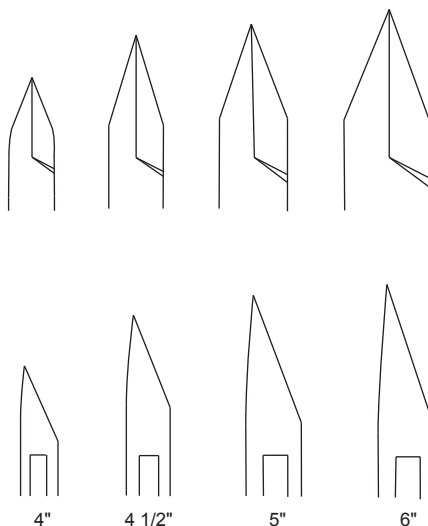
77/2 - nail splitters

77

Tapered jaw nail splitters have fine pointed tips for splitting thin nails only. If used as a nail nipper, delicate tips can become damaged.

Tips can also be blunted upon request. Please contact gSource Customer Service for more information.

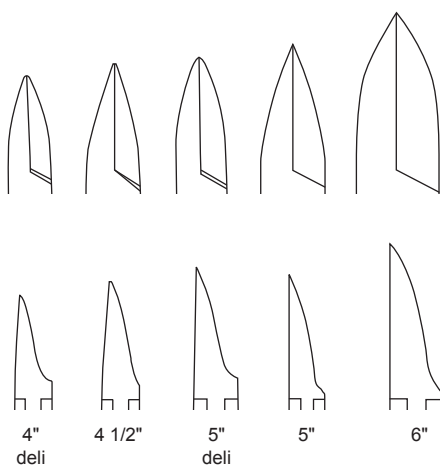
gS 77.4410 4"
gS 77.4420 4 1/2"
gS 77.4430 5"
gS 77.4440 6"



Nail Splitter
 tapered jaw
 grooved handles

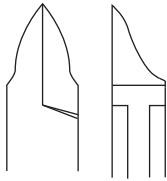
Tapered jaw nail splitters have fine pointed tips for splitting thin nails only. If used as a nail nipper, delicate tips can become damaged.

tapered jaw
gS 77.6001 4" delicate
gS 77.6003 4 1/2"
gS 77.6005 5" delicate
gS 77.6007 5"



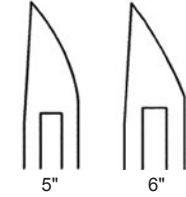
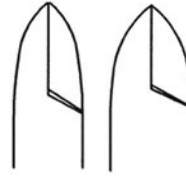
regular jaw
gS 77.6010 6"

Nail Splitter
 thin line
 smooth handles



gS 77.5040 4 3/4"

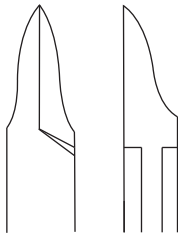
Short Jaw Nail Splitter
delicate
grooved handles



Short jaw design for
cutting thick nails.

gS 77.5010 5"
gS 77.5020 6"

Short Jaw Nail Splitter
grooved handles

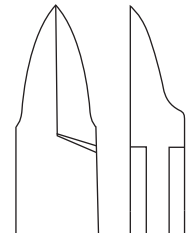


For splitting thin nails
only. Fine tips can
become damaged if
used as a nail nipper.

Compact design
provides increased
cutting power and
helps to reduce
hand fatigue.

gS 77.5050 5"

Long Jaw Nail Splitter
extra fine tip
grooved handles



For splitting thin nails
only. Fine tips can
become damaged if
used as a nail nipper.

Compact design
provides increased
cutting power and
helps to reduce
hand fatigue.

gS 77.5055 5 1/2"

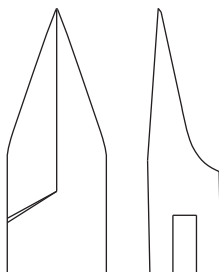
Compact Jaw Nail Splitter
fine tip
grooved handles



77/4 - nail splitters

77

Tapered jaw nail splitters have fine pointed tips for splitting thin nails only. If used as a nail nipper, delicate tips can become damaged.

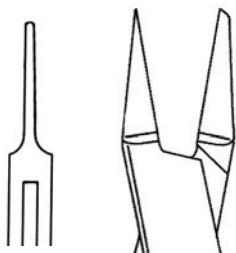


gS 77.6105 5 1/2"

gNail Splitter
tapered jaw
smooth handles

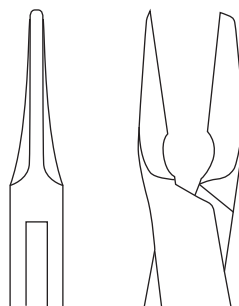
Delicate anvil design slides under nail easily.

Longer anvil design slides under nail easily.



gS 77.4480 5"

Ingrown Nail Splitter
English Anvil
smooth handles



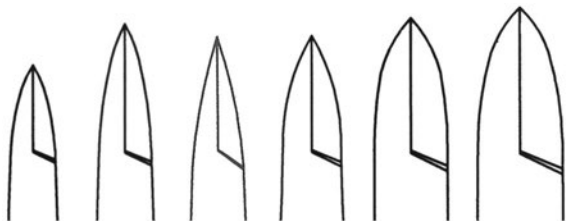
gS 77.4485 5"

Ingrown Nail Splitter
English Anvil
tapered anvil jaw
smooth handles



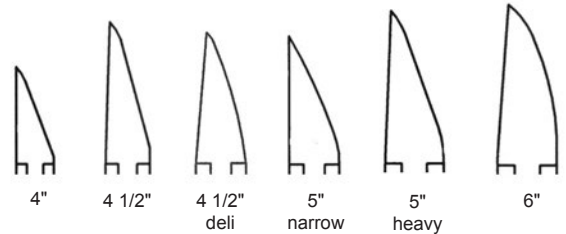
smooth handles

- gS 77.4202** 4"
- gS 77.4222** 4 1/2"
- gS 77.5482** 4 1/2" delicate
- gS 77.4270** 5" narrow
- gS 77.4262** 5" heavy
- gS 77.4402** 6"

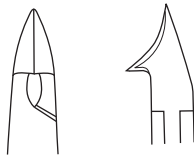


grooved handles

- gS 77.4200** 4"
- gS 77.4220** 4 1/2"
- gS 77.5480** 4 1/2" delicate
- gS 77.4260** 5" heavy
- gS 77.4400** 6"



Nail Nipper
regular jaw



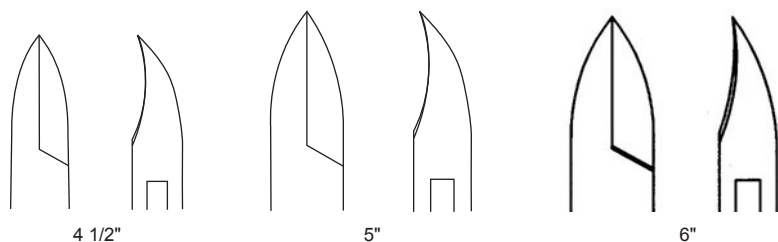
- gS 77.5340** 4"

Nail Nipper
concave, delicate jaw
smooth handles



77/6 - nail nippers

77



smooth handles

gS 77.5146 4 1/2"

gS 77.5152 5"

gS 77.5182 6"

grooved handles

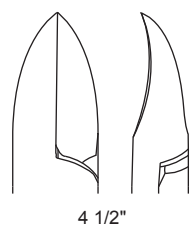
gS 77.5145 4 1/2"

gS 77.5150 5"

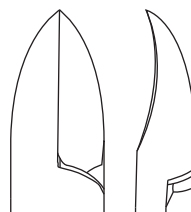
gS 77.5180 6"

Nail Nipper

concave narrow jaw



4 1/2"



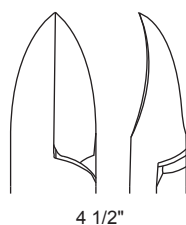
5 1/4"

gS 77.5110 4 1/2"

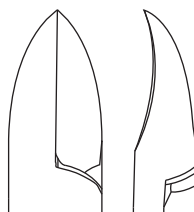
gS 77.5120 5 1/4"

Nail Nipper

concave, barrel spring
stainless, grooved handles



4 1/2"



5 1/4"

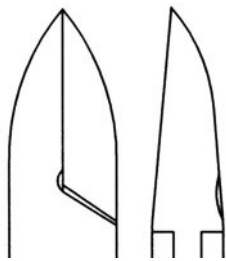
gS 77.5130 4 1/2"

gS 77.5140 5 1/4"

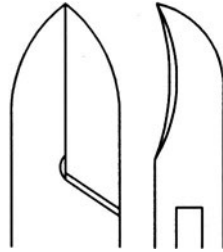
Nail Nipper

concave, leaf spring
stainless, grooved handles

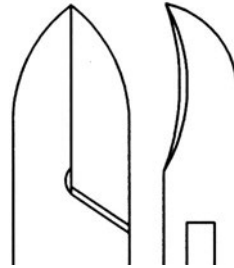




straight



concave



concave super size

smooth handles

gS 77.5300 5 1/2" concave

grooved handles

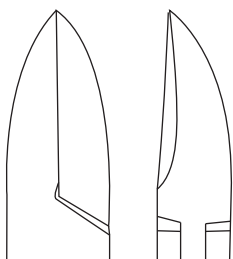
gS 77.5320 5 1/2" straight

gS 77.5301 5 1/2" concave

gS 77.5325 6 1/2" concave, super size

Nail Nipper

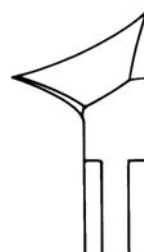
heavy jaw



gS 77.5305 5 1/2"

Nail Nipper

beveled, heavy jaw
grooved handles



gS 77.5400 5 1/2"

Nail Nipper

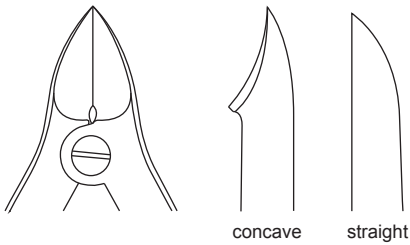
angled concave jaw
knurled handles



77/8 - nail nippers

DA = Double Action

Useful for Mycotic and Onychauxis nails.
Double action design helps prevent hand fatigue.



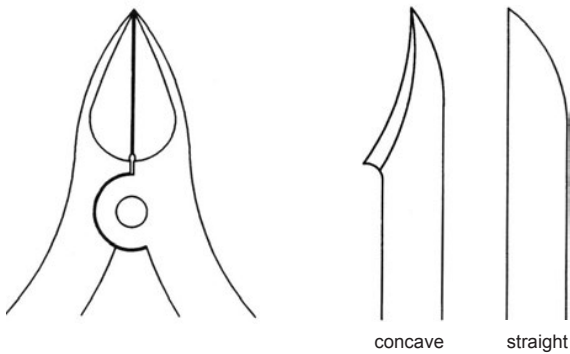
gS 77.5440 concave
gS 77.5442 straight

Mycotic Nail Nipper DA

4 3/4"
barrel spring, grooved handles



Useful for Mycotic and Onychauxis nails.
Double action design helps prevent hand fatigue.



gS 77.5460 concave
gS 77.5462 straight

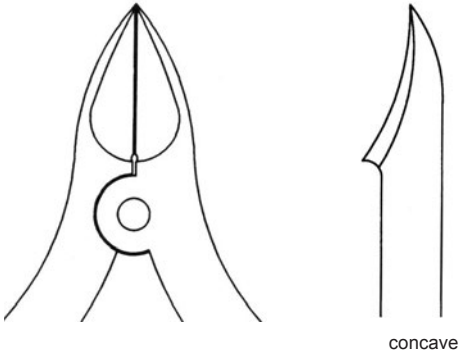
Mycotic Nail Nipper DA

6"
barrel spring, grooved handles



DA = Double Action

Useful for Mycotic and Onychauxis nails.
Double action design helps prevent hand fatigue.

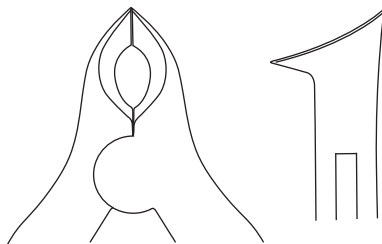


gS 77.5470 6"

Mycotic Nail Nipper DA
concave
leaf spring, knurled handles



Useful for Mycotic and Onychauxis nails.
Double action design helps prevent hand fatigue.



gS 77.5464 6"

Mycotic Nail Nipper DA
angled concave
barrel spring, grooved handles



77/10 - nail nippers and splitters

did you know... ?

The following replacement springs for gSource nippers and splitters are available from stock.

Replacement Barrel Springs (each)

gS 10.1504
gS 10.1505
gS 10.1529



Replacement Leaf Springs (pair)

gS 10.1502
gS 10.1503
gS 10.1506
gS 10.1525

gS 10.1526
gS 10.1527
gS 10.1528



gS Nail Nipper or Splitter

gS 77.3880
gS 77.3890
gS 77.3900
gS 77.3910
gS 77.3920
gS 77.3940
gS 77.4200
gS 77.4202
gS 77.4220
gS 77.4222
gS 77.4260
gS 77.4262
gS 77.4270
gS 77.4400
gS 77.4402
gS 77.4410
gS 77.4420
gS 77.4430
gS 77.4440
gS 77.4480
gS 77.4485
gS 77.5010
gS 77.5020
gS 77.5040
gS 77.5050
gS 77.5055
gS 77.5110
gS 77.5120
gS 77.5130

gS Replacement Spring Needed

gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1528
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1526
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1529
gS 10.1529
gS 10.1525

gS Nail Nipper or Splitter

gS 77.5140
gS 77.5145
gS 77.5146
gS 77.5150
gS 77.5152
gS 77.5180
gS 77.5182
gS 77.5300
gS 77.5301
gS 77.5305
gS 77.5320
gS 77.5325
gS 77.5340
gS 77.5400
gS 77.5440
gS 77.5442
gS 77.5460
gS 77.5462
gS 77.5464
gS 77.5470
gS 77.5480
gS 77.5482
gS 77.5600
gS 77.6001
gS 77.6003
gS 77.6005
gS 77.6007
gS 77.6010
gS 77.6105

gS Replacement Spring Needed

gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1525
gS 10.1502
gS 10.1525
gS 10.1504
gS 10.1504
gS 10.1505
gS 10.1505
gS 10.1505
gS 10.1505
gS 10.1527
gS 10.1525
gS 10.1525
gS 10.1503
gS 10.1502
gS 10.1506
gS 10.1502
gS 10.1526
gS 10.1525
gS 10.1525

Please contact gSource Customer Service for availability of replacement springs for gSource nipper and splitter part numbers not listed above.

stainless steel k-wires - 78-79/1

Double Trocar

Smooth



diameter		4"	5"	6"	9"	12"
0.7mm	[.028"]	gS 78.2000	gS 78.2050	gS 78.1210	gS 78.2105	gS 78.2200
0.9mm	[.035"]	gS 78.2010	gS 78.2060	gS 78.1220	gS 78.2110	gS 78.2210
1.1mm	[.045"]	gS 78.2020	gS 78.2070	gS 78.1230	gS 78.2120	gS 78.2220
1.4mm	[.054"]	gS 78.2040	gS 78.2080	gS 78.1240	gS 78.2140	gS 78.2240
1.6mm	[.062"]	gS 78.2030	gS 78.2090	gS 78.1250	gS 78.2130	gS 78.2230

Full Thread



diameter		4"	5"	6"	9"	12"
1.6mm	[.062"]	gS 78.4210	gS 78.4220	gS 78.4230	gS 78.4030	gS 78.4035

Single Trocar

Smooth / Round End



diameter		4"	5"	6"	9"	12"
0.7mm	[.028"]	gS 78.2300	gS 78.2700	gS 78.2800	gS 78.2500	gS 78.2600
0.9mm	[.035"]	gS 78.2310	gS 78.2710	gS 78.2810	gS 78.2510	gS 78.2610
1.1mm	[.045"]	gS 78.2320	gS 78.2720	gS 78.2820	gS 78.2520	gS 78.2620
1.4mm	[.054"]	gS 78.2330	gS 78.2740	gS 78.2840	gS 78.2540	gS 78.2640
1.6mm	[.062"]	gS 78.2340	gS 78.2750	gS 78.2850	gS 78.2530	gS 78.2630

Partial Thread 25mm / Round End



diameter		4"	5"	6"	9"	12"
1.6mm	[.062"]	gS 78.9110	gS 78.9112	gS 78.9114	gS 78.9116	gS 78.9118

Full Thread / Round End



diameter		4"	5"	6"	9"	12"
1.6mm	[.062"]	gS 78.4080	gS 78.4085	gS 78.4090	gS 78.4100	gS 78.4110

Double Diamond

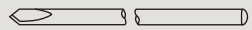
Smooth



diameter		4"	5"	6"	9"	12"
0.7mm	[.028"]	gS 78.3000	gS 78.3050	gS 78.1300	gS 78.3100	gS 78.3200
0.9mm	[.035"]	gS 78.3010	gS 78.3060	gS 78.1310	gS 78.3110	gS 78.3210
1.1mm	[.045"]	gS 78.3020	gS 78.3070	gS 78.1320	gS 78.3120	gS 78.3220
1.4mm	[.054"]	gS 78.3030	gS 78.3080	gS 78.1340	gS 78.3140	gS 78.3230
1.6mm	[.062"]	gS 78.3040	gS 78.3090	gS 78.1330	gS 78.3130	gS 78.3240

Single Diamond

Smooth / Round End



diameter		4"	5"	6"	9"	12"
0.7mm	[.028"]	gS 78.3300	gS 78.3341	gS 78.3350	gS 78.3400	gS 78.3500
0.9mm	[.035"]	gS 78.3310	gS 78.3342	gS 78.3360	gS 78.3410	gS 78.3510
1.1mm	[.045"]	gS 78.3320	gS 78.3344	gS 78.3370	gS 78.3420	gS 78.3520
1.4mm	[.054"]	gS 78.3330	gS 78.3346	gS 78.3380	gS 78.3440	gS 78.3525
1.6mm	[.062"]	gS 78.3340	gS 78.3348	gS 78.3390	gS 78.3430	gS 78.3530

An internal fixation device, such as the K-wires, Steinmann Pins and cerclage wires shown in this section, must never be reused. They are intended for single use only.

Stainless Steel

Kirschner Wires

6 wires per package
non-sterile



Precision ground from certified implant stainless steel.



Smooth tapered points are expertly machined for easier penetration.



Please inquire about the availability of any size and style not shown on this page.



78-79/2 - stainless steel steinmann pins

78-79

Double Trocar		Smooth		Full Thread
				
diameter		9"	12"	9"
2.0mm	[.079"]	gS 78.5500	gS 78.5720	gS 78.8500
2.4mm	[.094"]	gS 78.5530	gS 78.5724	gS 78.8530
2.8mm	[.110"]	gS 78.5560		gS 78.8560
3.2mm	[.126"]	gS 78.5590		gS 78.8590
3.5mm	[.138"]	gS 78.5620		gS 78.8620
4.0mm	[.157"]	gS 78.5650		gS 78.8650
4.5mm	[.177"]	gS 78.5680		gS 78.8680
6.35mm	[.250"]	gS 78.5698		

Single Trocar / Round End		Smooth		Threaded
				
diameter		9"	12"	9"
2.0mm	[.079"]	gS 78.6100	gS 78.5820	gS 78.8700
2.4mm	[.094"]	gS 78.6130	gS 78.5824	gS 78.8730
2.8mm	[.110"]	gS 78.6160		gS 78.8760
3.2mm	[.126"]	gS 78.6190		gS 78.8780
3.5mm	[.138"]	gS 78.6220		gS 78.8820
4.0mm	[.157"]	gS 78.6250		gS 78.8850
4.5mm	[.177"]	gS 78.6280		gS 78.8880
6.35mm	[.250"]	gS 78.6288		

Double Diamond		Smooth		Full Thread
				
diameter		9"		9"
2.0mm	[.079"]	gS 78.7000		gS 78.8300
2.4mm	[.094"]	gS 78.7030		gS 78.8330
2.8mm	[.110"]	gS 78.7060		gS 78.8360
3.2mm	[.126"]	gS 78.7090		gS 78.8390
3.5mm	[.138"]	gS 78.7120		gS 78.8420
4.0mm	[.157"]	gS 78.7150		gS 78.8450
4.5mm	[.177"]	gS 78.7180		gS 78.8480

Single Diamond / Round End		Smooth		Threaded
				
diameter		9"		9"
2.0mm	[.079"]	gS 78.7780		gS 78.8000
2.4mm	[.094"]	gS 78.7630		gS 78.8030
2.8mm	[.110"]	gS 78.7660		gS 78.8060
3.2mm	[.126"]	gS 78.7690		gS 78.8090
3.5mm	[.138"]	gS 78.7720		gS 78.8120
4.0mm	[.157"]	gS 78.7750		gS 78.8150
4.5mm	[.177"]	gS 78.7782		gS 78.8180

An internal fixation device, such as the K-wires, Steinmann Pins and cerclage wires shown in this section, must never be reused. They are intended for single use only.

Stainless Steel Steinmann Pins

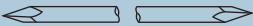
6 wires per package
non-sterile

Precision ground from certified implant stainless steel.

Smooth tapered points are expertly machined for easier penetration.

Please inquire about the availability of any size and style not shown on this page.

titanium k-wires and stainless steel cerclage wires - 78-79/3

Double Trocar		Smooth			
		diameter		4"	6"
	0.6mm	[.024"]		gS 79.2106	gS 79.2306
	1.0mm	[.039"]		gS 79.2110	gS 79.2310
	1.2mm	[.047"]		gS 79.2112	gS 79.2312
	1.5mm	[.059"]		gS 79.2115	gS 79.2315
	1.6mm	[.062"]		gS 79.2116	gS 79.2316
	1.8mm	[.070"]		gS 79.2118	gS 79.2318

- Titanium K-wires are lightweight and have a high tensile strength especially useful under repeated load stresses and capable of withstanding strain during internal fixation.
- Titanium is non-magnetic, biocompatible, and corrosion resistant.

**Titanium
Kirschner Wires**
1 wire per package
non-sterile

An internal fixation device, such as the K-wires, Steinmann Pins and cerclage wires shown in this section, must never be reused. They are intended for single use only.

Precision ground from certified implant titanium.
Smooth tapered points are expertly machined for easier penetration.
Please inquire about the availability of any size and style not shown on this page.

	diameter	gauge
gS 79.2002	0.2mm	36
gS 79.2003	0.3mm	30
gS 79.2004	0.4mm	27
gS 79.2005	0.5mm	25
gS 79.2006	0.6mm	23
gS 79.2007	0.7mm	22
gS 79.2008	0.8mm	21
gS 79.2009	0.9mm	20
gS 79.2010	1.0mm	19
gS 79.2012	1.2mm	18
gS 79.2015	1.5mm	17



**Stainless Steel
Cerclage Wires**
1 roll per package
10 meters in length
non-sterile

An internal fixation device, such as the K-wires, Steinmann Pins and cerclage wires shown in this section, must never be reused. They are intended for single use only.

78-79/4 - k-wires, steinmann pins, cerclage wires

did you know... ?

Since their introduction, Kirschner wires (also known as K-wires) have been used extensively throughout the body to help reduce and stabilize fractures, osteotomies, and fusions. They are considered a versatile tool in the hands of orthopedic and plastic surgeons. gSource provides surgeons with a wide selection of K-wires in various styles and sizes, as shown on pages 1 and 3 in this section.

In 1908, Swiss surgeon Fritz Steinmann improved the technique of reducing fractures by directing the realigning force directly onto the bone. Dr. Steinmann initially used a perforating pin with a sharp tip to pierce the skin on both sides as it went in and out to transfix the bone in the transverse axis. Due to the problem of infection when the pin was removed, he suggested two pins be inserted into the bone from both sides only piercing the skin once.

German surgeon Rudolf Klapp introduced the use of a thin, flexible wire for treatment of lower extremity fractures using traction. He burred a hole into the calcaneum and inserted the wire through it. To avoid direct surface-skin-bone contact, the wire was directed towards the plantar surface and penetrated the skin in the area through separate incisions.

When German surgeon Martin Kirschner became aware of these techniques and developments, he contributed to the technique of applying traction directly to the bone and published his first series of cases in 1909. Dr. Kirschner combined the advantages of wire and pin extension techniques. He inserted a thin wire directly into the bone, minimizing the size of the skin wounds and damage to the bone, and designed the wire to be rigid enough in order to avoid transverse wire movement.

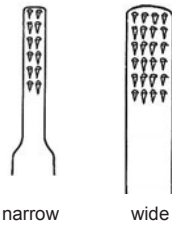
Although Dr. Kirschner developed the wire technique, he used it exclusively for traction treatment. The first paper suggesting the use of the Kirschner wires for fracture fixation was published by Otto Loewe in 1932. In the same year, Rene Sommer described percutaneous wires to fix fractures with different patterns (transverse, oblique, complex), as well as dislocations of the acromio-clavicular joint. The ability to facilitate implant removal, avoid excessive dissection, and avoid strangulation of bone as in cerclage wiring were the main advantages of this technique according to Dr. Loewe.

Dr. Kirschner was born in 1870 in Breslau (now Wroclaw, Poland). He attended the universities of Friburg, Strasbourg (in France), Zurich and Munich, graduating in 1904. He went to Berlin for postgraduate studies under Rudolf von Renvers. Between 1908 and 1910 he was at the university surgical clinic in Greifswald under Erwin Payr, then went to Königsberg to work with Dr. Payr and Paul Leopold Friedrich. Three years later he started work in Leipzig (Germany). He first experienced war surgery during a Red Cross expedition to Sofia and Adrianopol in 1912-1913. Later he worked as a surgeon on the Western Front in the First World War during 1914-1915. He was appointed professor of surgery at Königsberg in 1916. From 1927 to 1934 he was head of the department of surgery in Tübingen (Germany) and in 1934 he was elected President of the German Society of Surgery. He passed away in 1942.

His scientific research and academic interests addressed topics covered by several specialties such as general surgery, orthopedic surgery, neurosurgery, urology, anesthesiology and even plastic surgery. In orthopedics, he remains renowned for skeletal tractions, bone elongations, and invention of thin wire. He described tourniquet application. In 1924, he performed the first successful pulmonary artery embolectomy. His skills contributed significantly to cancer surgery of the stomach, colon and rectum. He was able to mobilize the stomach without vascular compromise in order to use for esophagoplasty (plastic surgery for the repair or reconstruction of the esophagus). He modified the Bassini technique for inguinal hernia repair in order to reduce the recurrence rate. He also modified the technique of craniotomy that was used at the time and contributed to neurosurgery with his proposals for the treatment of cortical epilepsy. His impact on plastic surgery was comparably important as he modified the Langenbeck technique for cleft palate repair. He published several articles on wound healing and infection, and changed the current techniques of anesthesiology in 1931 when he presented a technique of spinal anesthesia which was individually adjustable in dosage and level of anesthesia.

gSource K-Wire and Pin Dispensers on pages 1-2 in Section 98-99 are handy containers for storing and dispensing K-Wires and Steinmann Pins.

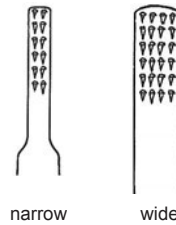
gRacks for 4" and 6" K-Wires and 9" K-Wires and Steinmann Pins on pages 5-6 in Section 98-99 are convenient for organization and storage of various diameter sizes.



Alligator teeth on jaws provide a secure grip for nail removal.

gS 81.8510 narrow
gS 81.8520 wide

Platypus Nail Pulling Forceps
5 1/2"

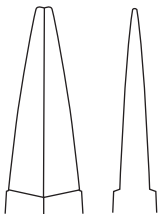


gS 81.8530 narrow
gS 81.8540 wide

Platypus Nail Pulling Forceps
5 1/2", leaf spring



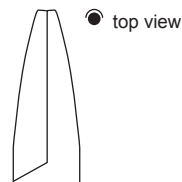
81



For cerclage wire.

gS 81.3360 5 1/2"

Round Nose Pliers
smooth 1mm tip
delicate



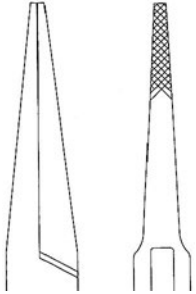
For cerclage wire.

gS 81.3370 5 1/2"

Needle Nose Pliers
one round 2mm tip
delicate



81/2 - pliers



For cerclage wire.

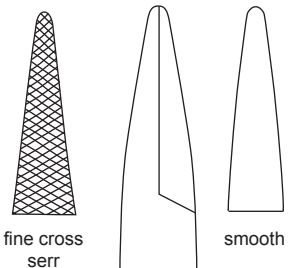
gS 81.3480 6"

Flat Nose Pliers
delicate jaw tapers to 2mm



gS 81.3460 5 1/2"

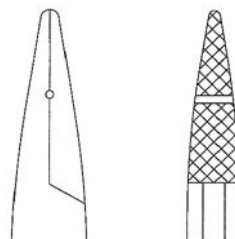
Flat Nose Pliers
serrated jaw 5mm tip



gS 81.3220 fine cross
serrations

gS 81.3225 smooth

Needle Nose Pliers
5 1/2"
tapers to 2mm tip



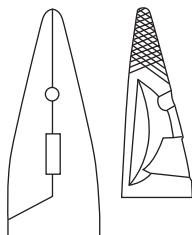
For cerclage wire.

gS 81.3214 5 1/4"

Needle Nose Pliers
delicate with wire groove
tapers to 2mm tip



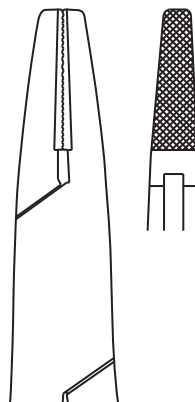
TC = Tungsten Carbide



For cerclage wire.
max cap 17 gauge [1.5mm]

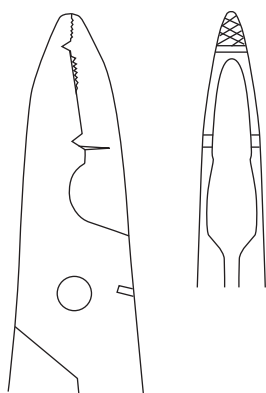
gS 81.3290 5 1/2"

Cerclage Pliers with Cutter
side groove and cutting edge



gS 81.3330 6 1/2"

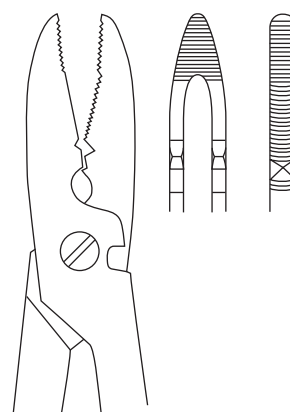
Universal Bending Pliers
TC serrated jaw
tapers to 3.5mm at tip



For cerclage wire.
max cap 20 gauge [0.9mm]

gS 81.3315 6"

Wire Bending Pliers with Cutter
notched, serrated jaw



max cap 1.6mm [.062"]

gS 81.3320 6"

Wire Bending Pliers with TC Cutter
notched, serrated, slotted jaw



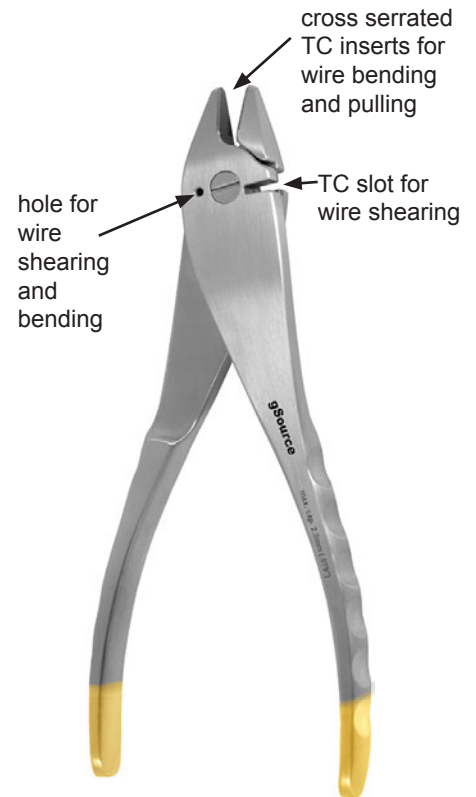
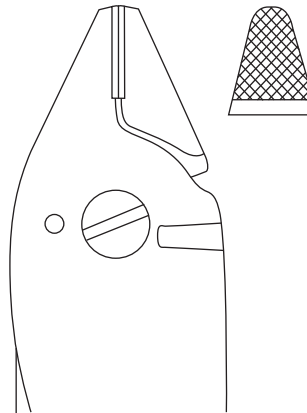
81/4 - pliers

3 functions in 1 versatile instrument.

- 1) Shears wires with ease and provides a clean cut without burns or sharp edges.
- 2) Bends wires quickly and easily.
- 3) Cross serrated TC (tungsten carbide) inserts ensure a secure grip on wires for pulling.

Features:

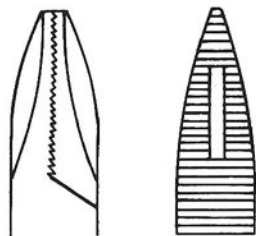
- TC in jaws and cutter.
- Grooved handles are ergonomically designed for a comfortable and secure grip.
- Made from German stainless steel.



gS 81.3380 8"

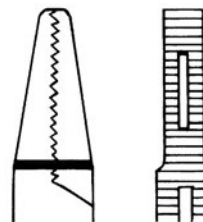
Wire Bending Pliers with Cutter

TC jaw and cutter
max cap 2.0mm [.079"]



gS 81.3450 5 1/2"

Needle Nose Pliers serrated jaw 2mm tip

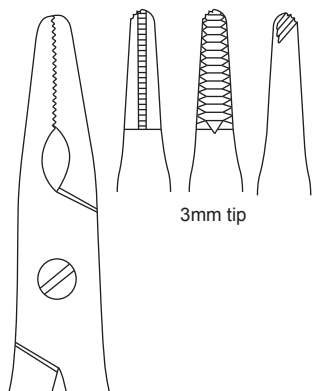


gS 81.3462 5 1/2"

Flat Nose Pliers serrated jaw 5mm tip



TC = Tungsten Carbide



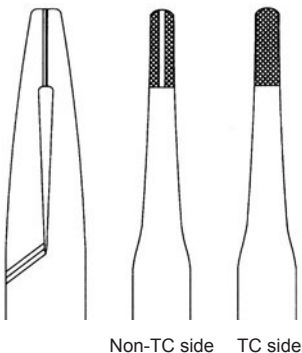
gS 81.3540 5" 3mm tip
gS 81.3542 7" 4mm tip

Pin Extraction Pliers
with excavating tip and
screw lock



gS 81.3546 7 1/2"

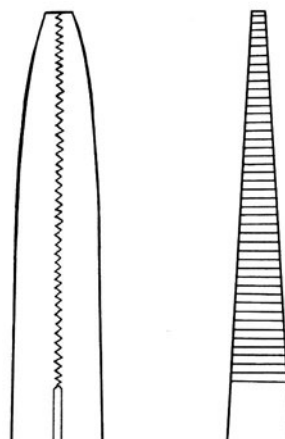
Screw and Pin Removing Pliers
with speedlock and TC inserts for
3.0/4.5 screws/pins



One side has TC insert.
Grooved non-TC side
helps grip small pins.

gS 81.6780 5 1/2"

Pin Puller
TC insert
tapers to 3mm at tip



Long delicate needle nose
jaws for hard-to-reach sites.

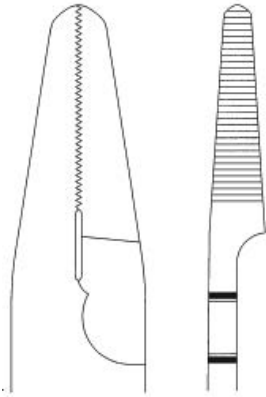
gS 81.3610 7"

Long Jaw Pliers
2" long delicate jaw
tapers to 2mm at tip



81/6 - pliers

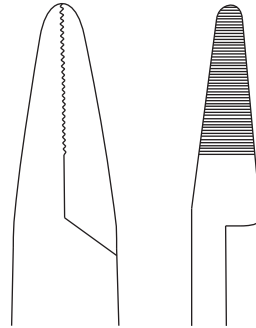
TC = Tungsten Carbide



For cerclage wire.
max cap 17 gauge [1.5mm]

gS 81.3490 6 1/2"

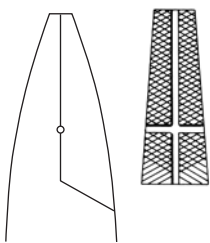
Flat Nose Pliers with Cutter
tapers to 3.5mm at tip



Heavy jaws for
pulling wires and pins.

gS 81.3530 7 1/2"

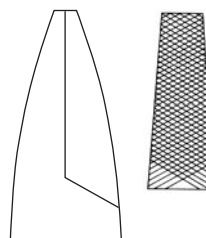
Narrow Nose Pliers
tapers to 3.5mm at tip



Grooves for pulling
wires.

gS 81.3464 7"

Flat Nose Pliers
with grooves



Flat jaws with cross serrated
surface for pulling wires.

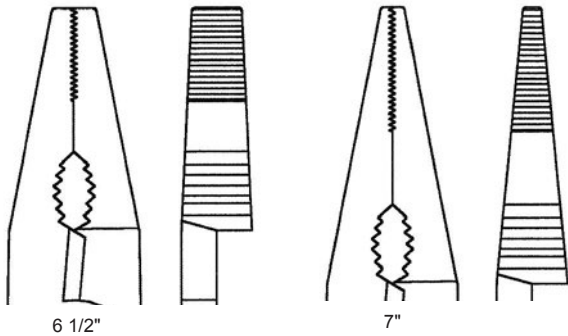
gS 81.3466 7"

Flat Nose Pliers
serrated jaws



TC = Tungsten Carbide
PEEK = Polyether Ether Ketone

pliers - 81/7

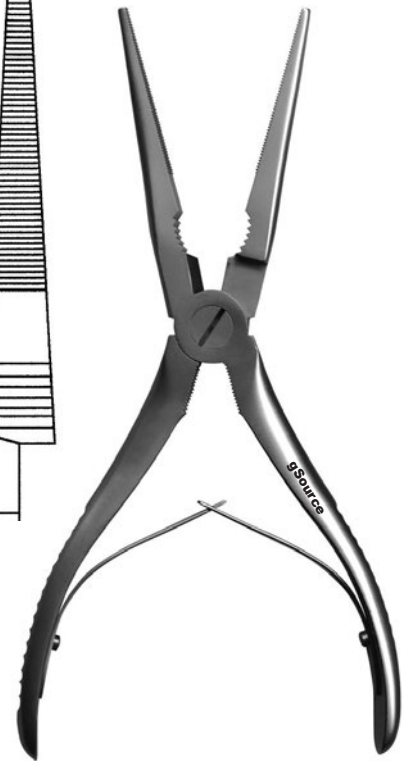
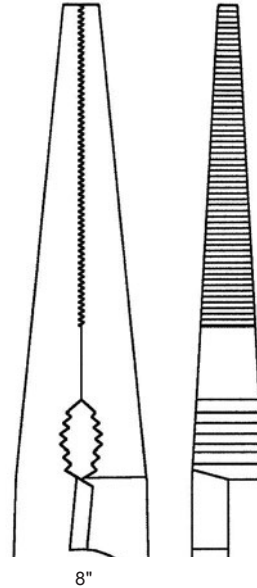


- Combination pliers and wire cutter.
- Precision serrated jaws produce firm and secure gripping action.
- TC welded jaws cut all sizes of cerclage wire and k-wire up to 1.1mm [.045"].
- Heavy duty spring for strong return.

gS 81.3716 6 1/2" square 7mm jaw
gS 81.3717 7" tapers to 2mm at tip
gS 81.3720 8" needle nose 2" long jaw tapers to 2mm at tip

Universal Pliers

TC serrated jaws with spring and cutting edge
1.1mm [.045"] max cap



81

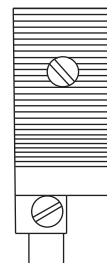


All purpose pliers for wires, pins, screws, and rods.

gS 81.3620 8"

Slip Joint Pliers

heavy duty
2" max opening



Replaceable PEEK inserts on jaws helps to eliminate metal-to-metal contact.

Helps to grasp an implant or other delicate materials and devices, without scratching or impairing their surface.

gS 81.3630 8"

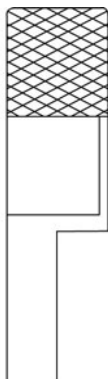
gPliers, Slip Joint

with PEEK inserts
2" max opening



81/8 - pliers/locking pliers

TC = Tungsten Carbide



Heavy duty pliers for wires, pins, screws, and rods.

gS 81.7060 8 1/2"

Lineman Pliers

heavy duty with cutting edge
max cap 1.6mm [.062"]

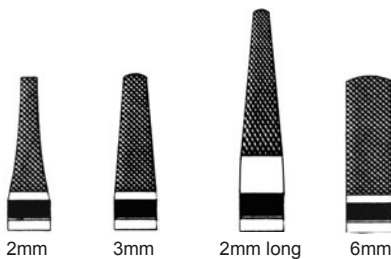


Double action power combined with TC inserts makes these pliers ideal for heavy use.

TC inserts are harder and longer lasting than regular stainless steel.

Pliers with 2mm jaws can be used to remove up to 1.6mm [.062"] k-wires from hard-to-reach areas.

Pliers with 3mm and 6mm jaws can be used to grasp all sizes of wires and pins.



gS 81.6720 2mm delicate jaw

gS 81.6730 3mm jaw

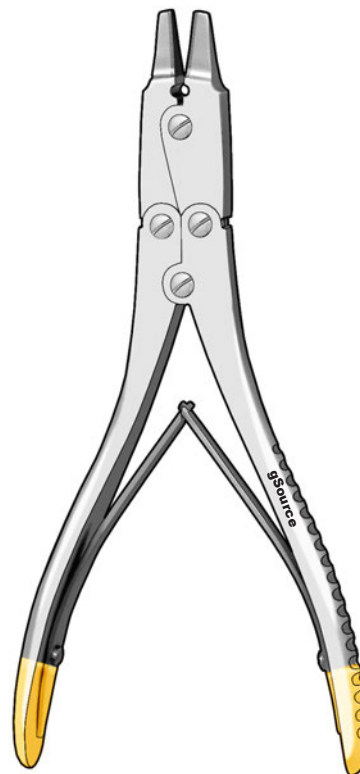
gS 81.6733 2mm long jaw

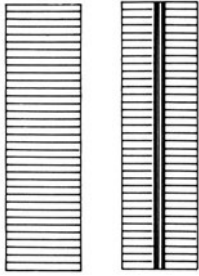
gS 81.6740 6mm jaw

Double Action Wire Extraction Pliers

7"

TC inserts





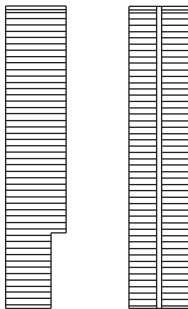
Parallel jaws with one grooved side provides extraordinary gripping power.

gS 81.7040 7 1/4"

Parallel Pliers
10mm jaw



81

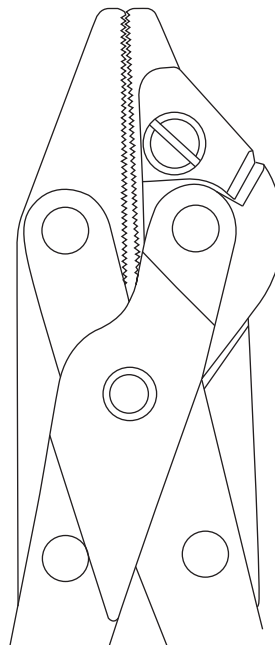


Parallel jaws with one grooved side provides extraordinary gripping power.

Side cutting jaws for k-wire up to 1.6mm [.062"]. Angle makes cutting easier.

gS 81.7050 7 1/4"

Parallel Pliers with Cutter
max cap 1.6mm [.062"]
10mm jaw



81/10 - locking pliers

81



- Heavy duty locking jaws.
- Crafted from German stainless steel.
- Reinforced side construction reduces play in jaws.
- Size of jaw opening is controlled by adjustment screw.
- Self-locking lever with one-handed release.

gS 81.7070 7" small
gS 81.7080 8" medium
gS 81.7095 9 1/2" large

Locking Pliers



- Heavy duty locking jaws.
- Long jaw for those hard-to-reach places.
- Crafted from German stainless steel.
- Reinforced side construction reduces play in jaws.
- Size of jaw opening is controlled by adjustment screw.
- Self-locking lever with one-handed release.
- One v-groove jaw helps hold pins securely.

gS 81.7108 8 1/2" small

gS 81.7110 10" medium

gS 81.7112 12" large

Needle Nose Locking Pliers

81/12 - locking pliers

81



- Implants are removed more effectively with well-engineered slaphammer attachments.
- Force is applied directly in line with jaws providing more control during implant removal.
- Stable three point contact reduces the possibility of twisting or turning.
- Interchangeable slaphammer can be used with two different pliers.
- German stainless steel.

small pliers

gS 81.7138 7" regular jaw

gS 81.7144 8 1/2" needle nose jaw

medium pliers

gS 81.7140 8" regular jaw

gS 81.7145 10" needle nose jaw

large pliers

gS 81.7142 9 1/2" regular jaw

gS 81.7146 12" needle nose jaw

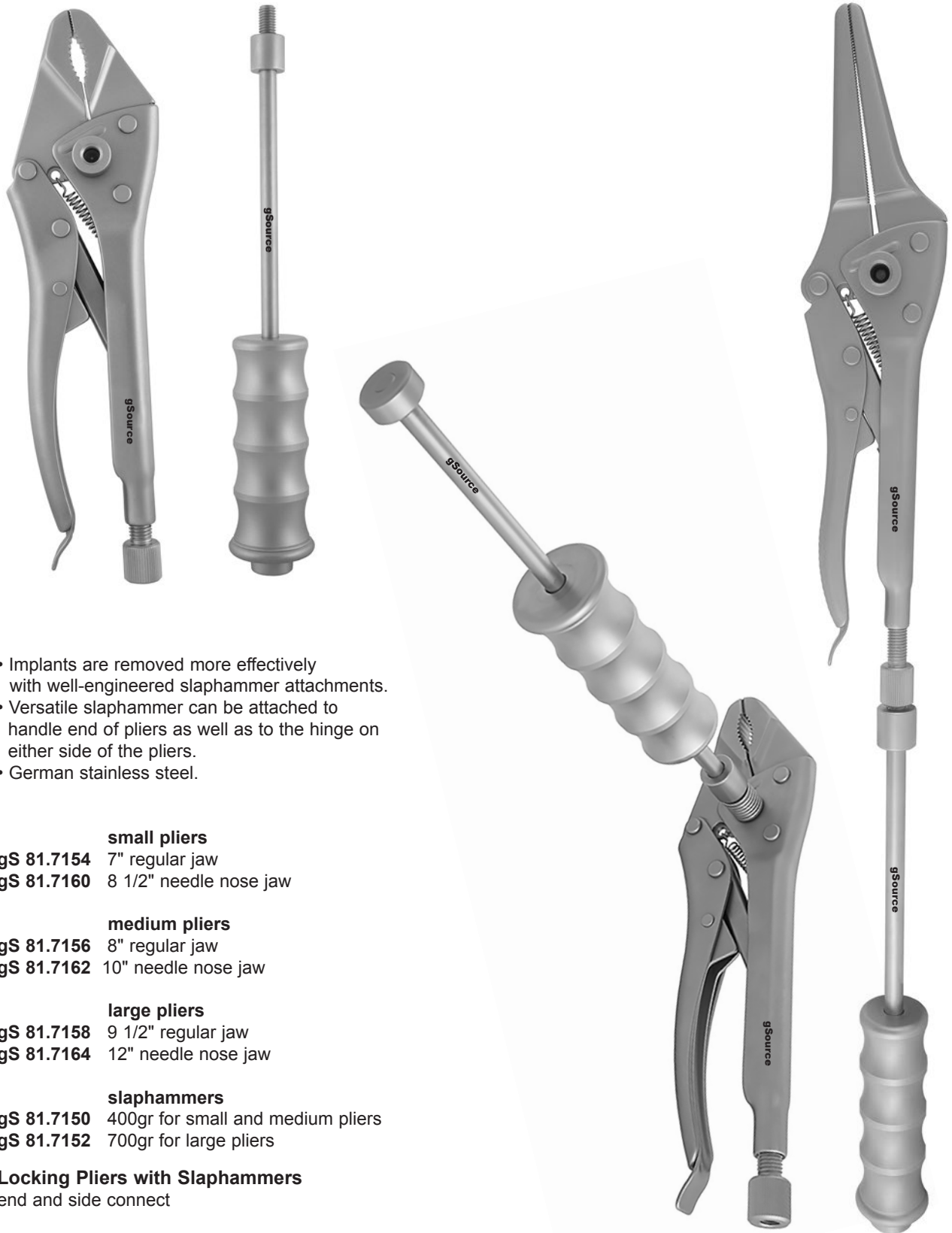
slaphammers

gS 81.7128 400gr for small pliers

gS 81.7130 400gr for medium pliers

gS 81.7132 700gr for large pliers

Locking Pliers with Slaphammers



- Implants are removed more effectively with well-engineered slaphammer attachments.
- Versatile slaphammer can be attached to handle end of pliers as well as to the hinge on either side of the pliers.
- German stainless steel.

small pliers

gS 81.7154 7" regular jaw

gS 81.7160 8 1/2" needle nose jaw

medium pliers

gS 81.7156 8" regular jaw

gS 81.7162 10" needle nose jaw

large pliers

gS 81.7158 9 1/2" regular jaw

gS 81.7164 12" needle nose jaw

slaphammers

gS 81.7150 400gr for small and medium pliers

gS 81.7152 700gr for large pliers

Locking Pliers with Slaphammers

end and side connect

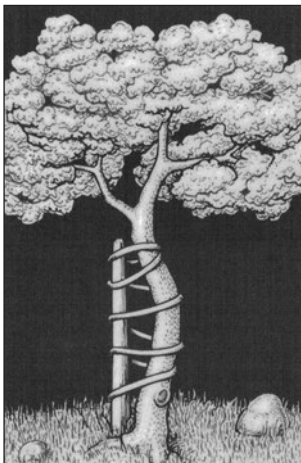
did you know... ?

The Greek roots of the word "orthopaedics" are *ortho* (straight) and *pais* (child). Early orthopaedists often used braces or other forms of treatment to help children suffering from spine and limb deformities in an effort to make the child "straight".

The history of Orthopedics as a discipline began in the 18th century, marked by the publication of a monograph by French physician Nicolas Andry, Dean of the Faculty of Medicine of the College de France (Paris, 1741) entitled: "L'Orthopedie, ou l'art de prevenir et de corriger dans les enfans, les difformites du corp". This title translates to: "Orthopaedia: or the Art of Correcting and Preventing Deformities in Children".

Dr. Andry was 83 years old at the time his work was published. He was interested in matters of the bones as he encountered many children with bone and limb deformities. At the time, these were common childhood conditions due to a wide array of public health crises ranging from congenital syphilis to rickets. This inspired him to spend years working to correct and prevent these problems in children because he recognized that the malleable nature of a child's skeletal system offered physicians a unique opportunity for early intervention.

His published work was also the source of one of the most famous and recognizable symbols within medicine, drawn by Dr. Andry's collaborator and illustrator, Antoine Humblot. The picture of a crooked trunk of a tree tied to a stake, allowing it to resume normal growth once again, became a visual metaphor for the treatment of skeletal injuries and deformities. An important basic orthopedic principle is depicted by the drawing of the tree: bone is not an inert material, but a dynamic structure that responds to stimuli.



Bones may become deformed for many reasons. These include congenital (from birth), developmental (from abnormal growth during childhood), and posttraumatic (from healing in a deformed position after a fracture). Bones may be deformed in four ways: angulation (a bend in the bone), rotation or torsion (a twist in the bone), translation or displacement (a shift in the position of the bone after a fracture or osteotomy), or limb length discrepancy (a difference in the length of a bone compared with the other side).

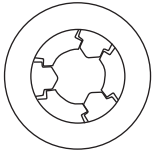
Osteogenesis imperfecta (OI) literally means "imperfectly formed bone". People with osteogenesis imperfecta have a genetic defect that impairs the body's ability to make strong bones. One of the genes that tells the body how to make a specific protein does not function. This protein (type I collagen) is a major component of the connective tissues in bones. Type I collagen is also important in forming ligaments, teeth, and the white outer tissue of the eyeballs (sclera). As a result of the defective gene, not enough type I collagen is produced, or the collagen that is produced is of poor quality. In either case, the result is fragile bones that break easily but can heal at a normal rate. There are several types of osteogenesis imperfecta and they vary in severity and characteristics:

Type I is the most common and mildest form. While the structure of the collagen is normal, there is less collagen than there should be. There is little or no bone deformity, although the bones are fragile and easily broken. Teeth are prone to cavities and cracking. The whites of the eyes may have a blue, purple, or gray tint.

Type II is the most severe form. The collagen does not form properly. Bones may break even while the fetus is in the womb. Many infants with type II do not survive.

Type III also has improperly formed collagen and often severe bone deformities, plus additional complications. The infant is often born with fractures. The whites of the eyes may be white, blue, purple, or gray. People with type III are generally shorter than average and may have spinal deformities, respiratory complications, and brittle teeth.

Type IV is moderately severe, with improperly formed collagen. Bones fracture easily, but the whites of the eyes are normal. Some people with type IV may be shorter than average and may have brittle teeth. Bone deformities are mild to moderate.

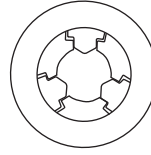


Keyless chuck for insertion and removal of steinmann pins.

Cannulation max cap: 6.0mm
Chuck max cap: 6.1mm

gS 82.0020 5" reverse lock

Universal Chuck
cannulated



Keyless chuck for insertion and removal of steinmann pins.

Cannulation max cap: 5.0mm
Chuck max cap: 6.1mm

gS 82.0030 5 1/4"

Universal Chuck
cannulated



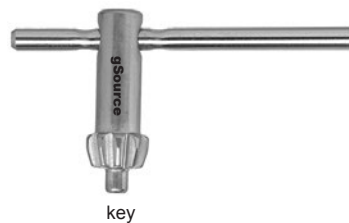
Chuck for insertion and removal of steinmann pins includes separate chuck key.

Cannulation max cap: 5.0mm
Chuck max cap: 7.0mm

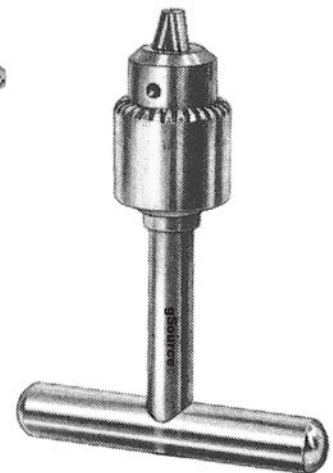
gS 82.4740 4" chuck with key

gS 82.4741 key only

Steinmann Pin Chuck
cannulated, with key



key



82/2 - wire and pin management

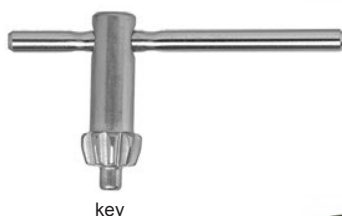
Chuck for insertion and removal of steinmann pins includes separate chuck key.

Cannulation max cap: 4.0mm

Chuck max cap: 7.0mm

Biocompatible silicone handle helps to prevent slippage and provide a secure grip.

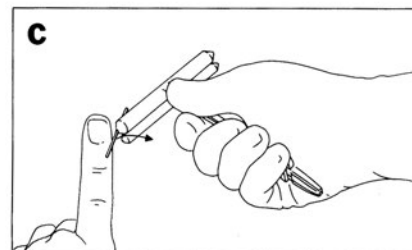
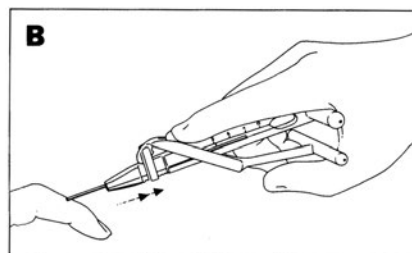
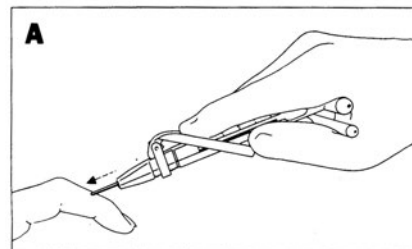
gS 82.4731 black
gS 82.4732 blue
gS 82.4733 red
gS 82.4734 green
gS 82.4735 yellow
gS 82.4736 orange
gS 82.4737 grey



gSilicone Steinmann Pin Chuck

4", cannulated, with key
silicone handle, green

82



Drive, bend and pull k-wire with one instrument.

- one-handed operation
- depth gauge
- keyless operation
- for wires 0.7mm [.028"] to 1.6mm [.062"]

gS 82.0100 5 1/2"

Vickers Manual K-Wire Driver



OD = Outside Diameter



gS 82.0050 4 3/4"

Manual Pin Driver

for max OD 3.0mm [.118"] pins
knurled handle



gS 82.0240 5 1/2"

Pin Puller

grips, holds and pulls
OD 3.2mm [.126"] pins

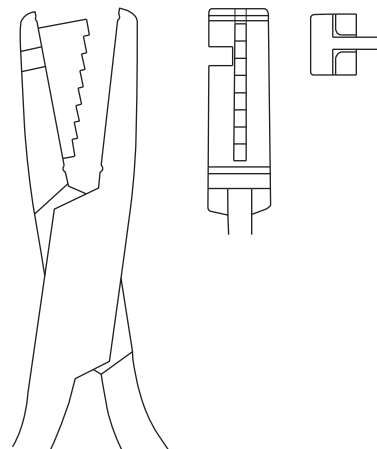


Bending aid for pins and
wires.

gS 82.4760 6"

Wire and Pin Bender

max cap 3.2mm [.126"]



gS 82.1050 5 1/2"

Seven Step Wire Bender

max cap 1.1mm [.045"] wire or
19 gauge [1.0mm] cerclage wire



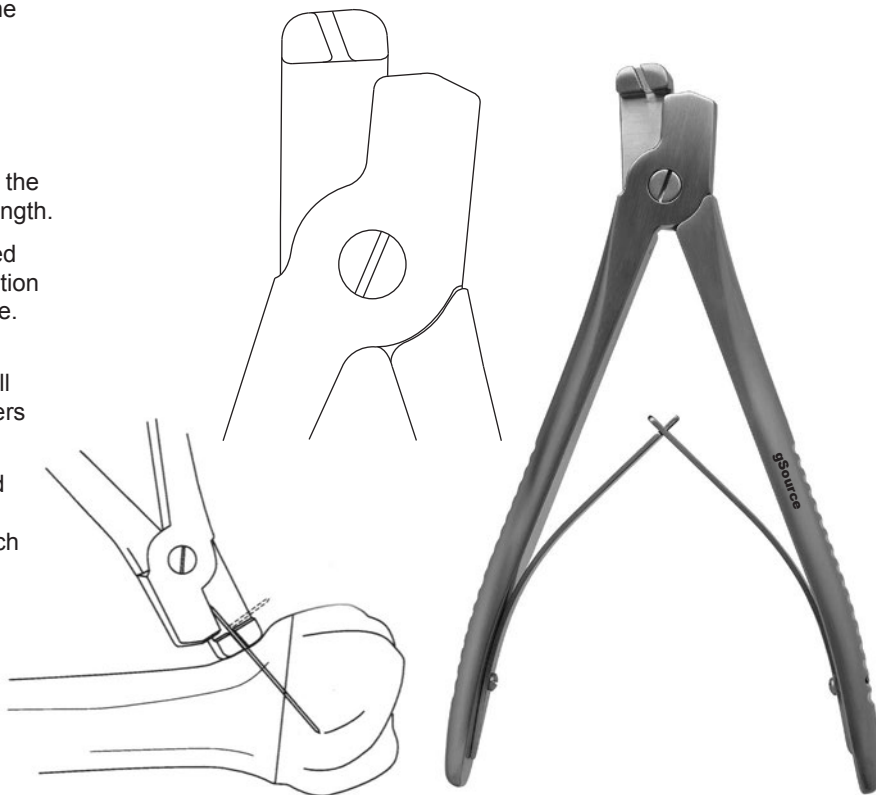
82/4 - wire and plate management

Stabilize and bend k-wire at the same time with one instrument.

- one-handed operation
- bends wire close to the bone

To bend wire:

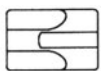
1. After inserting a k-wire in the bone, cut the wire leaving a piece of 1/2" to 3/4" in length.
2. Insert the piece of k-wire into the angled slot on working end of bender and position bender as close to the bone as possible.
3. Press handle together to bend the k-wire. Wire diameter 1.6mm [.062"] will bend 90 degrees while smaller diameters will bend slightly less than 90 degrees.
4. For flush bending of 1.1mm [.045"] and 1.6mm [.062"] k-wire, the two angled cannulations at the proximal end of each handle are useful.



gS 82.2016 7 1/2"

Gratloch Wire Bender
max cap 1.6mm [.062"]

82



Bends k-wire up to 1.1mm [.045"] to 90° angle.

gS 82.1014 5"

K-Wire and Plate Bender
max cap 1.1mm [.045"]



Bends k-wire up to 1.6mm [.062"] to 90° angle.

gS 82.1020 5 1/2"

K-Wire and Plate Bender
max cap 1.6mm [.062"]



gS 82.4755 4 1/2"

Wire Bending Iron
for 0.8mm [.031"] to
1.2mm [.050"] wires



gS 82.0172 4 3/4"

Mini Plate Bending Iron
for 1.5mm/2.0mm plates



Used in pairs with
gS 82.0176.

gS 82.0174 5 1/2"

Small Plate Bending Iron
for 2.7mm/3.5mm plates



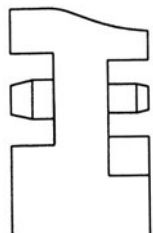
Used in pairs with
gS 82.0174.

gS 82.0176 5 1/2"

Small Plate Bending Iron
for 3.5mm/2.7mm plates

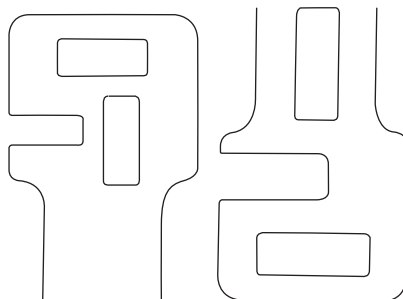


82/6 - plate and rod management



gS 82.0182 7 3/4"

Plate Bending Iron
for 3.5mm/4.5mm plates



gS 82.0183 6 3/4"

Plate Bending Iron
for 4.0mm/5.0mm plates



gS 82.0184 7"

Plate Bender
double ended (Lane)
for 4.5mm/5.0mm plates

Handle holes accept:
3.5mm, 5.0mm, 6.5mm
and 8.0mm rods.

gS 82.0180 9 1/2"

**Standard Plate/Rod
Bending Iron**
for 5.0mm/7.0mm plates



for 4.76mm [.188"] rods
gS 82.7710 right
gS 82.7712 left

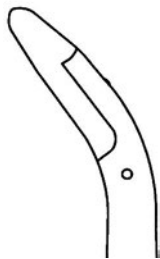
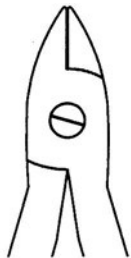
for 6.35mm [.250"] rods
gS 82.7720 right
gS 82.7722 left

In Situ Rod Bender
 13"
 used in pairs



gS 82.0970 5"

Mini Plate Bending Pliers
 for 1.5mm and 2.0mm plates



gS 82.0980 5 1/2"

Plate Bending Pliers
 for 2.0mm plates



gS 82.0296 8"

Plate Bending Pliers
 for 1.6mm plates



82/8 - plate management

82

gS 82.0315 8 1/2"

Plate Bending Pliers
for 1.6mm plates



gS 82.0298 9 1/2"

Plate Bending Pliers
for 2.8mm plates



gS 82.0303



gS 82.0304

Includes two anvils
for narrow and
wide plates.

gS 82.0302 10"

gS 82.0303 wide anvil only

gS 82.0304 narrow anvil only

Plate Bending Pliers
for straight plates



gS 82.0300 10"

Plate Bending Pliers
for reconstruction plates
max cap 12mm x 2.5mm





gS 82.0292

Includes anvil.

gS 82.0290 16"
gS 82.0292 anvil only

Plate Bending Press
table top
for plates up to 4.5mm [.177"]



gS 82.0282

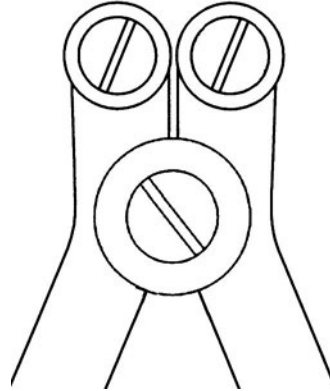
Includes anvil.

gS 82.0280 12"
gS 82.0282 anvil only

Plate Bending Press
table top
for plates up to 2.5mm [.098"]



82/10 - rod management



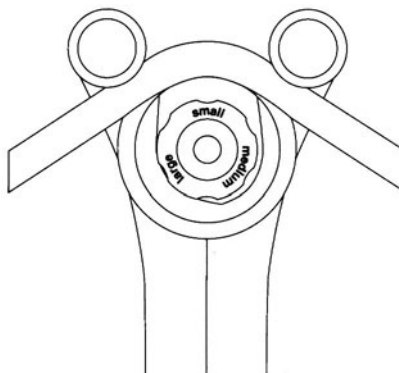
gS 82.7630 7 1/2"

Rod Bender

one-handed bender
for 3mm [.118"] and 4mm [.156"] rods



- Bends rods up to 7mm [.276"] to three different angles.
- Separate reduction ring not required.
- Adjustable center cam is spring loaded.

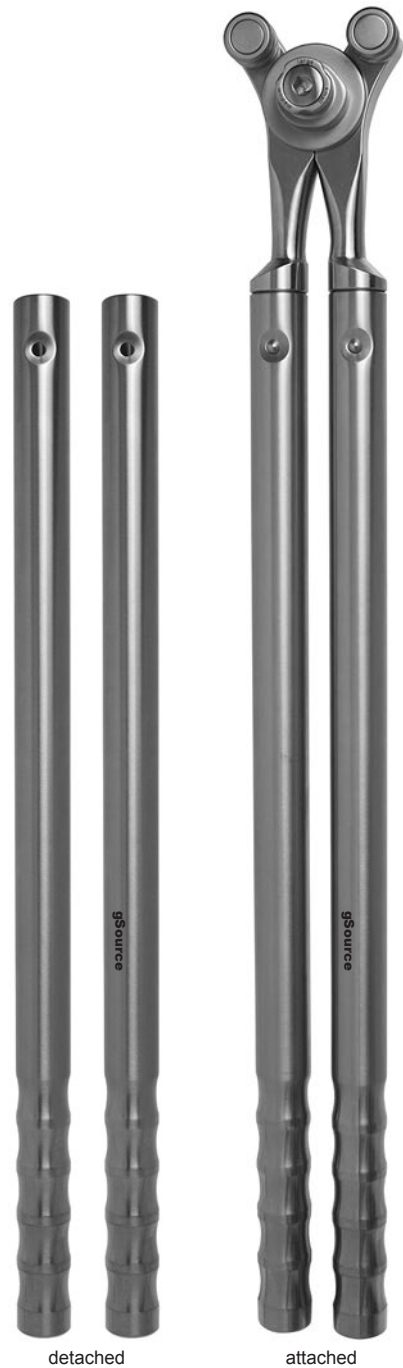
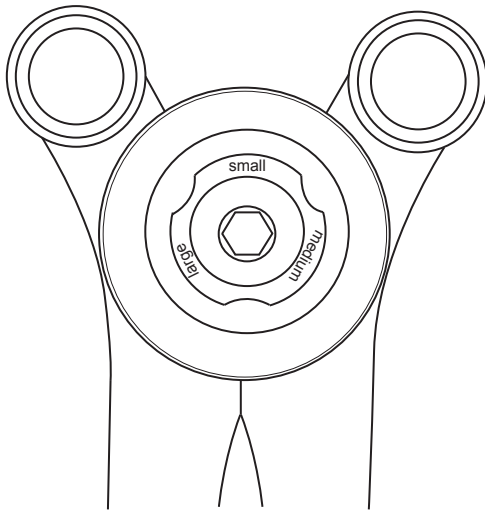


gS 82.7640 11"

Universal Rod Bender

for rods up to 7mm [.276"]





- Bends rods up to 6mm with three different cam settings.
- Separate reduction ring not required.
- Adjustable center cam is spring loaded.

gS 82.7690 19"

gRod Bender, Universal
for rods up to 6mm [.236"]
with 15 1/2" detachable handles

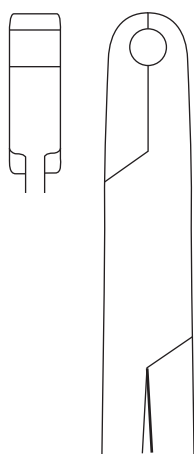
82/12 - rod management

82

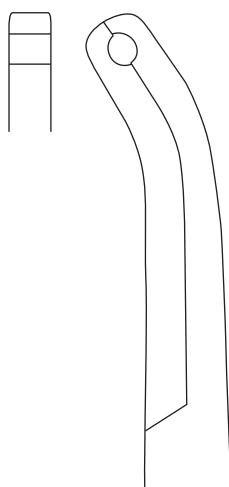
	for rods
gS 82.7740	4.0mm [.157"]
gS 82.7745	4.76mm [.187"]
gS 82.7750	5.5mm [.217"]
gS 82.7760	6.35mm [.25"]

Rod Holder

7 1/4"
straight



gS 82.7745



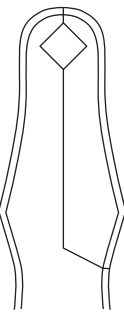
gS 82.7840

	for rods
gS 82.7840	4.0mm [.157"]
gS 82.7845	4.5mm [.177"]
gS 82.7850	5.0mm [.197"]
gS 82.7855	5.5mm [.217"]
gS 82.7860	6.35mm [.25"]

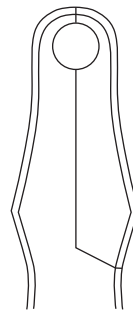
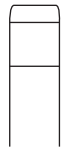
Rod Holder

8 1/2"
curved





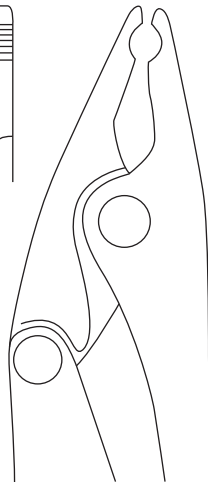
gS 82.7950



gS 82.7960

- for rods
- gS 82.7950** 5.5mm [.217"], with prism
 - gS 82.7955** 5.5mm [.217"]
 - gS 82.7960** 6.35mm [.25"]

Rod Holder
10"
straight



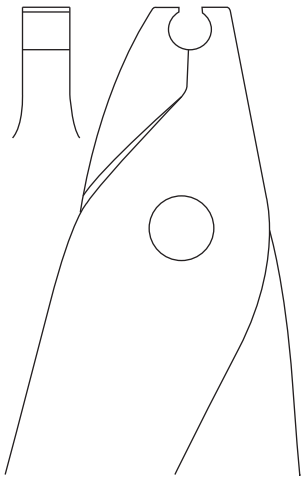
gS 82.7555

- for rods
- gS 82.7551** 4.5mm [.177"]
 - gS 82.7552** 4.75mm [.187"]
 - gS 82.7553** 5.0mm [.197"]
 - gS 82.7555** 5.5mm [.217"]
 - gS 82.7556** 6.0mm [.236"]
 - gS 82.7557** 6.35mm [.25"]
 - gS 82.7558** 6.55mm [.258"]

Rod Gripper
8 1/2"
adjustable

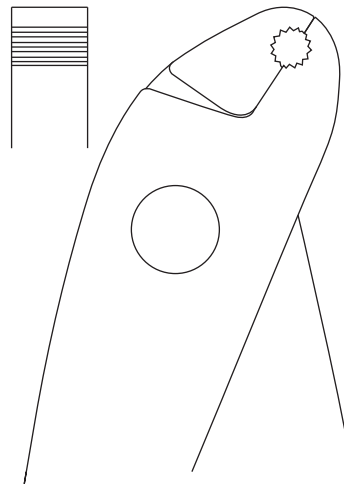


82/14 - rod management



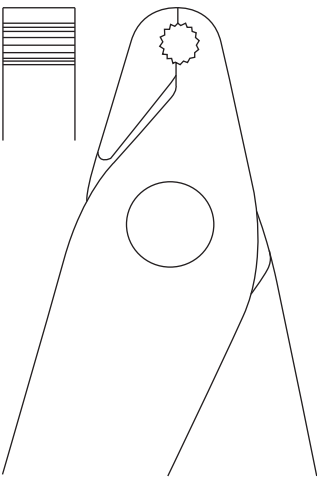
gS 82.7982 for 5.5mm
[.217"] rods

Rod Holder
11"
straight narrow nose

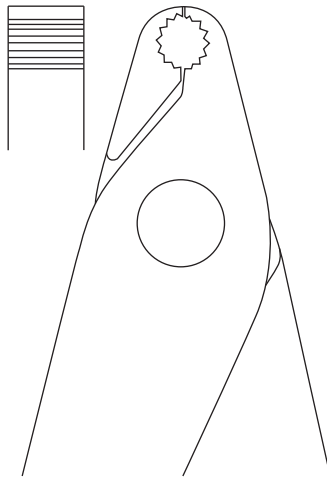


gS 82.7995 for 4.75mm
[.187"] rods

Rod Holder
11"
angled nose



gS 82.7985

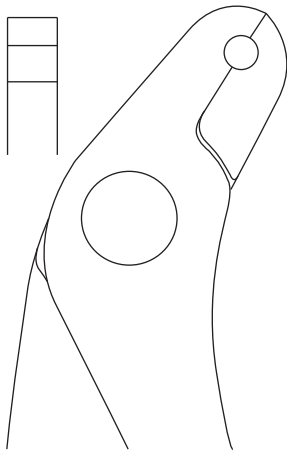


gS 82.7987

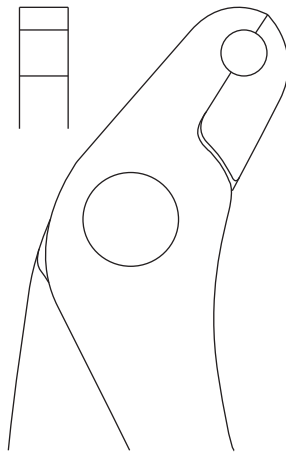
for rods
gS 82.7985 4.75mm [.187"]
gS 82.7987 6.35mm [.25"]

Rod Holder
11"
straight nose

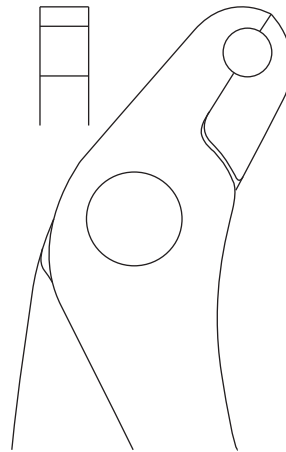




gS 82.7991



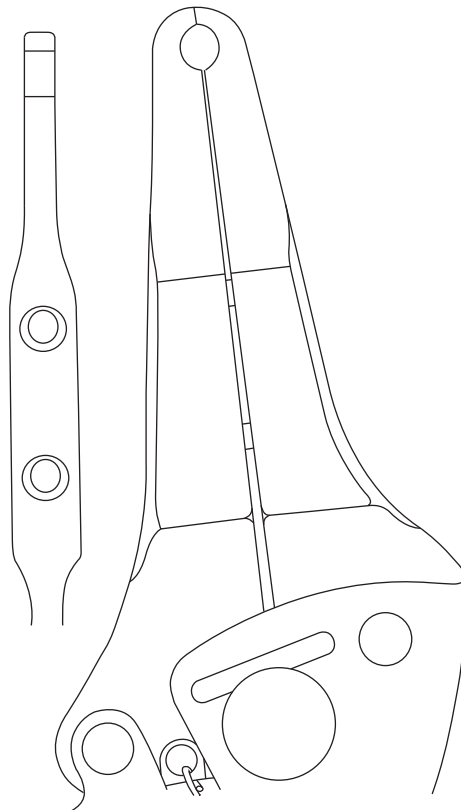
gS 82.7992



gS 82.7993

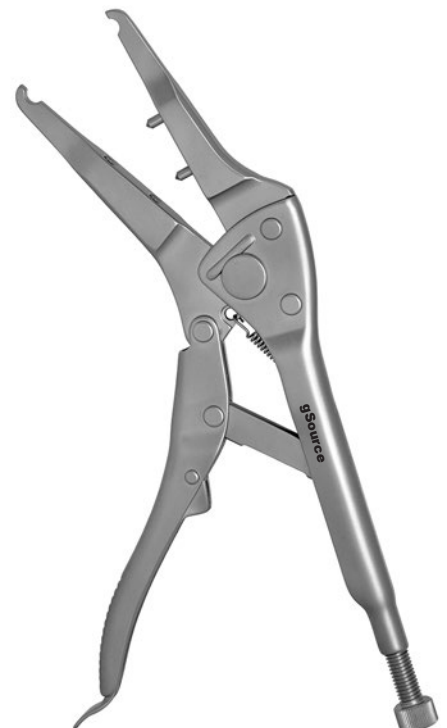
for rods
gS 82.7991 4.75mm [.187"]
gS 82.7992 5.5mm [.217"]
gS 82.7993 6.35mm [.25"]

Rod Holder
 11"
 angled narrow nose



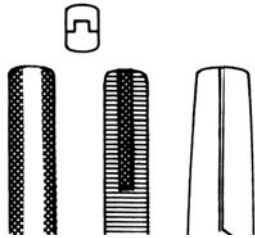
gS 82.7970 10"

Locking Rod Holder
 for 5.5mm [.217"] rods



82/16 - wire management

TC = Tungsten Carbide

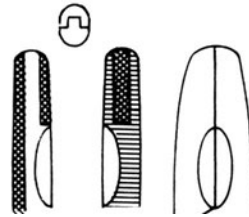


gS 82.4220 6 1/2"

Wire Pulling Fcps
one grooved jaw

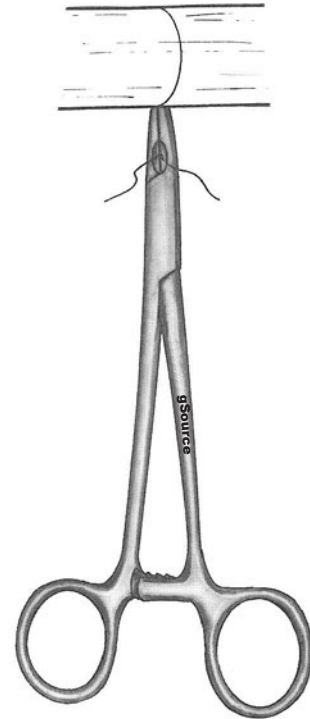


Side jaw fenestration
for twisting cerclage wire.



gS 82.4225 6 1/4"

**Wire Twister and
Tightener**
side fenestration



4mm

For twisting
cerclage wire.

gS 82.4230 6"
gS 82.4231 7 1/4"
gS 82.4232 8"

Wire Twisting Forceps
TC inserts
4mm serrated square tip



3mm

For twisting
cerclage wire.

gS 82.4235 6"
gS 82.4236 7 1/4"
gS 82.4237 8"

Wire Twisting Forceps
TC inserts
3mm serrated rounded tip



TC = Tungsten Carbide



For twisting
cerclage wire.

gS 82.4240 7 1/2"

Wire Twisting Forceps
TC inserts 6mm serrated
rounded tip



For twisting
cerclage wire.

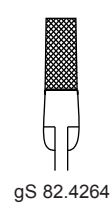
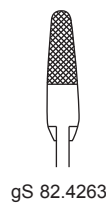
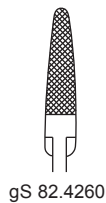
gS 82.4250 6"

Wire Twisting Forceps
3mm smooth rounded tip



How to use:

1. Wrap wire around bone and position ends next to each other.
2. Grasp both ends of wire with jaws.
3. Engage the ratchet to enforce solid clamping.
4. Stabilize wiring site.
5. Pull back on center ring repeatedly until wire has reached desired tension.
6. Disengage ratchet.



gS 82.4260 6 1/4" rounded long tip, 3mm

gS 82.4263 6" rounded short tip, 3mm

gS 82.4264 6" square short tip, 4mm

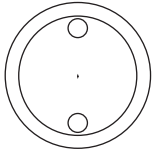
Corwin Wire Twister

TC inserts serrated
for cerclage wire



82/18 - wire management

DA = Double Action
TC = Tungsten Carbide

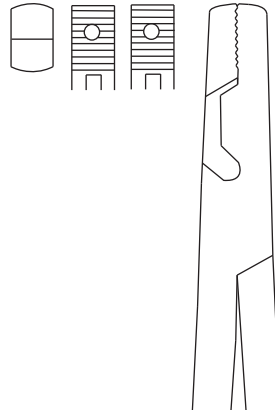


For twisting cerclage wire.

Biocompatible silicone handle helps to prevent slippage and provide a secure grip.

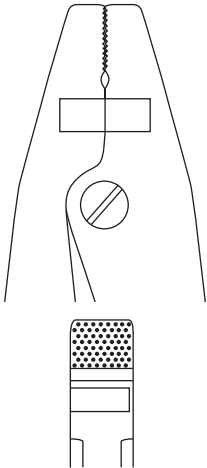
gS 82.4200 6 1/2"

gWire Twister
max cap 17 gauge [1.5mm]
silicone handle, green



gS 82.4255 6 1/2"

Wire Twister/Shear Cutter
serrated, with hole
max cut 14 gauge [2.0mm] cerclage wire



gS 82.4270 9"

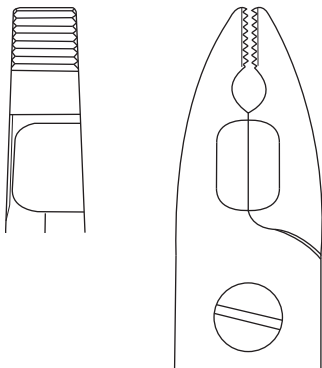
Wire Cutter and Twister DA
8mm serrated jaw, TC inserts
max cap 1.6mm [.062"]



Save time. Quickly twist and cut cerclage wire with control and ease.

The gSource Wire Cutter and Twister is designed to provide exceptional holding, twisting and cutting ability.

- Twists and cuts cerclage wire from 21 gauge [0.8mm] up to 18 gauge [1.2mm].
- Uniformly twists cerclage wire.
- Knurled locking nut turns to unlock and release the handle so wire can be cut before twisting.
- Serrated 8mm jaws are designed to tightly hold wire when closed and in locked position.
- Knurled twisting knob on end helps to provide a secure grip as repeated pulling action is required until wire has reached desired tension.
- Grooved handles provide a secure grip when cutting or clamping.



gS 82.4275 10"

Wire Cutter and Twister

8mm serrated jaw
max cap 18 gauge [1.2mm] cerclage wire

How to use:

1. Wrap wire around bone using a gSource wire guide or passer and position wire ends next to each other.
2. Disengage knurled locking nut and grasp both ends of wire with jaw.
3. Engage locking nut for hands free clamping.
4. Stabilize the wiring site.
5. Pull back on knurled twisting knob (repeatedly) until wire has reached desired tension.
6. Disengage locking nut to release wire.
7. Cut off wire ends.

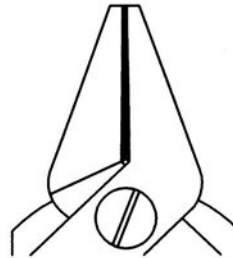


shown in
open position
(unlocked)

82/20 - wire management

Twist cerclage wire quickly, smoothly and evenly.

1. Wrap wire around bone and bring wire ends together.
2. Place wire ends in jaw.
3. Engage ratchet and clamp wire firmly.
4. Stabilize site.
5. Pull back on t-handle until desired tension is reached.
6. Release jaw by disengaging ratchet.



gS 82.4790 11"

Jet Wire Twister

10mm serrated jaw
max cap 17 gauge [1.5mm] cerclage wire

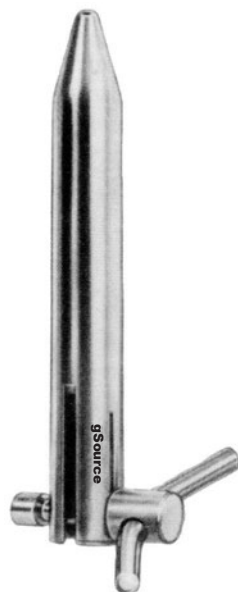


82

gS 82.4100 4 3/4"

Wire Tightener

max cap 18 gauge [1.2mm]
cerclage wire



Double wire tightener.

gS 82.4150 9 1/2"

Wire Tightener

two turning screws, phenolic handle
max cap 18 gauge [1.2mm] cerclage wire



How to use:

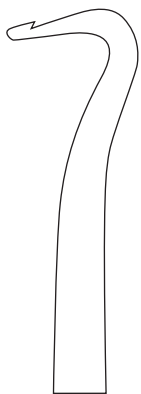
1. Loosen both knobs by turning counterclockwise until center pin disappears from view.
2. Pass wire around bone and feed both ends into center hole at the tip.
3. Use Wire Pulling Forceps to pull ends through and hold wire tight while pushing the instrument close to the bone.
4. Turn lower (distal) knob clockwise to lock wire in place. Then turn upper (proximal) knob clockwise to pull the remaining slack from the wire.
5. Balance instrument in one hand and rotate it with the other hand until resistance is felt. Then hold tightener shaft tight and turn lower (distal) knob clockwise until wire is cut.

Note: Hold instrument straight (do not tilt) while tightening.

gS 82.4750 8 1/2"

Loute Wire Tightener

max cap 17 gauge [1.5mm] cerclage wire



gS 82.4918 7 1/4"

**Ligature Carrier
(Bankart)**

curved with crochet hook



gS 82.4930 7"

gS 82.4940 9"

Suture Passer

curved with crochet hook
phenolic handle



82/22 - wire and suture management



gS 82.4941 7"
gS 82.4942 9"

Suture Passer
curved with suture hole
phenolic handle



gS 82.4960 right blunt
gS 82.4962 left blunt
gS 82.4964 right sharp
gS 82.4966 left sharp

Deschamps Ligature Carrier
8"
with suture hole

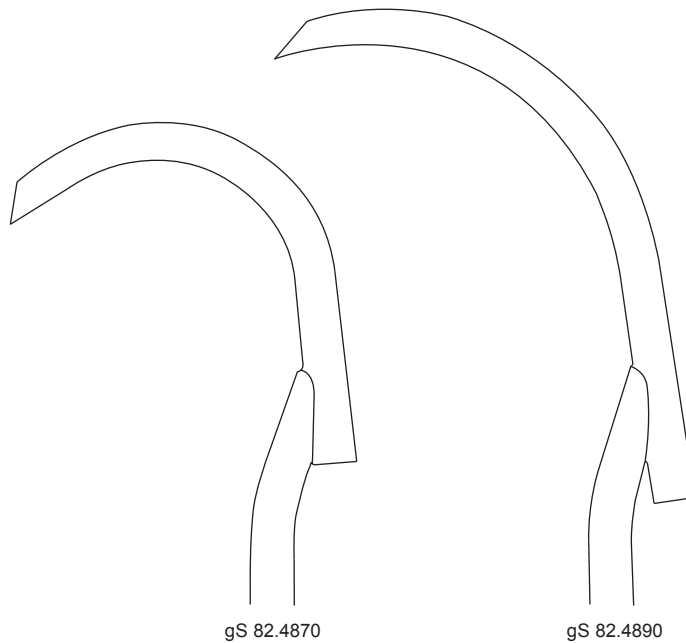


gS 82.4800 10 1/2" 30mm
gS 82.4820 11 1/2" 47mm
gS 82.4840 12 1/2" 64mm

Demel Wire Guide
max cap 17 gauge [1.5mm] cerclage wire



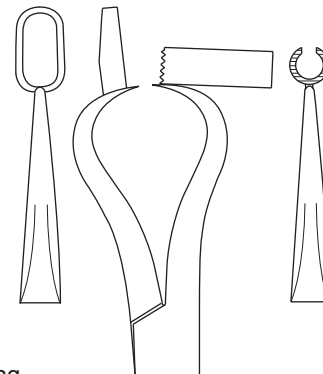
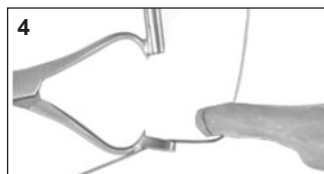
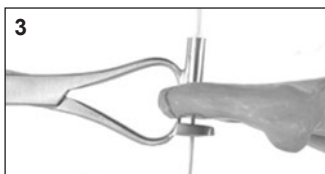
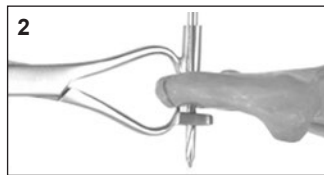
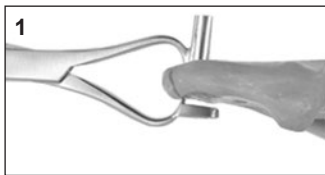
OD = Outside Diameter



gS 82.4870 8 1/2" 45mm
gS 82.4890 9 1/2" 70mm

Wire Passer

max cap 11 gauge [3.0mm] cerclage wire
 phenolic handle



- 1-2. Serrated end of drill guide helps with fixation of drill hole positioning and provides soft tissue protection during drilling.
3. Drill guide also helps to guide cerclage wire through the hole and into the fenestrated loop on the other side.
4. After wire passes through fenestrated loop, forceps are opened and wire can be easily pulled up from other side.

gS 82.4970 6"

gWire Passer and Retriever Forceps

with drill guide for max OD 3.0mm drill bit
 max cap 17 gauge [1.5mm] cerclage wire

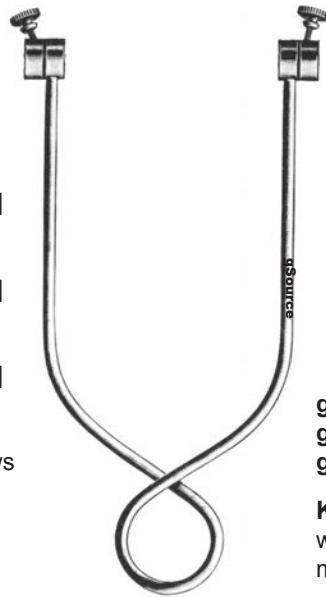


82/24 - wire and pin management

	length x width
gS 82.4278	9 x 7.5cm max 2.4mm [.094"] wire, 5"
gS 82.4280	16 x 9cm max 3.2mm [.126"] wire, 7"
gS 82.4281	21 x 15cm max 4.0mm [.157"] wire, 9"

gS 82.4282 replacement screws

**Boehler Wire and Pin
Tractor**



gS 82.4302	5 3/4"
gS 82.4304	7 1/2"
gS 82.4306	9 1/2"

Kirschner Bow
with three hooks
max cap 2.0mm [.079"]



82

did you know... ?

There are many types of fractures, but the main categories are:

- Complete: the bone snaps into two or more parts.
- Incomplete: the bone cracks but does not break all the way through.
- Compound: also called an open fracture, the bone breaks through the skin. It may then recede back into the wound, so it is no longer visible through the skin.
- Simple: also called a closed fracture, the bone breaks but there is no open wound in the skin.

Simple fractures include:

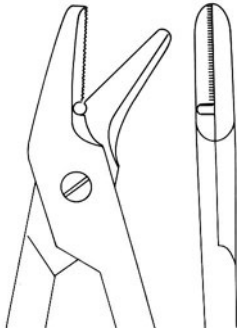
- Greenstick: an incomplete fracture in which the bone is bent. This type of fracture occurs most often in children.
- Transverse: a fracture at a right angle to the bone's axis.
- Oblique: a fracture in which the break is at an angle to the bone's axis.
- Comminuted: a fracture in which the bone fragments into several pieces.
- Impacted: a fracture whose ends are driven into each other. This commonly occurs with arm fractures in children and is sometimes known as a buckle fracture.

gSource cerclage wire, as shown in Section 78-79, is stainless steel in the form of a very flexible wire in the shape of a ring or loop, for the purpose of stabilizing fragments in a fractured bone, especially useful for transverse irregular or short oblique fractures. Many of the wire management instruments shown in this section, such as wire tighteners and twistors, were designed to be used with cerclage wire.

Cerclage is an orthopedic procedure in which the ends of an oblique bone fracture or the chips of a broken patella (the small bone in front of the knee) are bound together with a wire loop or a metal band to hold them in position until healed. In a comminuted fracture of the patella, the fragments tend to be pulled apart by the normal knee forces unless held together by one or more cerclage wires. The ruptured patellar tendon may also require cerclage wires to pull it back into the patella.

When a bone is shattered, the pieces are often impossible to plate and cerclage wires may be useful in uniting the fragments again. Cerclage wires may also be used in an osteotomy, a surgical procedure to realign or remove a segment of bone. Most often, an osteotomy is performed to realign a deformed bone. The bone is cut with surgical instruments, realigned, and allowed to heal in its new position.

TC = Tungsten Carbide



Notch in jaw for cutting wire.

- gS 83.2980** for cerclage wire
max cap 19 gauge [1.1mm]
gS 83.3000 TC inserts
for K-wire
max cap 0.7mm
[.028"]

Wire Cutting Scissors
4 3/4" angled with one
serrated blade and notch



Serrated jaw with notch
for cutting K-wire up
to 0.9mm [.035"] or
cerclage wire up to 20
gauge [0.9mm].

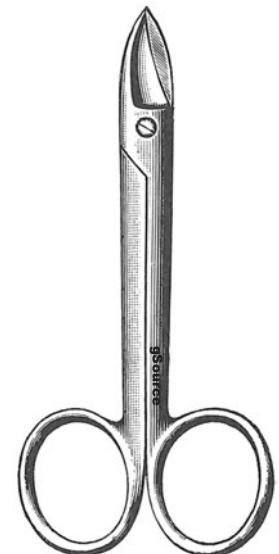
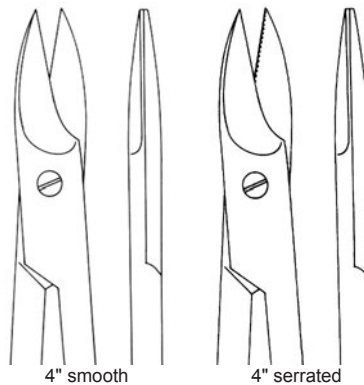
gS 83.4016 6 1/4"

Wire Cutting Scissors
TC inserts



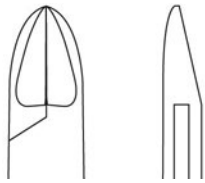
- smooth blades**
gS 83.2680 4" str
gS 83.2945 4 3/4" str
gS 83.2920 4" cvd
one serrated blade
gS 83.2700 4" str
gS 83.2950 4 3/4" str
gS 83.2940 4" cvd

Wire Cutting Scissors
(crown and collar)
for cerclage wire, max cap 21 gauge [0.8mm]



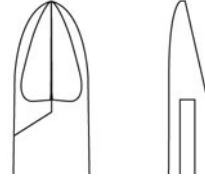
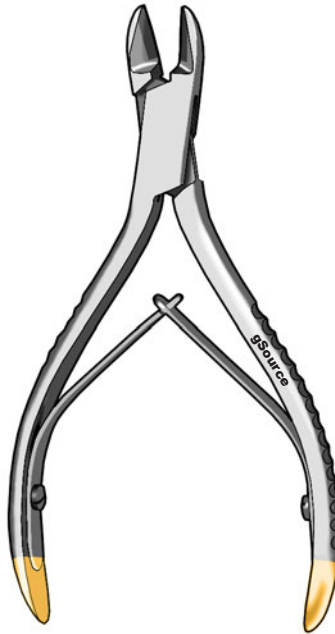
83/2 - wire cutters

TC = Tungsten Carbide



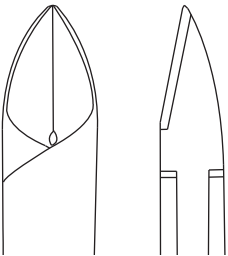
gS 83.7220 5"

Wire Side Cutter
TC inserts
max cap 0.7mm [.028"]



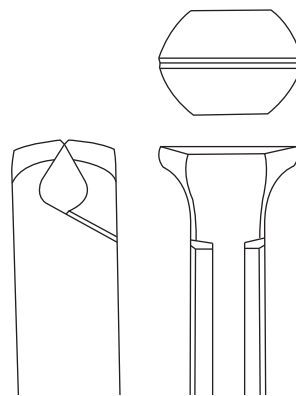
gS 83.7221 5"

Wire Side Cutter
TC inserts
max cap 0.7mm [.028"]



gS 83.7222 6"

Wire Side Cutter
TC inserts
max cap 1.0mm [.040"]

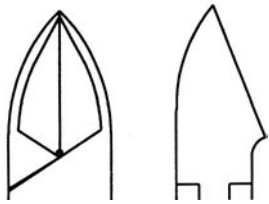


gS 83.7440 5 1/2"

Wire End Cutter
TC inserts
max cap 1.0mm [.040"]



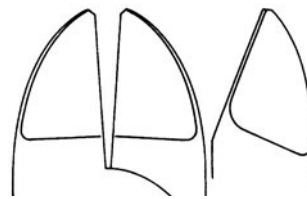
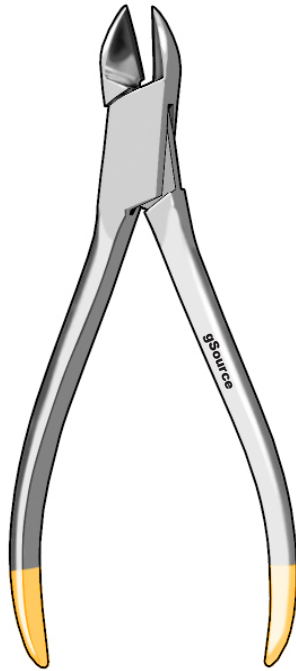
DA = Double Action
TC = Tungsten Carbide



gS 83.7223 6"

Wire Side Cutter

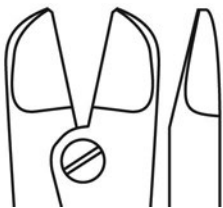
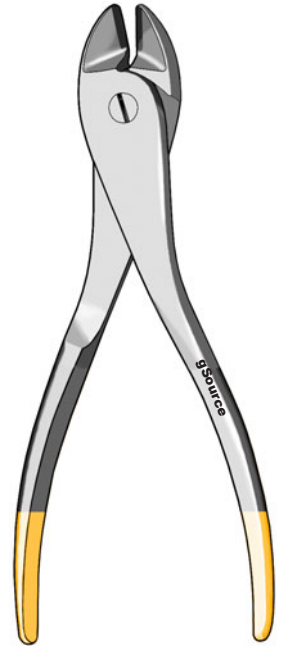
TC inserts
max cap 1.1mm [.045"]



gS 83.7226 7"

Wire Side Cutter

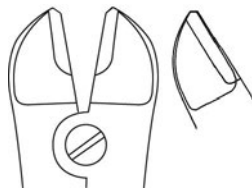
TC inserts
max cap 1.6mm [.062"]



gS 83.7228 6 1/2"

Wire Side Cutter DA Angled

TC inserts
max cap 1.6mm [.062"]



gS 83.7230 7"

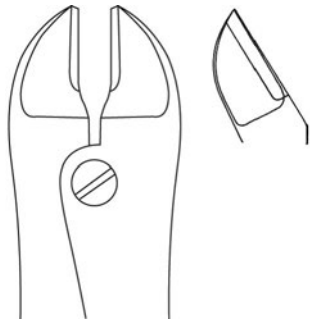
Wire Side Cutter DA Angled

TC inserts
max cap 1.6mm [.062"]



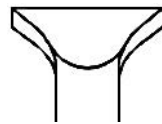
83/4 - wire cutters

DA = Double Action
TC = Tungsten Carbide



gS 83.7232 7" heavy

Wire Side Cutter DA Angled
TC inserts
max cap 1.6mm [.062"]

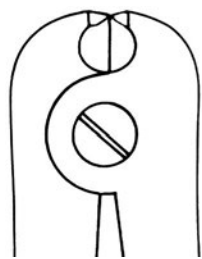


gS 83.7512 6"

Wire End Cutter DA
TC inserts
max cap 1.6mm [.062"]



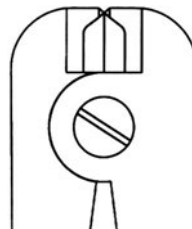
83



End and side cutting jaws.

gS 83.7260 7"

Wire End and Side Cutter DA
TC inserts
max cap 1.6mm [.062"]



End and side cutting
jaws modified to cut
closer to the bone than
regular cutters.

gS 83.7310 7"

Wire End and Side Flush Cutter DA
TC inserts
max 1.6mm [.062"]



DA = Double Action
TC = Tungsten Carbide

Designed with safety and ease in mind.

The gSource Flush End and Side Wire Cutter with tungsten carbide and silicone inserts can help prevent a cut piece of wire from being projected into the air or falling into the wound site.

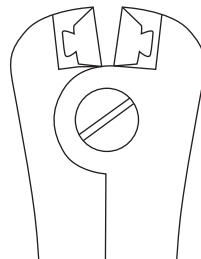
- Silicone inserts are designed to hold the remnant piece of wire for safe disposal after cutting.
- Improved design of tungsten carbide (TC) jaws cuts wire flush to the bone.
- Maximum leverage is achieved with the combined double action and leaf spring design. Provides a smooth and easy cutting action.
- End and side cutting jaws.
- Grooved handles provide a secure grip.
- Silicone inserts are suitable for use in manufacturing of medical devices. They are autoclavable and replaceable.

gS 83.8450 7"

gS 83.8451 replacement silicone inserts (pair)

Wire End and Side Flush Cutter with Silicone Inserts DA

TC inserts
max cap 1.6mm [.062"]



- Silicone inserts are designed to hold the remnant piece of wire for safe disposal after cutting.
- Double action provides smooth cutting action.
- End and side cutting jaws.
- Grooved handles provide a secure grip.
- Silicone inserts are suitable for use in manufacturing of medical devices. They are autoclavable and replaceable.

gS 83.8400 7"

gS 83.8401 replacement silicone inserts (pair)

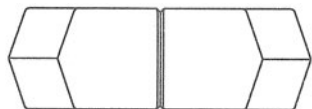
Wire End and Side Cutter with Silicone Inserts DA

max cap 1.6mm [.062"]



83/6 - pin and wire cutters

DA = Double Action
TC = Tungsten Carbide

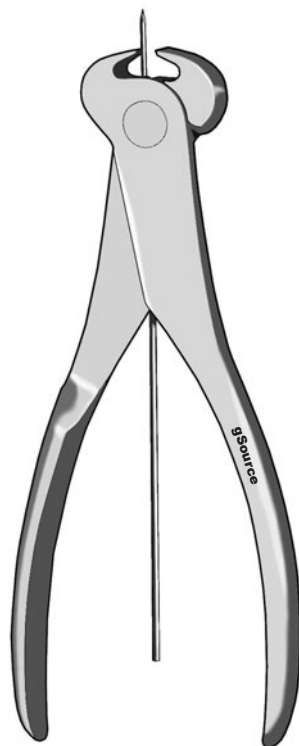


Slide cutter over wire to cut. Remnant piece is held securely inside the cannulated channel for fast and easy removal.

gS 83.7470 7 1/2"

Cannulated Wire End Cutter

max cap 1.6mm [.062"]



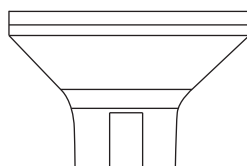
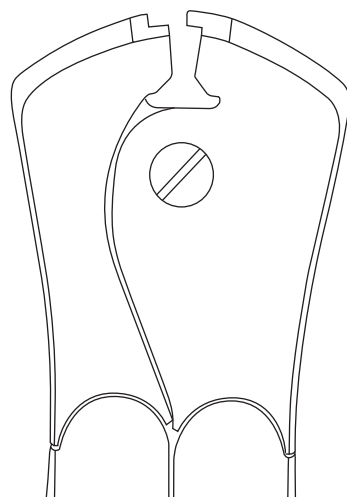
Can be disassembled for thorough cleaning.

gS 83.7510 6 1/2"

Diamond Pin End Cutter
max cap 2.0mm [.079"]



83



Stepped TC insert design holds the remnant piece of wire for safe disposal and shearing.

Designed with safety and ease in mind.

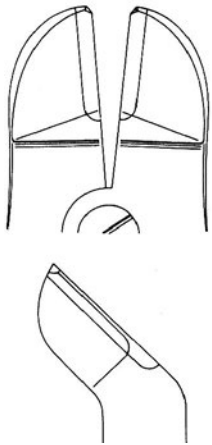
gS 83.7513 8 1/2"

Wire End Cutter and Holder DA

TC inserts
max cap 1.6mm [.062"]

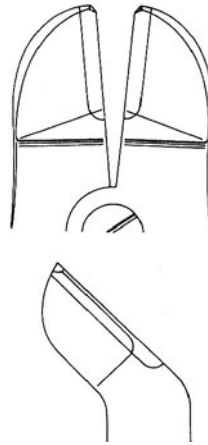


DA = Double Action
TC = Tungsten Carbide



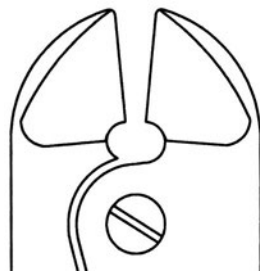
gS 83.7240 9"

Wire Side Cutter DA Angled
TC inserts
max cap 2.4mm [.079"]



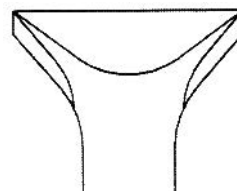
gS 83.7236 9 1/2"

Wire Side Cutter DA Angled
TC inserts
max cap 2.4mm [.079"]



gS 83.7250 9"

Wire Side Cutter DA
TC inserts
max cap 2.4mm [.079"]



gS 83.7514 8 1/2"

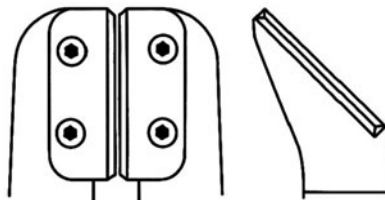
Pin End Cutter DA
TC inserts
max cap 2.8mm [.110"]



83/8 - pin and wire cutters

DA = Double Action
TC = Tungsten Carbide

- Strong, lightweight design requires less strength than regular double action cutters.
- Titanium Nitride (TiN) coated TC inserts are harder and last longer than uncoated TC.
- Angled cutting edge.
- Silicone inserts hold remnant wire securely, helps prevent flying pieces.



gS 83.7900 9"

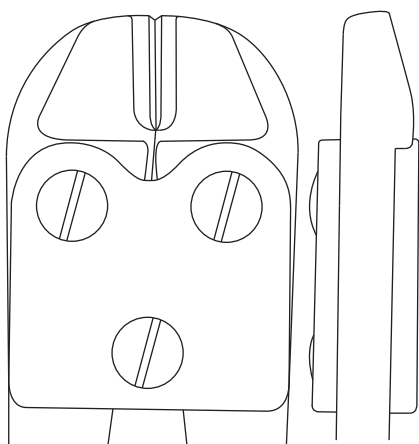
gS 83.7901 TC insert replacement kit includes: inserts (2), screws (4) and wrench (1)

gS 83.7902 silicone insert replacement kit includes: inserts (2), screws (2) and screwdriver (1)

Hercules Pin Side Cutter with Silicone Inserts DA Angled

TiN coated TC inserts
max cap 3.0mm [.118"]

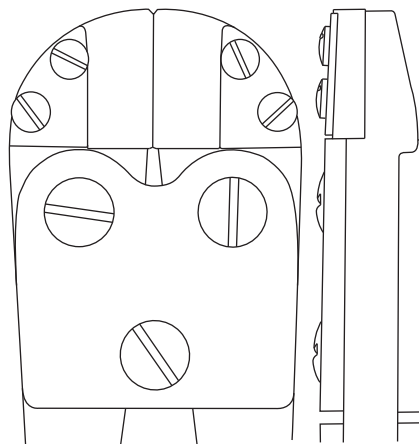
83



gS 83.8880 9"

gPin Side Cutter DA Angled

TC inserts
max cap 2.8mm [.110"]



Silicone inserts are designed to hold the remnant piece of wire for safe disposal after cutting.

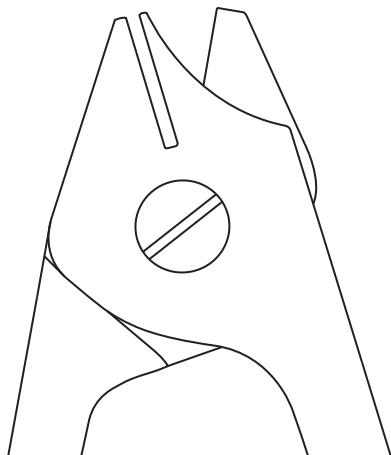
gS 83.8882 9"

gPin Side Cutter DA Angled

TC and silicone inserts
max cap 2.8mm [.110"]



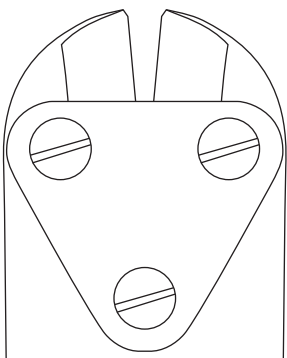
DA = Double Action



For mini plates.

gS 83.8800 9"

Plate Side Cutter
max cap 1.0mm [.040"]



Double action delivers power to the cutter.

Side cutting jaws for mini plates.

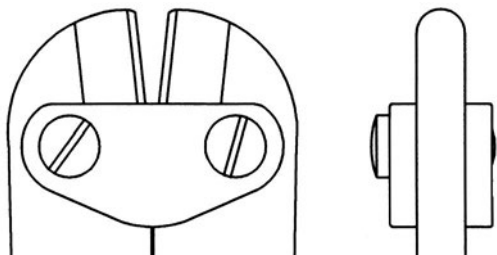
gS 83.8900 9"

Plate Side Cutter DA
max cap 1.0mm [.040"]



83/10 - pin cutters and pin shears

DA = Double Action

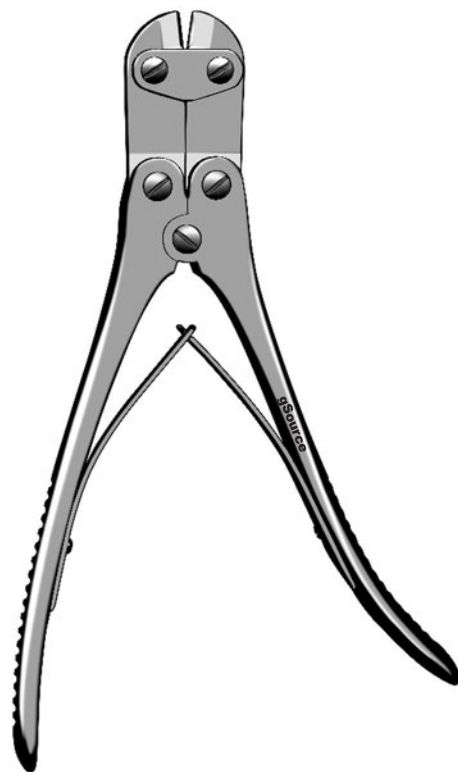


Double action delivers power to this versatile cutter.

Side cutting jaws for pins.

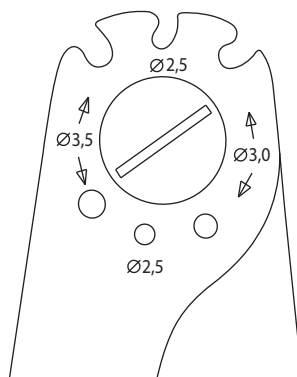
gS 83.9000 9 1/2"

Pin Side Cutter DA
max cap 3.2mm [.126"]



Shear 3 different pin diameters with 1 instrument.

- Shears 2.5mm [.098"] 3.0mm [.118"] and 3.5mm [.138"] diameter pins with ease and provides a clean cut without burrs or sharp edges.
- Grooved handles are ergonomically designed for a comfortable and secure grip.
- Double action design allows for ease in cutting.

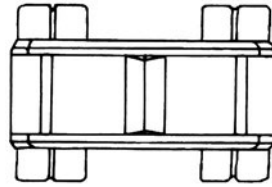
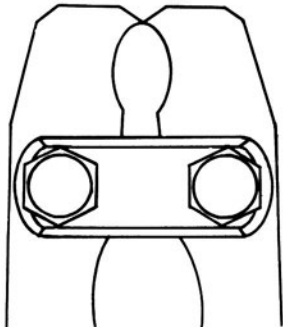


gS 83.9135 11 1/2"

Pin Shears DA
for 2.5mm [.098"], 3.0mm [.118"], 3.5mm [.138"] pins

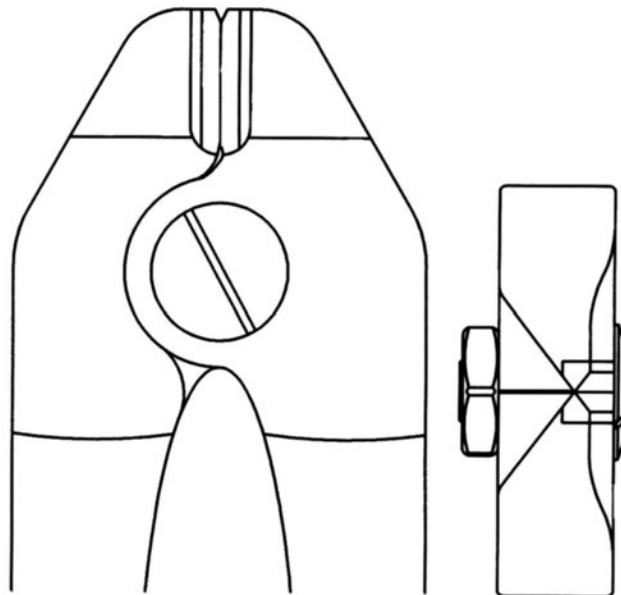


DA = Double Action



gS 83.7320 10"

Pin End Cutter DA
max cap 3.0mm [.118"]



Large heavy duty cutter
with specially hardened
jaws for cutting titanium
and stainless steel rods.

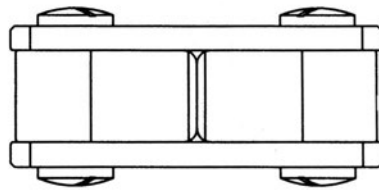
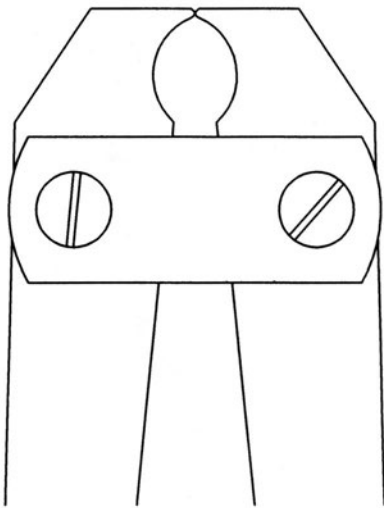
gS 83.9200 15"

Pin Side Cutter DA
max cap 4.0mm [.157"]



83/12 - pin cutters

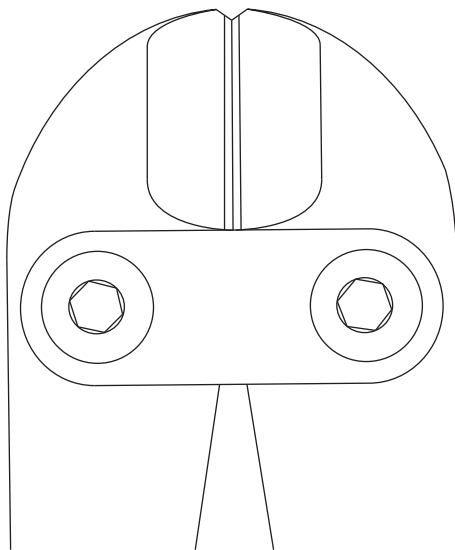
DA = Double Action



gS 83.7330 15"
gS 83.7331 replacement jaws

Pin End Cutter DA
max cap 4.5mm [.177"]

DA = Double Action



- Cuts rods up to 6.35mm [.250"].
- Specially hardened jaws.
- Grooved handles for non-slip grip.
- Handle stop prevents jaw overload.
- Not to be used inside patient.
- Weight: 3.6 lbs.

gS 83.7261 21"

gS 83.7262 replacement jaws

Large Pin Side Cutter DA
max cap 6.35mm [.25"]



83/14 - pin cutters

DA = Double Action



Detachable handles save space during autoclaving and storage. Overall length reduces from 22 1/2" to 15 1/2".

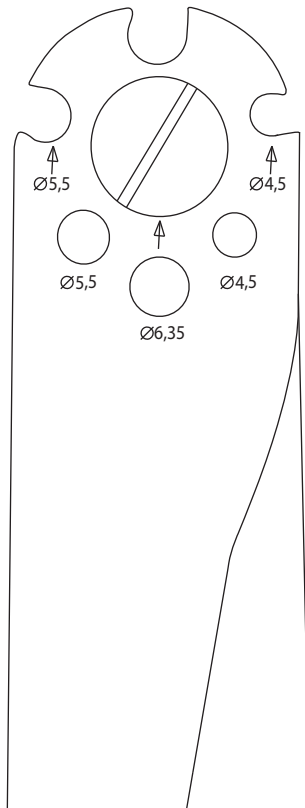
- Jaws made from hardest stainless steel for maximum durability.
- Grooved handles for non-slip grip.
- Cuts rods up to 6.35mm [.250"].
- Handle stop prevents jaw overload.
- Not to be used inside patient.
- Weight: 4.8 lbs.

gS 83.7270 22 1/2"

Large Pin Side Cutter DA
with detachable handles
max cap 6.35mm [.25"]



Recognized for Excellence
in surgical performance, efficiency,
and safety by the readership of
Surgical Products.



gS 83.7290
detached



gS 83.7290



gS 83.7280

The gSilicone Rod Shears easily shears 4.5mm [.177"], 5.5mm [.217"] and 6.35mm [.250"] diameter pins and rods.

- Rods are sheared, leaving a smooth and clean surface rather than a sharp, jagged, burr-like surface common when using a standard pinching-type rod cutter.
- Available with and without detachable handles.
- Double action design allows for ease in cutting.
- Note: Instrument is not designed to be used inside the patient's body.

gS 83.7280 without detachable handles

gS 83.7290 with detachable handles

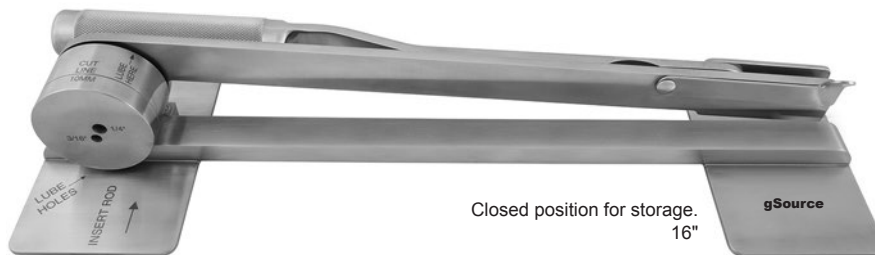
gSilicone Rod Shears

22" with silicone handles, black

for 4.5mm [.177"], 5.5mm [.217"] and 6.35mm [.25"] rods

83/16 - rod shears and cable cutter

- Provides sturdy and accurate shearing of rods.
- Rods are sheared, leaving a smooth and clean surface rather than a sharp, jagged, burr-like surface common when using a standard pinching-type rod cutter.
- Locking, collapsible handle extends to provide increased leverage for cutting.
- Collapsible handle allows for smaller footprint when stored.
- Rod diameter holes are clearly marked.



Closed position for storage.
16"



Handle extended during cutting action.
27"

gS 83.9905 16"

Table Top Rod Shears

for 5.0mm [.197"] and 6.35mm [.25"] rods

83

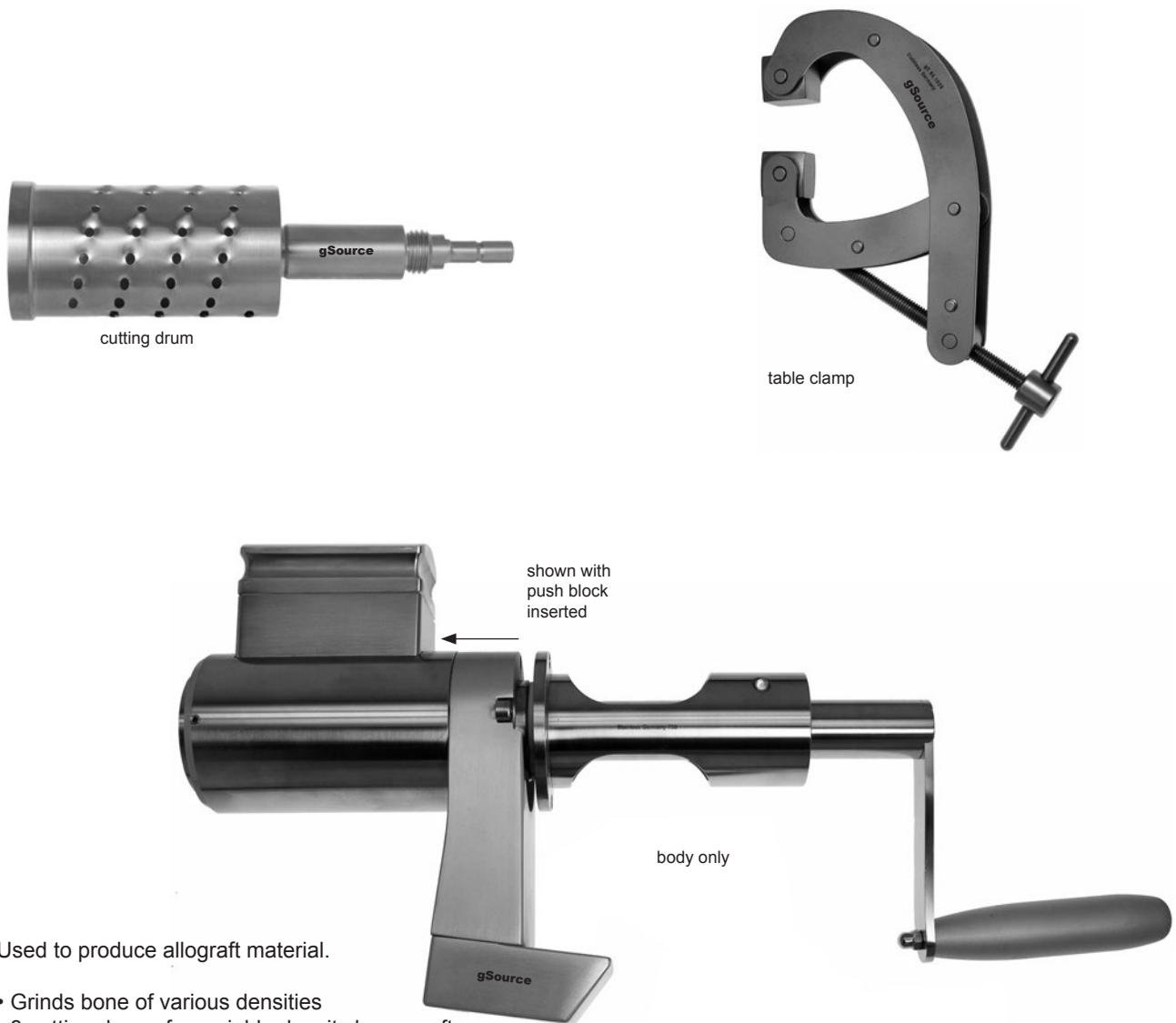
- Cuts cables cleanly and completely.
- Angled tungsten carbide jaws cut all cable strands with one clean cut.
- Handle design provides comfort and control.
- Small jaw allows surgeon to get close to the bone.
- Ball spring provides a smooth and strong return.

gS 83.9950 7"

Cable Cutter

max cap 2.0mm [.079"] cable





Used to produce allograft material.

- Grinds bone of various densities
- 3 cutting drums for variable density bone graft
- Attaches securely with table clamp
- Fully autoclavable and easy to dismantle for cleaning
- When push block is removed, top opening on gS 84.1000 is 2 5/8" x 1 3/16"

gS 84.1000 body only with handle, push block and lock nut for cutting drum, 6 1/2"

gS 84.1020 table clamp

gS 84.1021 safety screw, M4x11, knurled

gS 84.1022 hex screw, M4x5, 2.0mm

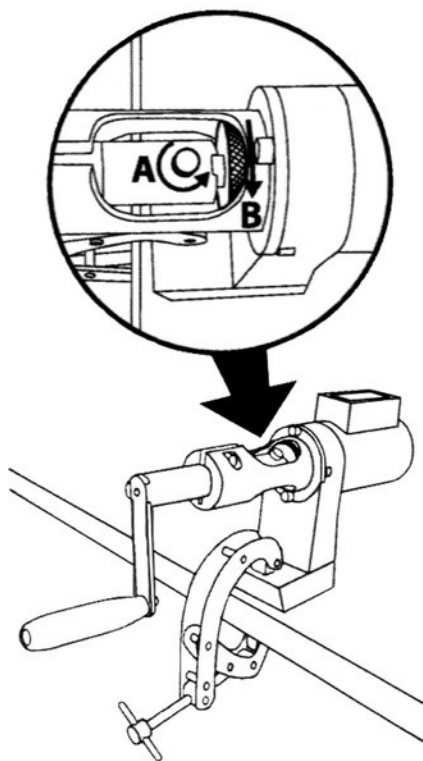
gS 84.1032 cutting drum with 3.0mm holes

gS 84.1042 cutting drum with 4.0mm holes

gS 84.1052 cutting drum with 5.0mm holes

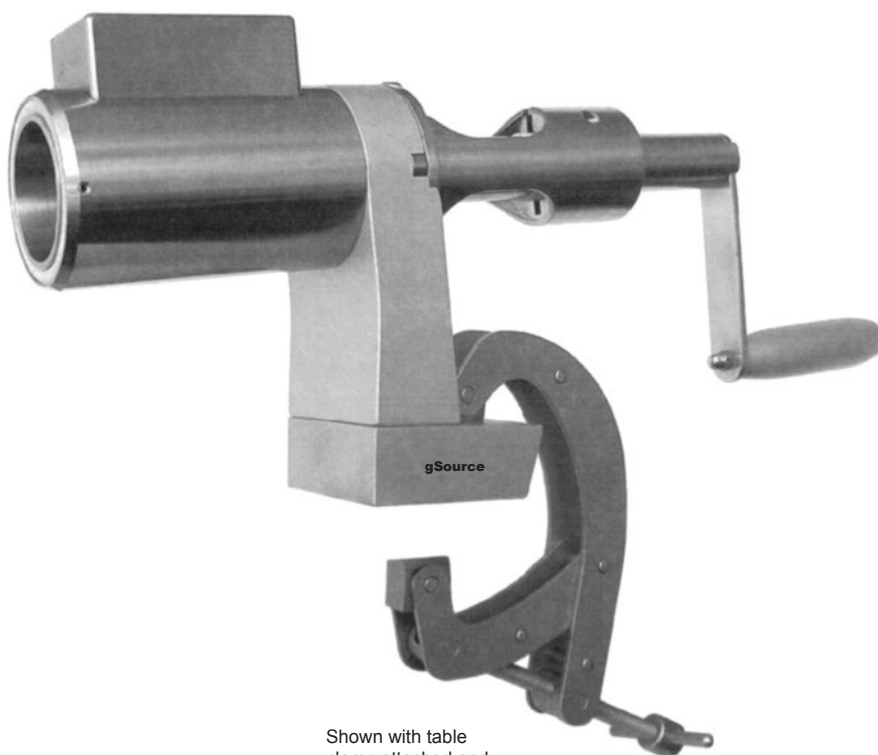
Bone Mill

84/2 - bone mills



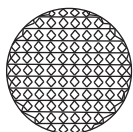
To remove cutting drum:

- A) Small knob turns counter-clockwise.
- B) Lock nut turns clockwise.



Shown with table
clamp attached and
push block removed

Bone Mill



gS 84.2000 7"

Bone Mill, Hand-held
titanium alloy milling teeth



did you know... ?

Bone grafting is a surgical procedure that replaces missing bone in order to repair bone fractures that are extremely complex, pose a significant health risk to the patient, or fail to heal properly.

Bone grafting is possible because bone tissue, unlike most other tissues, has the ability to regenerate completely if provided the space into which to grow. As native bone grows, it will generally replace the graft material completely, resulting in a fully integrated region of new bone. The biological mechanisms that provide a rationale for bone grafting are osteoconduction, osteoinduction and osteogenesis.

Osteoconduction occurs when the bone graft material serves as a scaffold, or temporary structure, for new bone growth that is perpetuated by the native bone. Osteoblasts from the margin of the defect that is being grafted, utilize the bone graft material as a framework upon which to spread and generate new bone. Osteoblasts are cells that secrete the matrix for bone formation. In the process of bone formation, osteoblasts function in groups of connected cells and produce a calcium and phosphate-based mineral, hydroxylapatite, that is deposited into the organic matrix forming a strong and dense mineralized tissue.

Osteoinduction involves the stimulation of osteoprogenitor cells to differentiate into osteoblasts that then begin new bone formation. The most widely studied type of osteoinductive cell mediators are bone morphogenetic proteins (BMPs). A bone graft material that is osteoconductive and osteoinductive will not only serve as a scaffold for currently existing osteoblasts but will also trigger the formation of new osteoblasts, theoretically promoting faster integration of the graft.

Osteogenesis occurs when osteoblasts originating from the bone graft material contribute to new bone growth along with bone growth generated via the other two mechanisms.

Autologous (or autogenous) bone grafting involves utilizing bone obtained from the same individual receiving the graft. Bone can be harvested from non-essential bones, such as from the iliac crest, or more commonly in oral and maxillofacial surgery, from the mandibular symphysis (chin area) or anterior mandibular ramus (the coronoid process).

Allograft bone, like autogenous bone, is derived from humans. The difference is that allograft is harvested from an individual other than the one receiving the graft. Allograft bone can be taken from cadavers who have donated their bone in order that it be used for living people who are in need of it. It is typically sourced from a bone bank. Bone banks also supply allograft bone sourced from living human bone donors (usually hospital inpatients) who are undergoing elective total hip arthroplasty. There are three types of bone allograft: fresh or fresh-frozen bone, freeze-dried bone allograft (FDBA), and demineralized freeze-dried bone allograft (DFDBA).

instruments for fracture management - 86-87/1

- gS 86.2545** 4 1/2" for 3.2mm drill bit
gS 86.2550 5 1/2" with protective sleeve for 4.5mm tap

Tap Sleeve
serrated end



gS 86.2545

gS 86.2550

- gS 86.2558** 4 1/2" 40mm guide for 3.2mm drill bit
for round hole and semi-tubular plates
gS 86.2560 5" 60mm guide for 3.2mm drill bit
for round hole plates

Drill Sleeve



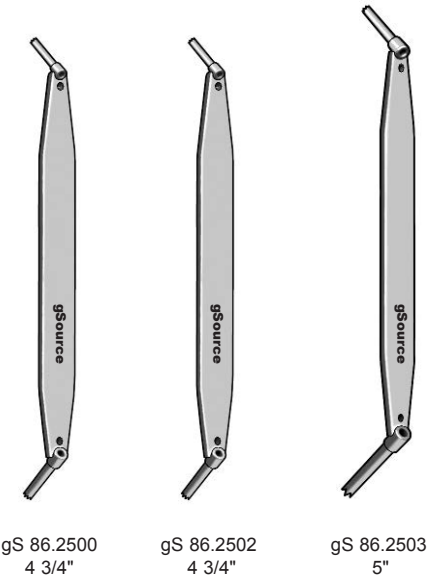
gS 86.2558

86-87/2 - instruments for fracture management

Used with drills and taps to place accurate holes and protect tissue. Serrated ends of both sleeves allow precise placement and help prevent slipping off bone.

	Drill Bits	Tap for Cortical Screws
gS 86.2500	1.1mm and 1.5mm	1.5mm
gS 86.2502	1.5mm and 2.0mm	2.0mm
gS 86.2503	2.0mm and 2.7mm	2.7mm

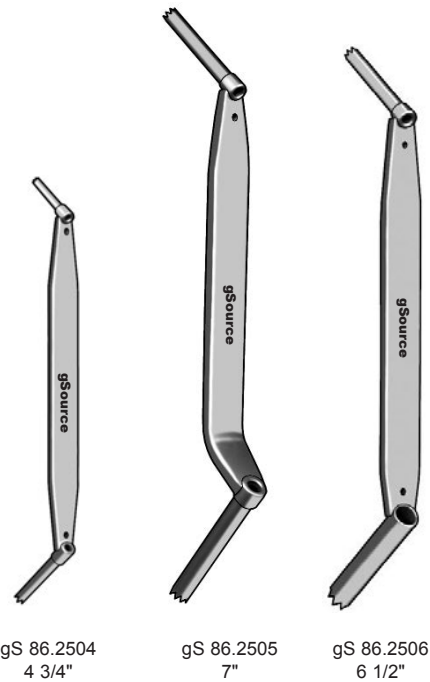
Double Drill Sleeve



86-87

	Drill Bits	Tap for Cortical Screws	Tap for Cancellous Screws
gS 86.2504	2.5mm and 3.5mm	3.5mm	4.0mm
gS 86.2505	3.2mm and 4.5mm	4.5mm	4.5mm (malleolar)
gS 86.2506	3.2mm	6.5mm	6.5mm

Double Drill Sleeve



instruments for fracture management - 86-87/3

Drill guides are color coded
green = neutral
gold = load

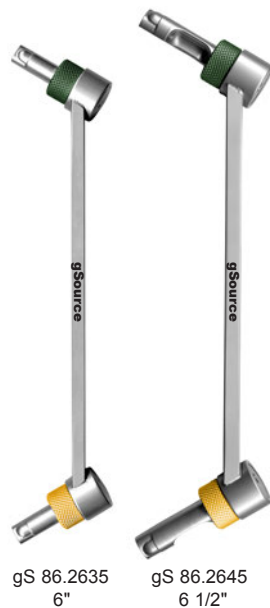
	Drill Bits	Screws
gS 86.2580	1.5mm	2.0mm cortical
gS 86.2582	2.0mm	2.7mm cortical
gS 86.2584	2.5mm	3.5mm cortical
gS 86.2586	3.2mm	4.5mm cortical/malleolar

Double Drill Guide
with neutral and load end



gS 86.2580 4 1/2" gS 86.2582 5 1/4" gS 86.2584 6" gS 86.2586 6 1/2"

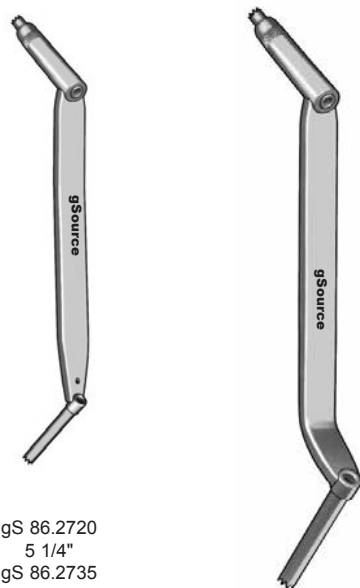
Drill guides are color coded
green = neutral
gold = load



gS 86.2635 6" gS 86.2645 6 1/2"

	Drill Bits	Cortical Screws
gS 86.2635	2.5mm	3.5mm
gS 86.2645	3.2mm	4.5mm

Double Drill Guide
dual compression
with neutral and load end



gS 86.2720 5 1/4"
gS 86.2735 5 1/2"

	Drill Bits	Cortical Screws
gS 86.2720	2.0mm	2.7mm
gS 86.2735	2.5mm	3.5mm
gS 86.2745	3.2mm	4.5mm

Universal Drill Guide

gS 86.2745 7"

86-87/4 - instruments for fracture management

With 3 holes and 1 hole for parallel drill bit and K-Wire placement.

gS 86.2507 4 1/2"

Parallel Drill Guide and Sleeve
for 2.0mm drill bit
and 2.7mm cortical screws



gS 86.2510
1 1/2"



gS 86.2515
3 1/8"

	Drill Bit	Screws
gS 86.2510	2.5mm	3.5mm
gS 86.2515	3.2mm	4.5mm

Insert Drill Sleeve
serrated tips



gS 86.2945 6"

Pointed Drill Guide
for 4.5mm cortical screws



gS 86.2675



gS 86.2685

	Drill Bit
gS 86.2675	3.3/3.3mm
gS 86.2685	3.8/3.8mm

Double Drill Guide
7 1/2"

instruments for fracture management - 86-87/5

FL = Flute Length

OAL = Overall Length

OD = Outside Diameter

SQC = Small Quick Coupling

TiN = Titanium Nitride

	OD	OAL	FL
gS 86.8211	1.1mm*	60mm	13mm
gS 86.8215	1.5mm*	85mm	18mm
gS 86.8216	1.5mm	110mm	18mm
gS 86.8220	2.0mm*	100mm	22mm
gS 86.8221	2.0mm	125mm	22mm
gS 86.8222	2.2mm*	110mm	32mm
gS 86.8224	2.5mm	110mm	30mm
gS 86.8226	2.5mm*	110mm	32mm
gS 86.8225	2.5mm	180mm	32mm
gS 86.8227	2.7mm	100mm	29mm
gS 86.8228	2.7mm*	125mm	29mm
gS 86.8232	3.2mm	145mm	48mm
gS 86.8233	3.2mm	195mm	50mm
gS 86.8235	3.5mm*	110mm	42mm
gS 86.8236	3.5mm	195mm	50mm
gS 86.8240	4.0mm	195mm	40mm
gS 86.8245	4.5mm	145mm	50mm
gS 86.8246	4.5mm	195mm	50mm

*Fits in gS 98.8178 gRack, SQC Twist Drill – see page 98-99/7.

TiN coated

- Drill bits with quick coupling ends
- Designed to fit quick coupling handles gS 86.0040, gS 86.0045, gS 86.0050 and power adaptor gS 86.1002

SQC Drill Bits



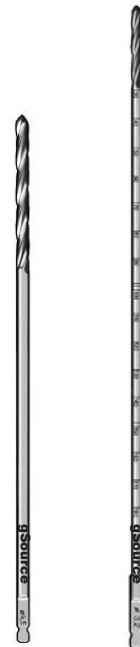
gS 86.8225

- Drill bits with quick coupling ends
- Designed to fit quick coupling handles gS 86.0040, gS 86.0045, gS 86.0050 and power adaptor gS 86.1002
- gS 86.8725 and gS 86.8732 have calibration lines.
- gS 86.8765 does not have calibration lines.

	OD	OAL	FL
gS 86.8725	2.5mm	230mm	30mm
gS 86.8732	3.2mm	230mm	30mm
gS 86.8765	4.5mm	195mm	45mm

SQC Drill Bits

3 fluted



gS 86.8765

gS 86.8725

gS 86.8732

86-87/6 - instruments for fracture management

FL = Flute Length
ID = Inside Diameter
OAL = Overall Length
OD = Outside Diameter
SQC = Small Quick Coupling



gS 86.8945
4 flutes

	OAL	FL	OD	Max ID	# Flutes
gS 86.8827	6"	20mm	2.0mm	1.00mm	3
gS 86.8832	6 1/2"	40mm	3.2mm	1.75mm	4
gS 86.8835	6"	35mm	3.5mm	1.30mm	4
gS 86.8845	6 1/2"	45mm	4.5mm	1.75mm	4
gS 86.8945	9"	40mm	4.5mm	2.05mm	4

SQC Drill Bits
cannulated



*Fits in gS 98.8127 Twist
Drill Rack - see page 98-99/8.



gS 86.8645

	OD	OAL	FL
gS 86.8410	1.0mm	55mm	26mm
gS 86.8412	1.0mm	127mm	20mm
gS 86.8415	1.5mm*	127mm	17mm
gS 86.8420	2.0mm*	127mm	23mm
gS 86.8424	2.4mm	127mm	22mm
gS 86.8425	2.5mm*	127mm	22mm
gS 86.8427	2.7mm*	127mm	30mm
gS 86.8432	3.2mm*	127mm	42mm
gS 86.8435	3.5mm*	127mm	42mm
gS 86.8440	4.0mm*	127mm	45mm
gS 86.8445	4.5mm*	127mm	34mm
gS 86.8448	4.7mm*	127mm	34mm
gS 86.8450	5.0mm*	127mm	42mm
gS 86.8460	6.0mm	127mm	37mm
gS 86.8532	3.2mm	180mm	70mm
gS 86.8535	3.5mm	180mm	70mm
gS 86.8545	4.5mm	180mm	70mm
gS 86.8560	6.0mm	180mm	70mm

Twist Drill Bits
round end
for power drills








	OD	Max ID	FL
gS 86.8620	2.0mm	1.2mm	25mm
gS 86.8627	2.7mm	1.3mm	25mm
gS 86.8635	3.5mm	1.8mm	35mm
gS 86.8640	4.0mm	2.0mm	35mm
gS 86.8645	4.5mm	2.1mm	40mm

gDrill Bits, Twist
5", cannulated
4 fluted, round end
for power drills

instruments for fracture management - 86-87/7

MQC = Mini Quick Coupling
QC = Quick Connect
SQC = Small Quick Coupling

*Fits gS 98.4050 gRack, Screwdriver
Bits SQC - see page 98-99/7.

							
	1.5 mm	2.5 mm	3.0 mm	3.5 mm	4.0 mm	4.5 mm	cruciform
	Length	Style	QC style	Holding Sleeve			
gS 86.1502	2"	1.5mm Hex	MQC	gS 86.4371			
gS 86.1504	2 1/2"	cruciform	MQC	gS 86.4371			
gS 86.1915	3 1/2"	1.5mm Hex*	SQC	none			
gS 86.1505	4"	1.5mm Hex	SQC	gS 86.4373			
gS 86.1925	3 1/2"	2.5mm Hex*	SQC	none			
gS 86.1506	4"	2.5mm Hex	SQC	gS 86.4373			
gS 86.1510	5 1/2"	2.5mm Hex	SQC	gS 86.4375			
gS 86.1515	6 1/2"	2.5mm Hex	SQC	gS 86.4375			
gS 86.1930	3 1/2"	3.0mm Hex	SQC	none			
gS 86.1935	3 1/2"	3.5mm Hex*	SQC	gS 86.4373			
gS 86.1519	4"	3.5mm Hex	SQC	none			
gS 86.1521	6 1/2"	3.5mm Hex	SQC	gS 86.4380			
gS 86.1940	3 1/2"	4.0mm Hex*	SQC	none			
gS 86.1945	3 1/2"	4.5mm Hex	SQC	none			



Screwdriver Bits

holding sleeve not included

- Design helps provide a uniform distribution of torque force which can lessen the chance of high stress to the working end of the bit and the screw head.
- Star shape profile has less of a surface-to-surface gap between the bit and the screw in comparison with hex profile. This results in a better force closure.
- No holding sleeve required.

*Fits gS 98.4050 gRack, Screwdriver
Bits SQC - see page 98-99/7.

	Size
gS 86.1604	T4*
gS 86.1605	T5
gS 86.1606	T6
gS 86.1607	T7
gS 86.1608	T8*
gS 86.1609	T9
gS 86.1610	T10
gS 86.1715	T15*
gS 86.1720	T20
gS 86.1725	T25*



Star Screwdriver Bits

3 1/2"

SQC

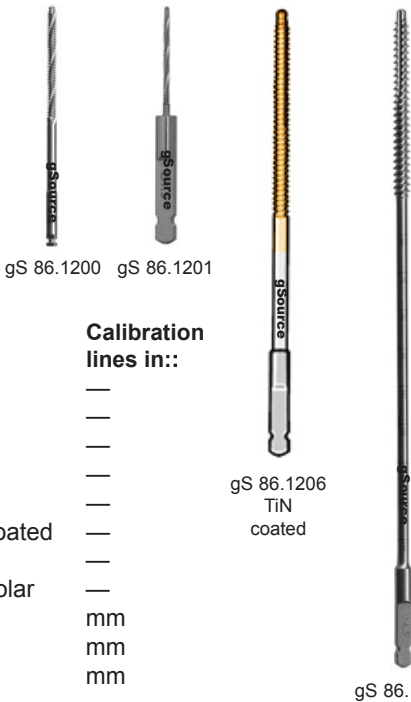
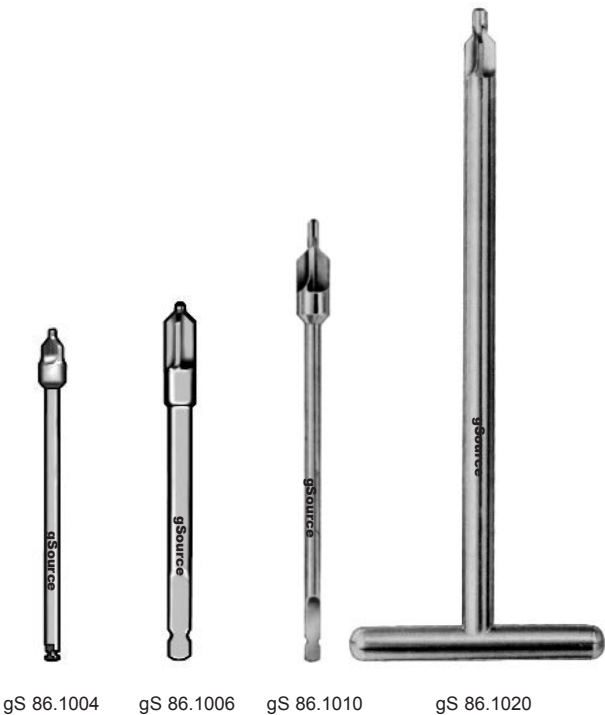


86-87/8 - instruments for fracture management

MQC = Mini Quick Coupling
OAL = Overall Length
OD = Outside Diameter
QC = Quick Connect
SQC = Small Quick Coupling
TiN = Titanium Nitride

	OAL	QC Handle	Pilot OD	Screw Size
gS 86.1004	2 1/4"	MQC	1.1mm	1.5, 2.0mm
gS 86.1006	2 3/4"	SQC	2.0mm	2.7, 3.5, 4.0mm
gS 86.1010	4 1/2"	SQC	3.2mm	4.5mm malleolar
gS 86.1020	7"	T-Handle	4.3mm	4.5, 6.5mm

Countersinks



	OAL	Diameter	Pitch	QC Style	Screws	Calibration lines in::
gS 86.1200	2"	1.5mm	0.5mm	MQC	cortical	—
gS 86.1201	2"	1.5mm	0.6mm	SQC	cortical	—
gS 86.1202	2 1/4"	2.0mm	0.6mm	MQC	cortical	—
gS 86.1203	2 1/4"	2.0mm	0.6mm	SQC	cortical	—
gS 86.1204	4"	2.7mm	1.0mm	SQC	cortical	—
gS 86.1206	4 1/4"	3.5mm	1.25mm	SQC	cortical TiN coated	—
gS 86.1208	4 1/4"	3.5mm	1.75mm	SQC	cancellous	—
gS 86.1212	5"	4.5mm	2.0mm	SQC	cortical, malleolar	—
gS 86.1209	7"	3.5mm	1.25mm	SQC	cortical	mm
gS 86.1216	7"	4.5mm	1.80mm	SQC	cortical	mm
gS 86.1220	8"	6.5mm	2.70mm	SQC	cancellous	mm

Taps

instruments for fracture management - 86-87/9

ID = Inside Diameter
MQC = Mini Quick Coupling
OAL = Overall Length
QC = Quick Connect
SQC = Small Quick Coupling

*Fits gS 98.4050 gRack, Screwdriver
Bits SQC - see page 98-99/7.

	OAL	QC Style
gS 86.0035	4 1/4"	MQC
gS 86.0040	4 1/2"*	SQC, plastic handle, black
gS 86.0050	4 1/2"*	SQC, plastic handle, black cannulated, max ID 2.4mm
gS 86.0045	3 1/2"	SQC T-Handle

Quick Coupling Handles



	OAL	Working End
gS 86.4550	6 3/4"	single slot
gS 86.4540	10"	single slot
gS 86.4420	7 1/2"	cruciform
gS 86.4560	10"	cruciform
gS 86.4580	10"	phillips


Screwdrivers with phenolic handle




86-87


86-87/10 - instruments for fracture management


OAL = Overall Length



1.5mm



2.5mm


	OAL	Hex	Holding Sleeve
gS 86.4395	7 3/4"	1.5mm	gS 86.4371
gS 86.4400	7 3/4"	2.5mm	gS 86.4373
gS 86.4490	8 1/2"	2.5mm	gS 86.4375, gS 86.4373
gS 86.4500	10"	2.5mm	none
gS 86.4585	10 1/2"	2.5mm	gS 86.4375, gS 86.4373


gS 86.4395
plastic handle
black


gS 86.4400
plastic handle
black


gS 86.4490
with notch
plastic handle
black


gS 86.4500
phenolic handle


gS 86.4585
with notch
phenolic handle

Hexagonal Screwdrivers



3.5mm


4.0mm

	OAL	Hex	Holding Sleeve
gS 86.4520	10"	3.5mm	none
gS 86.4590	10"	3.5mm	gS 86.4380
gS 86.4595	12"	3.5mm	gS 86.4380
gS 86.4530	10"	4.0mm	gS 86.4380


gS 86.4520
plastic handle
black

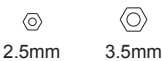

gS 86.4590
with notch
plastic handle
black


gS 86.4595
with notch
plastic handle
black


gS 86.4530
with notch
phenolic handle

Hexagonal Screwdrivers

ID = Inside Diameter
OAL = Overall Length

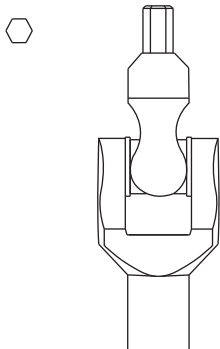


	OAL	Hex	Max ID	Holding Sleeve
gS 86.4410	7 3/4"	2.5mm	1.35mm	gS 86.4375, gS 86.4373
gS 86.4495	8 3/4"	3.5mm	1.75mm	none

Hexagonal Screwdrivers
cannulated, with notch
phenolic handle



gS 86.4410



gS 86.9914 10"

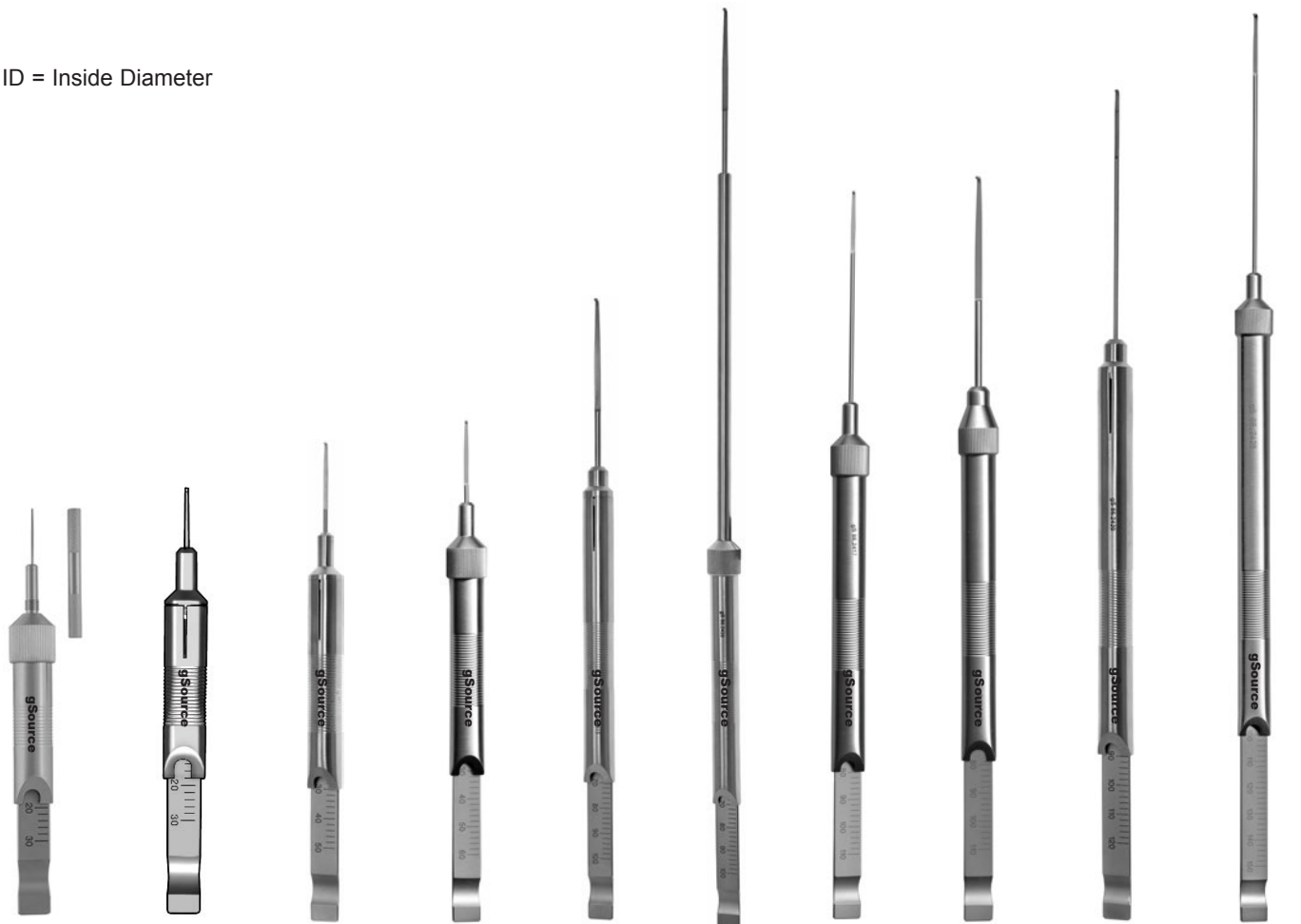
gSilicone Cardan Joint Hexagonal Screwdriver
3.5mm hex
silicone handle, green



86-87

86-87/12 - instruments for fracture management

ID = Inside Diameter



gS 86.2330 delicate with probe sleeve 4 3/4"
gS 86.2405 4 3/4"
gS 86.2410 6 1/2"
gS 86.2413 7"
gS 86.2415 9 1/2"
gS 86.2430 15 1/2"
gS 86.2417 10 1/2"
gS 86.2418 10 1/2"
gS 86.2420 11 1/2"
gS 86.2425 13 1/2"

	Measures up to	Minimum ID of drill hole*	Cap type
gS 86.2330	30mm	1.10mm	screw on
gS 86.2405	30mm	1.50mm	snap on
gS 86.2410	50mm	2.20mm	snap on
gS 86.2413	60mm	2.10mm	screw on
gS 86.2415	100mm	3.20mm	snap on
gS 86.2430	100mm	3.30mm	screw on
gS 86.2417	110mm	2.20mm	screw on
gS 86.2418	110mm	3.30mm	screw on
gS 86.2420	120mm	2.50mm	snap on
gS 86.2425	150mm	2.40mm	screw on

*Minimum ID of drill hole needed for use with depth gauge.

Depth Gauges
disassemble for cleaning

instruments for fracture management - 86-87/13

OD = Outside Diameter

SQC = Small Quick Coupling

- gS 86.4371** 1 1/2" for OD 3.5mm shafts
gS 86.4373 2" for OD 5.0mm shafts
gS 86.4375 3" for OD 5.0mm shafts with notch
gS 86.4380 5" for OD 7.0mm shafts with notch

Screw Holding Sleeves

gS 86.4371



gS 86.4373



gS 86.4375



gS 86.4380



Converts SQC end to round end with three flat sides for power drills.

gS 86.1002

Power Drill Adaptor
2 1/2"



Useful for compression and distraction modes.

Used in conjunction with plates to close larger fracture or osteotomy gaps.

gS 86.7220 3 1/2" span 20mm

Tension Device
articulated



86-87

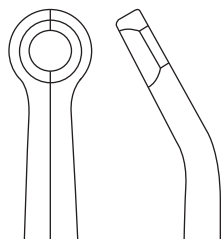
86-87/14 - instruments for fracture management

OD = Outside Diameter

For picking up screw from
screw rack.

	OD Screw Shaft
gS 86.6104	1.2mm
gS 86.6108	1.5mm-2.7mm
gS 86.6110	3.5mm-6.5mm

Screw Holding Forceps
3 1/2"



gS 86.6155 7 1/2"

Screw Holding Forceps
angled, for OD 5.5mm
shaft bone screw

instruments for fracture management - 86-87/15

SQC = Small Quick Coupling
TiN = Titanium Nitride

gS 87.0012 5 1/2"

Combination Wrench
11mm



gS 87.0014 7"

Socket Wrench
11mm
Cardan joint



gS 87.0200 8"

gExtractor, Screw
SQC, counter clockwise thread
TiN coated tip



gS 87.4080 8 1/2"

gExtractor, Femoral Head
with T-handle

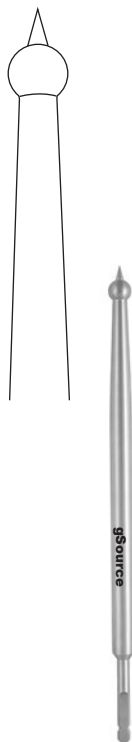


86-87/16 - instruments for fracture management

SQC = Small Quick Coupling

Useful for pushing bone fragments into place.

Designed to fit with
SQC handles gS 86.0040,
gS 86.0045, gS 86.0050
and Spiked Disc
gS 87.0022.



gS 87.2006 6 1/2"

Ball Spike SQC

sharp point
straight

Attaches to the ball tip end of
Ball Spikes gS 87.0020 and
gS 87.2006 shown on this page.

Also attaches to the ball tip end
of Pelvic Reduction Forceps
gS 47.6190, gS 47.6192,
gS 47.6196, gS 47.6200,
gS 47.6204, gS 47.6208,
gS 47.6300 and gS 47.6301
shown in Section 46-47 on
pages 22-25.

Helps to disperse the force of
the ball spike by providing a
greater contact area, thereby
reducing the risk of penetrating
thin bone.

The disc swivels on the ball tip
and the points help to reduce
slippage and allow for improved
alignment onto bone surface.

gS 87.0022 25mm

Spiked Disc

6 sharp points

Useful for pushing bone
fragments into place.

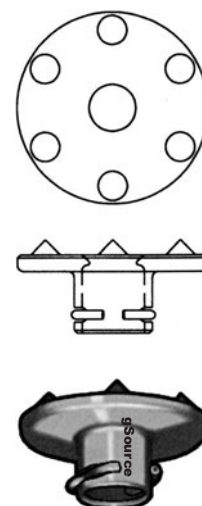
Designed to fit with
Spiked Disc
gS 87.0022.



gS 87.0020 12"






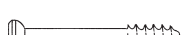




Ball Spike

sharp point
straight, phenolic handle



Guide to Fracture Management Instruments

Type of Screw

	Cortical	Cortical	Cortical	Cortical fine thread	Cancellous coarse thread	Cancellous	Cortical	Malleolar	Cancellous	Cancellous
diameter	1.5mm	2.0mm	2.7mm	3.5mm	3.5mm	4.0mm	4.5mm	4.5mm	6.5mm	6.5mm
										

Drill Bit for Gliding Hole



	gS 86.8215	gS 86.8220	gS 86.8227	gS 86.8235	gS 86.8235	-	gS 86.8425	-	gS 86.8425	gS 86.8426
diameter	1.5mm	2.0mm	2.7mm	3.5mm	3.5mm	None	4.5mm	None	4.5mm	For Shaft in Hard Bone 4.5mm

Drill Bit for Threaded Hole



	gS 86.8211	gS 86.8215	gS 86.8220	gS 86.8226	gS 86.8220 or gS 86.8226	gS 86.8220 or gS 86.8226	gS 86.8232	gS 86.8232	gS 86.8232
diameter	1.1mm	1.5mm	2.0mm	2.5mm	2.0mm or 2.5mm	2.0mm or 2.5mm	3.2mm	3.2mm	3.2mm

Tap



	gS 86.1200	gS 86.1202	gS 86.1204	gS 86.1206	gS 86.1208	gS 86.1208	gS 86.1212	gS 86.1220	gS 86.1220
diameter	1.5mm	2.0mm	2.7mm	fine thread 3.5mm	coarse thread 3.5mm	3.5mm	4.5mm	6.5mm	6.5mm






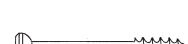




Countersink



	gS 86.1004	gS 86.1004	gS 86.1006	gS 86.1006	gS 86.1006	gS 86.1006	gS 86.1010	gS 86.1020	gS 86.1020
diameter	1.1mm	1.1mm	2.0mm	2.0mm	2.0mm	2.0mm	3.2mm	4.5mm	4.5mm

Guide to Fracture Management Instruments

Type of Screw

Type of Screw	Cortical 1.5mm	Cortical 2.0mm	Cortical 2.7mm	Cortical fine thread 3.5mm	Cancellous coarse thread 3.5mm	Cancellous 4.0mm	Cortical 4.5mm	Malleolar 4.5mm	Cancellous 6.5mm	Cancellous 6.5mm
diameter										

Depth Gauge



scale	gS 86.2330 gS 86.2405	gS 86.2330 gS 86.2405	gS 86.2410	gS 86.2410	gS 86.2410	gS 86.2410	gS 86.2410	gS 86.2415	gS 86.2415	gS 86.2415
	30mm	30mm	50mm	50mm	50mm	50mm	100mm	100mm	100mm	100mm

Quick Coupling Handle



	gS 86.0035	gS 86.0035	gS 86.0040 gS 86.0045 gS 86.0050	gS 86.0040 gS 86.0045 gS 86.0050	gS 86.0040 gS 86.0045 gS 86.0050	gS 86.0040 gS 86.0045 gS 86.0050	gS 86.0040 gS 86.0045 gS 86.0050	gS 86.0040 gS 86.0045 gS 86.0050

Screwdrivers



	gS 86.1502 gS 86.1504	gS 86.1502 gS 86.1504	gS 86.1506 gS 86.4400 gS 86.4410 gS 86.4500 gS 86.4580	gS 86.1506 gS 86.4400 gS 86.4410 gS 86.4500 gS 86.4580	gS 86.1506 gS 86.4400 gS 86.4410 gS 86.4500 gS 86.4580	gS 86.1519 gS 86.4495 gS 86.4520 gS 86.4590 gS 86.4595	gS 86.1519 gS 86.4495 gS 86.4520 gS 86.4590 gS 86.4595	gS 86.1519 gS 86.4495 gS 86.4520 gS 86.4590 gS 86.4595

Driver Type

Driver Type	1.5mm Hex ○	1.5mm Hex ○	2.5mm Hex Hex	2.5mm Hex Hex	2.5mm Hex Hex	3.5mm Hex Hex	3.5mm Hex Hex	3.5mm Hex Hex

Cruciform



OAL = Overall Length
OD = Outside Diameter
QTY = Quantity

- Handy container to store and dispense K-wires and Steinmann pins.
- Each dispenser is clearly marked with the inch/mm OD of the wires/pins held for quick identification.
- Dispenser is perforated at one end.
- Conical shaped end dispenses one wire at a time.
- It is recommended to load blunt end first.
- Will only dispense smooth (unthreaded) wires and pins.

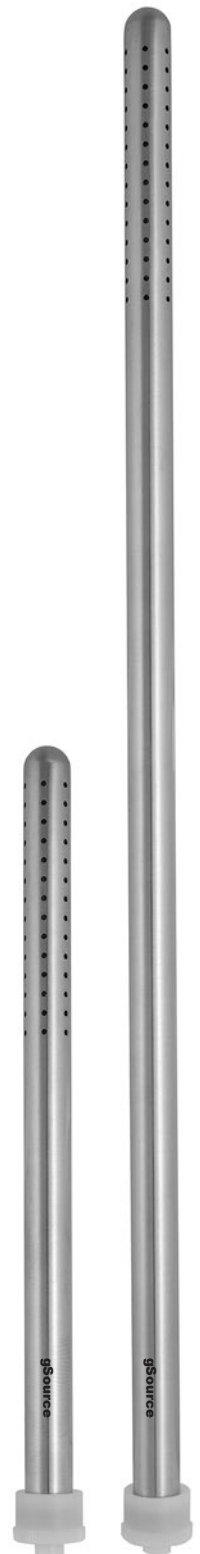
Dispensers store and dispense smooth (unthreaded) wires and pins only.

	OAL Dispenser	OAL Wire/Pin Stored	OD Wire/Pin Stored	Max Qty Stored - Not Dispensed	Max Qty Stored - Dispensed
gS 98.2002	6 3/4"	4", 5", and 6"	0.7mm [.028"]	120	24
gS 98.2003	6 3/4"	4", 5", and 6"	0.9mm [.035"]	78	18
gS 98.2005	6 3/4"	4", 5", and 6"	1.1mm [.045"]	54	18
gS 98.2007	6 3/4"	4", 5", and 6"	1.4mm [.054"]	30	18
gS 98.2009	6 3/4"	4", 5", and 6"	1.6mm [.062"]	24	18
gS 98.2011	13"	9" and 12"	0.9mm [.035"]	78	30
gS 98.2013	13"	9" and 12"	1.1mm [.045"]	54	24
gS 98.2015	13"	9" and 12"	1.4mm [.054"]	30	18
gS 98.2017	13"	9" and 12"	1.6mm [.062"]	24	18
gS 98.2019	13"	9" and 12"	2.0mm [.079"]	12	6
gS 98.2021	13"	9" and 12"	2.4mm [.094"]	12	6

gS 98.2018 replacement cap only, plastic, white

K-Wire and Pin Dispenser

stainless steel
plastic cap, white



98-99

98-99/2 - containers

OAL = Overall Length
OD = Outside Diameter
QTY = Quantity

- Store and dispense four different wire diameters from one dispenser.
- Wires are dispensed one at a time.
- Can be closed when not in use.
- Chambers are clearly marked with mm/inch OD of the wires/pins held.
- Will only dispense smooth (unthreaded) wires and pins.

Dispensers store and dispense smooth (unthreaded) wires and pins only.

	OAL Dispenser	OAL Wire/Pin Stored	OD Wire/Pin Stored	Max Qty Stored - Not Dispensed	Max Qty Stored - Dispensed
gS 98.5210	5 1/2"	4"	0.9mm [.035"]	60	18
			1.1mm [.045"]	30	12
			1.4mm [.054"]	24	12
			1.6mm [.062"]	18	6
gS 98.5230	7 1/2"	6"	0.9mm [.035"]	60	18
			1.1mm [.045"]	30	12
			1.4mm [.054"]	24	12
			1.6mm [.062"]	18	6
gS 98.5240	10 1/2"	9"	0.9mm [.035"]	60	18
			1.1mm [.045"]	30	12
			1.4mm [.054"]	24	12
			1.6mm [.062"]	18	6
gS 98.5245	10 1/2"	9"	1.6mm [.062"]	18	6
			2.0mm [.079"]	12	6
			2.0mm [.079"]	12	6
			2.4mm [.094"]	6	6
gS 98.5250	13 1/2"	12"	0.9mm [.035"]	60	18
			1.1mm [.045"]	30	12
			1.4mm [.054"]	24	12
			1.6mm [.062"]	18	6
gS 98.5260	13 1/2"	12"	1.6mm [.062"]	18	6
			2.0mm [.079"]	6	6
			2.0mm [.079"]	6	6
			2.4mm [.094"]	8	5



gS 98.5210

gS 98.5240

gS 98.5260

gS 98.5206 replacement cap only, plastic, white, screw on style

Four Chambered K-Wire and Pin Dispenser

stainless steel
plastic screw on cap, white

- Instrument stringer holds finger ring handle instruments securely ensuring instruments stay open during sterilization.
- Locking ball closure keeps cross bar in place.
- Stay-closed design prevents accidental opening.
- Expertly hand finished to eliminate any sharp edges.
- Made from German stainless steel.
- To open or close: squeeze side bars together, then fold back cross bar.

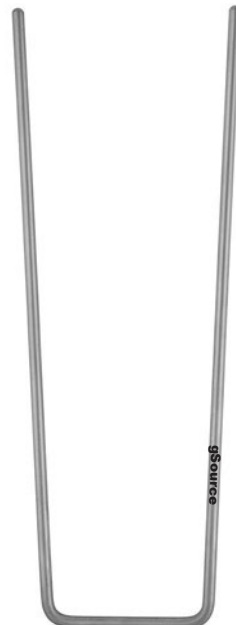


	2 1/2" wide		3 1/2" wide
gS 98.2104	4"		
gS 98.2106	6"	gS 98.2206	6"
gS 98.2108	8"	gS 98.2208	8"
gS 98.2110	10"		
gS 98.2112	12"		
gS 98.2114	14"		

Instrument Stringer
with lock

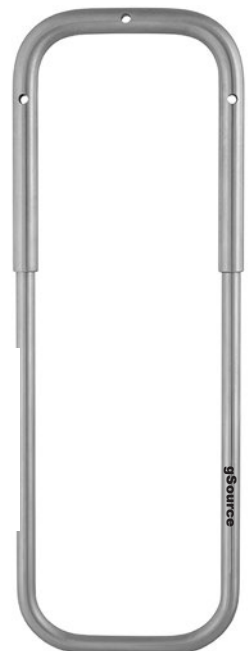
gS 98.2308	8"
gS 98.2310	10"
gS 98.2312	12"
gS 98.2314	14"
gS 98.2316	16"
gS 98.2318	18"

Instrument Stringer
2 3/4" wide
U-shaped, open end



gS 98.2406	6"
gS 98.2408	8"
gS 98.2410	10"
gS 98.2412	12"

Weinstein Instrument Holder
2 3/4" wide
U-shaped, closed end



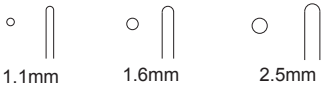
98-99/4 - cleaning

OD = Outside Diameter

gS 98.2515 6"
gS 98.2530 12"
Forceps Instrument Holder



bristles
gS 99.0100 steel
gS 99.0102 nylon
Instrument Cleaning Brush
7"
plastic handle, black



Useful for cleaning all cannulated instruments intraoperatively to prevent accumulation of debris in the cannulation.

gS 99.0104 7"
Instrument Cleaning Brush
nylon/steel bristles
plastic handle, black



OD
gS 99.1011 1.1mm
gS 99.1016 1.6mm
gS 99.1025 2.5mm
Cleaning Stylet
8 1/2"
ring handle



Double Trocar-Smooth


Double Trocar-Full Thread


Single Trocar-Smooth


Single Trocar-Partial Thread 25mm


Single Trocar-Full Thread


Double Diamond-Smooth


Single Diamond-Smooth


K-Wires 4" - diameters					K-Wires 6" - diameters				
0.7mm [.028"]	0.9mm [.035"]	1.1mm [.045"]	1.4mm [.054"]	1.6mm [.062"]	0.7mm [.028"]	0.9mm [.035"]	1.1mm [.045"]	1.4mm [.054"]	1.6mm [.062"]
78.2000	78.2010	78.2020	78.2040	78.2030	78.1210	78.1220	78.1230	78.1240	78.1250
				78.4210					78.4230
78.2300	78.2310	78.2320	78.2330	78.2340	78.2800	78.2810	78.2820	78.2840	78.2850
				78.9110					78.9114
				78.4080					78.4090
78.3000	78.3010	78.3020	78.3030	78.3040	78.1300	78.1310	78.1320	78.1340	78.1330
78.3300	78.3310	78.3320	78.3330	78.3340	78.3350	78.3360	78.3370	78.3380	78.3390



gS 98.5404 8 3/4"
anodized aluminum

gRack, K-Wire
stores 4" and 6" k-wires, 6 each (sold separately)
0.7mm to 1.6mm [.028" to .062"]

gSource K-Wires are sold separately in non-sterile packages of 6 each. They are precision ground from certified implant stainless steel and have smooth tapered points which are expertly machined for easier penetration.

See above chart for quick reference or Section 78-79 pages 1-2 in this catalog. Please inquire about the availability of any size and style not shown.

Rack folds to close for convenient storage. When opened, it converts to a table top stand for use in the operating room.

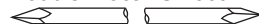
Closed position for storage.
8 3/4" x 5 1/2" x 1 1/2"



Open position
as a table top
stand.
Loaded

98-99/6 - containers

Double Trocar-Smooth



Double Trocar-Full Thread



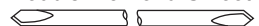
Single Trocar-Smooth



Single Trocar-Threaded



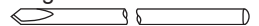
Double Diamond-Smooth



Double Diamond-Full Thread



Single Diamond-Smooth



Single Diamond-Threaded



K-Wires 9" - diameters					Steinmann Pins 9" - diameters						
0.7mm [.028"]	0.9mm [.035"]	1.1mm [.045"]	1.4mm [.054"]	1.6mm [.062"]	2.0mm [5/64"]	2.4mm [3/32"]	2.8mm [7/64"]	3.2mm [1/8"]	3.5mm [9/64"]	4.0mm [5/32"]	4.5mm [.177"]
78.2105	78.2110	78.2120	78.2140	78.2130	78.5500	78.5530	78.5560	78.5590	78.5620	78.5650	78.5680
				78.4030	78.8500	78.8530	78.8560	78.8590	78.8620	78.8650	78.8680
78.2500	78.2510	78.2520	78.2540	78.2530	78.6100	78.6130	78.6160	78.6190	78.6220	78.6250	78.6280
				78.9116	78.8700	78.8730	78.8760	78.8780	78.8820	78.8850	78.8880
78.3100	78.3110	78.3120	78.3140	78.3130	78.7000	78.7030	78.7060	78.7090	78.7120	78.7150	78.7180
					78.8300	78.8330	78.8360	78.8390	78.8420	78.8450	78.8480
78.3400	78.3410	78.3420	78.3440	78.3430	78.7780	78.7630	78.7660	78.7690	78.7720	78.7750	78.7782
					78.8000	78.8030	78.8060	78.8090	78.8120	78.8150	78.8180

gSource K-Wires are sold separately in non-sterile packages of 6 each. They are precision ground from certified implant stainless steel and have smooth tapered points which are expertly machined for easier penetration.

See above chart for quick reference or Section 78-79 pages 1-2 in this catalog. Please inquire about the availability of any size and style not shown.

Rack folds to close for convenient storage. When opened, it converts to a table top stand for use in the operating room.

Closed position for storage.
12 1/2" x 5 1/2" x 1 1/2"



gS 98.5409 12 1/2"
anodized aluminum

gRack, K-Wire and Pin
stores 9" k-wires and pins, 6 each (sold separately)
0.7mm to 4.5mm [.028" to .177"]



Open position
as a table top
stand.
Loaded

OAL = Overall Length
OD = Outside Diameter
SQC = Small Quick Coupling

Rack folds to close for convenient storage. When opened, it converts to a table top stand for use in the operating room.

Rack stores 1 each of the following gSource part numbers:

SQC Handle	OAL
gS 86.0040 black plastic and stainless steel	4 1/2"

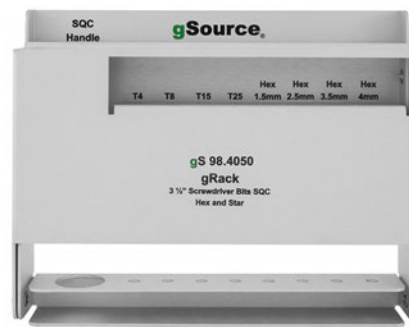
SQC Star Bits	Size	OAL
gS 86.1604	T4	3 1/2"
gS 86.1608	T8	3 1/2"
gS 86.1715	T15	3 1/2"
gS 86.1725	T25	3 1/2"

SQC Hex Bits	Size	OAL
gS 86.1915	1.5mm	3 1/2"
gS 86.1925	2.5mm	3 1/2"
gS 86.1935	3.5mm	3 1/2"
gS 86.1940	4.0mm	3 1/2"

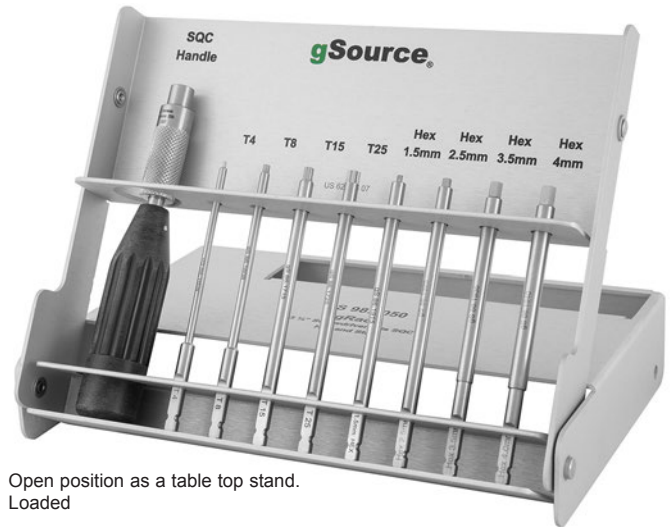
gS 98.4050 5 3/4"
anodized aluminum

gRack, Screwdriver Bits SQC

stores 4 SQC star bits, 4 SQC hex bits, 1 SQC handle
1 each (sold separately)



Closed position for storage.
5 3/4" x 7 1/4" x 1 1/4"
Empty



Open position as a table top stand.
Loaded

Rack folds to close for convenient storage. When opened, it converts to a table top stand for use in the operating room.

Drill bit diameter and reorder numbers are marked inside rack for easy identification.

Rack stores 1 each of the following gSource part numbers:

	OD	OAL
gS 86.8211	1.1mm	60mm
gS 86.8215	1.5mm	85mm
gS 86.8220	2.0mm	100mm
gS 86.8222	2.2mm	110mm
gS 86.8226	2.5mm	110mm
gS 86.8228	2.7mm	125mm
gS 86.8235	3.5mm	110mm

gS 98.8178 7"
stainless steel

gRack, SQC Twist Drill

stores 7 SQC twist drills, 1 each (sold separately)
1.1mm to 3.5mm [.045" to .138"]



Closed position for storage.
7" x 4 1/4" x 3/4"
Empty



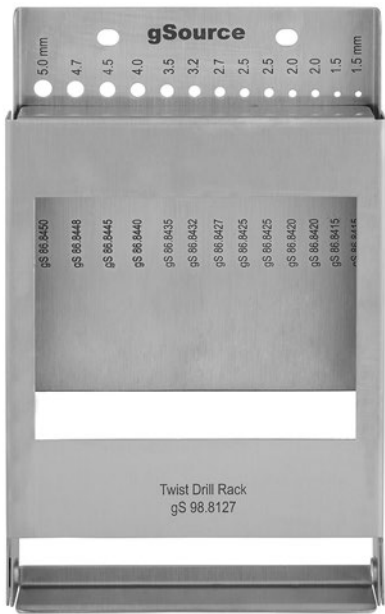
Open position as a table top stand.
Loaded

98-99/8 - containers

OAL = Overall Length
OD = Outside Diameter

Twist Drill rack folds to close for convenient storage. When opened, it converts to table top stand for use in the operating room.

Drill bit diameter and reorder numbers are marked inside rack for easy identification.



Closed position for storage.
6 3/4" x 4 1/4" x 3/4"
Empty

Rack stores the following gSource part numbers:

	OD	OAL	Max Stored
gS 86.8415	1.5mm	127mm	2
gS 86.8420	2.0mm	127mm	2
gS 86.8425	2.5mm	127mm	2
gS 86.8427	2.7mm	127mm	1
gS 86.8432	3.2mm	127mm	1
gS 86.8435	3.5mm	127mm	1
gS 86.8440	4.0mm	127mm	1
gS 86.8445	4.5mm	127mm	1
gS 86.8448	4.7mm	127mm	1
gS 86.8450	5.0mm	127mm	1

gS 98.8127 6 3/4"
stainless steel

Twist Drill Rack
stores 13 drill bits with round end
(sold separately)



Open position as a table top stand.
Loaded

Nylon coated brackets help avoid metal-to-metal contact.

Side arms stay locked to prevent curettes from falling out.

Rack stores any 12 of the following gSource part numbers:

#	cup width	straight	angled
5/0	2.2mm	gS 51.6110	gS 51.6400
4/0	2.5mm	gS 51.6120	gS 51.6401
3/0	2.8mm	gS 51.6130	gS 51.6402
2/0	3.3mm	gS 51.6150	gS 51.6403
0	3.7mm	gS 51.6170	gS 51.6404
1	4.3mm	gS 51.6190	gS 51.6410
2	4.8mm	gS 51.6210	gS 51.6420
3	5.6mm	gS 51.6230	gS 51.6430
4	6.1mm	gS 51.6250	gS 51.6440
5	6.7mm	gS 51.6290	gS 51.6450
6	8.8mm	gS 51.6310	gS 51.6460

gS 98.6020 10"
anodized aluminum, stainless steel latches

gRack, Brun Curettes
stores 12 7" Brun curettes, (sold separately)
#5/0 to #6 [2.2mm to 8.8mm]



Closed position
for storage.
10" x 8" x 2 3/4"
Empty



Open position
as a table top
stand.
Loaded

Nylon coated brackets help avoid metal-to-metal contact.

Side arms stay locked to prevent osteotomes from falling out.

Rack stores 2 each of the following tip widths:

tip width	straight	curved
1/4" [6mm]	gS 52.4040	gS 52.4280
1/2" [13mm]	gS 52.4060	gS 52.4290
3/4" [19mm]	gS 52.4100	gS 52.4300
1" [25mm]	gS 52.4140	gS 52.4310
1 1/4" [32mm]	gS 52.4180	gS 52.4320
1 1/2" [38mm]	gS 52.4220	gS 52.4330

gS 98.6040 12"
anodized aluminum, stainless steel latches

gRack, Lambotte Osteotomes
stores 12 9" Lambotte osteotomes (sold separately)
6mm to 38mm [1/4" to 1 1/2"]



Closed position
for storage.
12" x 6" x 3 1/2"
Empty



Open position
as a table top
stand.
Loaded

98-99/10 - containers

did you know... ?

Instrument care and cleaning recommendations can be found in Section 100 of this catalog or on the gSource website at www.gSource.com.



gS 98.1000 7 3/4" x 4" x 1"
[200mm] x [100mm] x [25mm]

Instrument Case, Small
with silicone mat
(instruments sold separately)

metric - metric conversions

to convert	to	multiply by
millimeters (mm)	centimeters (cm)	0.1
millimeters (mm)	meters (m)	0.001
centimeters (cm)	millimeters (mm)	10
centimeters (cm)	meters (m)	0.01
meters (m)	millimeters (mm)	1,000
meters (m)	centimeters (cm)	100
grams (g)	kilograms (kg)	0.001
kilograms (kg)	grams (g)	1,000

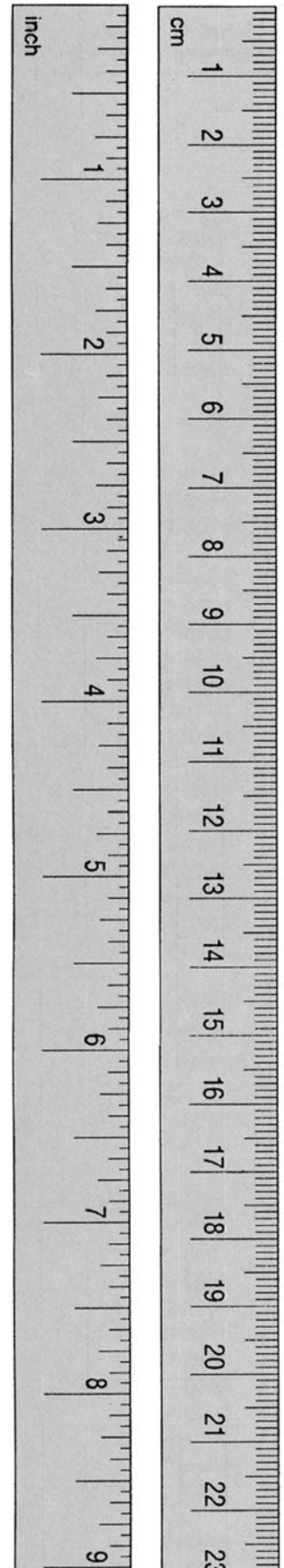
english - metric conversions

to convert	to	multiply by
inches	millimeters (mm)	25.4
inches	centimeters (cm)	2.54
millimeters (mm)	inches	0.0394
centimeters (cm)	inches	0.394
ounces (oz)	grams (g)	28.3
pounds (lbs)	kilograms (kg)	0.454
grams (g)	ounces (oz)	0.035
kilograms (kg)	pounds (lbs)	2.20

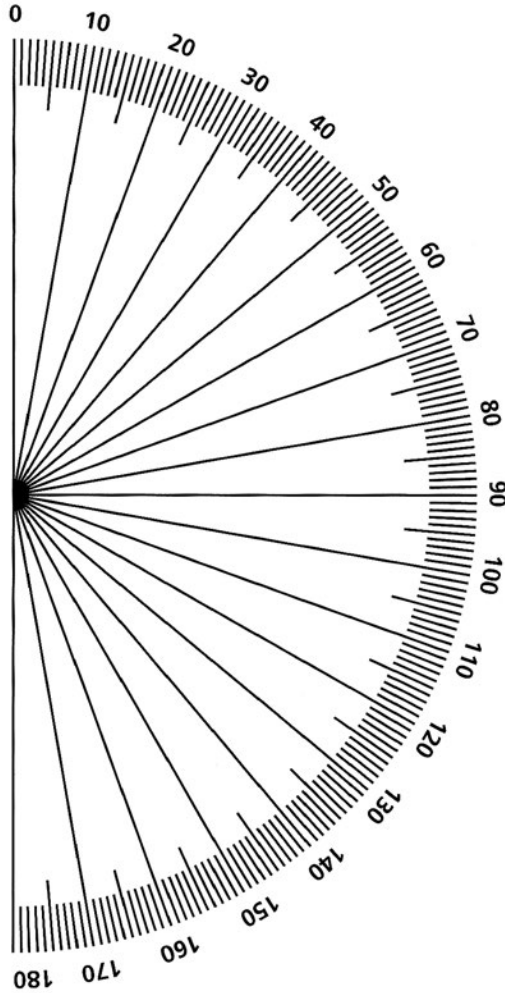
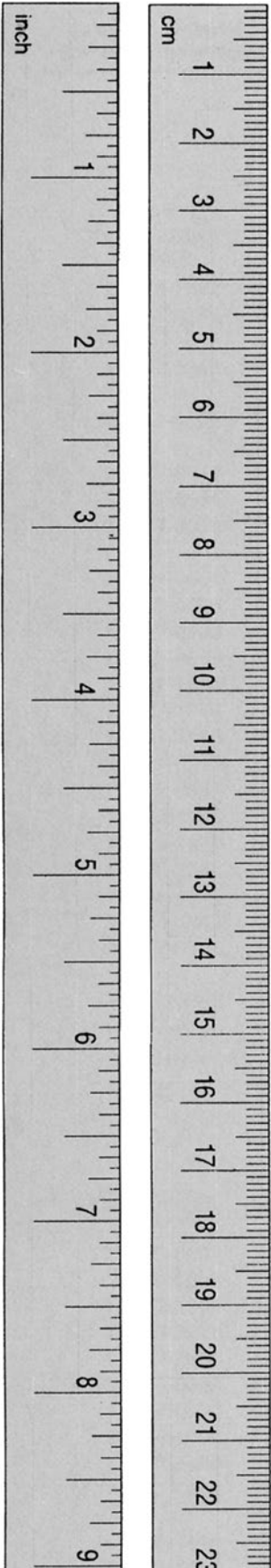
fractions to millimeters

inch	millimeters
1/16	1.59
1/8	3.18
3/16	4.74
1/4	6.35
5/16	7.94
3/8	9.53
7/16	11.11
1/2	12.70
9/16	14.29
5/8	15.88
11/16	17.46
3/4	19.05
13/16	20.64
7/8	22.23
15/16	23.81
1	25.40

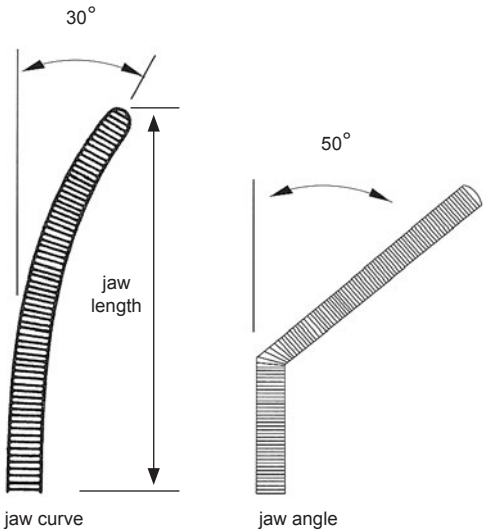
french scale fr/mm							measures outside diameter	
3	4	5	6	7	8	9	3 fr	1.0mm
•	•	•	•	•	•	•	4 fr	1.3mm
1mm			2mm			3mm	5 fr	1.7mm
							6 fr	2.0mm
							7 fr	2.3mm
							8 fr	2.7mm
							9 fr	3.0mm
10	11	12	13	14	15		10 fr	3.3mm
•	•	•	•	•	•		11 fr	3.7mm
		4mm			5mm		12 fr	4.0mm
							13 fr	4.3mm
							14 fr	4.7mm
							15 fr	5.0mm
							16 fr	5.3mm
16	17	18	19	20	22	24	17 fr	5.7mm
•	•	•	•	•	•	•	18 fr	6.0mm
		6mm				8mm	19 fr	6.3mm
							20 fr	6.7mm
							22 fr	7.3mm
							24 fr	8.0mm
							26 fr	8.7mm
							28 fr	9.3mm
							30 fr	10.0mm
26	28	30	32	34			32 fr	10.7mm
•	•	•	•	•			34 fr	11.3mm
		10mm						



100/2 - conversion charts



Jaw curvature and jaw angles are measured in degrees. Use the angle chart to determine degree of curvature.



temperature scale

Fahrenheit (°F) to
Centigrade (°C)

°F	°C
500	260
428	220
392	200
374	190
356	180
338	170
320	160
302	150
284	140
266	130
248	120
239	115
230	110
221	105
212	100
203	95
194	90
185	85
176	80
167	75
158	70
149	65
140	60
131	55
122	50
113	45
104	40
95	35
86	30
77	25
68	20
59	15
50	10
41	5
32	0
23	-5
14	-10
5	-15
0	-17
-4	-20
-13	-25
-22	-30
-40	-40

Proper care and maintenance will greatly prolong the life of your instruments.

Newly purchased instruments must be cleaned, lubricated and autoclaved before use.

Proper use

Instruments are designed for a particular purpose and should be used only for that purpose. Even the strongest instrument can be damaged when used inappropriately, such as when scissors are used to cut wire.

Water and Stainless Steel

Regular tap water contains minerals that can cause discoloration and staining. We recommend using distilled water for cleaning, disinfecting, sterilizing and rinsing. To avoid staining, use a cleaning solution with a pH near neutral (7). Instruments should be placed in distilled water immediately after use. They should never be placed in saline solution, as it may cause corrosion and eventually irreversible damage to the instrument.

Manual Cleaning

When handling instruments, be careful not to damage fine tips and mechanisms. If instruments have been exposed to blood, tissue, saline or other foreign matter, they must be rinsed in warm water before these substances are allowed to dry. Failure to do so may cause rusting. After rinsing, immerse them in a cleaning and disinfecting solution.

Because many compounds, including certain chemicals, are highly corrosive to stainless steel, rinse and dry instruments immediately if they come into contact with any potentially harmful substances.

If no ultrasonic cleaner is available, clean the instrument very carefully. Pay particular attention when cleaning box locks, serrations, hinges and other hard-to-reach areas. Use nylon (not steel) brushes and warm (not hot) cleaning solutions. Follow the manufacturer's instructions for the preparation of the cleaning solutions. Change these solutions daily.

Ultrasonic Cleaning

Ultrasonic cleaning is the most effective and efficient way to clean instruments. To maximize its effectiveness, instruments should be cleaned of all visible debris before they are placed in an ultrasonic cleaner.

When using ultrasonic cleaners:

- Do not mix dissimilar metals, e.g., chrome and stainless, in the same cycle.
- Use only designated cleaners. Open all instruments so ratchets and box locks are accessible.
- Whenever possible, disassemble instruments for optimal cleaning.
- Avoid piling instruments on top of each other.
- Remove and rinse off instruments immediately after the cycle is finished.
- Allow instruments to air-dry.
- Lubricate all moving parts after cleaning and before sterilization.
- Use only lubricants specifically designed for surgical instruments.
- Change the ultrasonic cleaning solution daily.

Instrument Checkup

The best time to review the condition of instruments is after they have been cleaned, lubricated and before sterilization. Check for:

Function

"Sharps" must cut cleanly (resharpen if needed) and close properly. Check for burrs along the cutting edges. Needle holders and clamps must engage properly and meet correctly at the tips.

Surface

Inspect surfaces for any sign of staining, cracking or other irregularities. Common sources of staining are:

- Inadequate cleaning.
- Mixing dissimilar metals.
- Impurities in the water.
- Unsuitable or improper preparation and usage of cleaning and disinfecting agents.
- Noncompliance with operating procedures of cleaning and sterilizing equipment.

Lubrication and Autoclaving

All instruments must be properly cleaned before autoclaving. Moving parts, such as box locks and hinges, should be well lubricated. Be sure to use surgical lubricants and not industrial oils.

Always sterilize instruments in the open, unlocked position.

We recommend that instruments be wrapped in cloth and then placed in the container, or that a cloth be put on the bottom of the pan to absorb moisture.

The cloth should be pH(7) neutral and free of detergent residues.

Finally, avoid sudden cooling. Instruments should be allowed to air-dry.

Cold Sterilizing or Disinfecting

Prolonged immersion in disinfecting or sterilizing solution can damage surgical instruments. Do not soak instruments for longer than 20 minutes. To render the instruments sterile and ready for use, we recommend using an autoclave.

Avoid BAC

Instruments with tungsten carbide inserts, such as wire cutters, needle holders and TC scissors, should never be immersed in sterilizing solutions containing benzyl ammonium chloride (BAC). BAC will soften and dissolve the tungsten carbide. Never use bleach as it will cause severe pitting.

Storage

Once instruments are thoroughly dry, store them in a clean, dry environment. Never put them in areas where chemicals may emit corrosive vapors or where temperature and moisture variations could cause condensation on the instruments.

Instrument Care Checklist

1. Rinse and soak soiled instruments immediately after use. Thoroughly clean before autoclaving.
2. Clean, autoclave and sterilize instruments in an open position.
3. Do not stack or entangle instruments.
4. Follow the manufacturer's recommendations when using equipment and cleaning solutions.
5. Keep instruments properly lubricated.
6. Inspect instruments regularly.
7. Have instruments repaired if needed to increase longevity and maintain proper function.
8. Use tip protectors to protect sharp or delicate working ends.

Surgical Instruments

Visually inspect the instrument surface. The surface should be clean, smooth and free from crevices, rough spots and grinding marks, as these could provide an opportunity for corrosion and also harbor bacteria. Carefully examine the tips of the instrument, blades, handles, box locks, alignment, and working end or tip.

Tungsten Carbide Instruments

Tungsten carbide inserts should not have any gaps or holes in the solder that could collect surgical debris that might lead to corrosion and pitting. The insert seam should be almost invisible.

Ratcheted Instruments

Ratchets should be beveled so there are no sharp edges. They should be smooth and clean. The ratchets should lock and unlock easily without excessive force.

Scissors

- To test the sharpness and proper alignment of scissors, cut a latex glove or rubber dam from the mid-point of the scissors blades to the distal end. The scissors should cleanly cut the latex without “chewing” it between the scissors blades.
- Hold the scissors up to the light, and while closing the scissors, confirm that the blades contact only at one point on the lead cutting edge of the scissors. This test confirms correct alignment of the blades and that a proper helix curve exists on the opposing blades (this places the control of the scissors in the surgeon’s hand).

- Open the scissors. Holding onto the bottom ring of the scissors, drop the top ring. The distal tips of the blades should remain 1/2 to 1/3 open. If the blade closes completely, the scissors are too loose. If it closes less than halfway, the scissors are too tight.
- Lay the scissors flat on a table. Look from the rings toward the tip. If the left shank is higher, then the scissors are too loose. If the right shank is higher, then the scissors are too tight.

Needle Holders

- When the tips touch, the ratchet should just touch on the first tooth. If the ratchet does not touch, excessive pressure will be placed upon the jaws when grasping a suture needle. This condition could lead to metal fatigue and stress crack failure.
- Hold the needle holder up to the light. You should be able to see light through the serrations, with the jaws touching at the distal tip. When the jaws are fully closed, you should not be able to see light through the serrations.
- Close the jaws on a piece of aluminum foil. You should see an even mesh pattern with no gaps or pinholes.
- Place an appropriate size needle in the jaws of the needle holder and close on the second ratchet tooth. It should not twist, turn, or slip under pressure.

Hemostats and Clamps

- Close a standard hemostat clamp. The tips of the jaws should touch on the first ratchet tooth. In addition, the jaws should close gradually, in thirds, as the clamp is being ratcheted down.

- Clamps need more ratchet teeth than other instruments in order to allow the surgeon precise controlled occlusion. A properly adjusted clamp should have the distal tips touching when the instrument is closed to the middle ratchet.
- The instrument should have a flexible feel to it when being locked and unlocked. Hold onto the top ring handle and drop the bottom ring. The handle should not swing freely, but move with minimal effort.
- It is important to check the box lock and verify that there is no “play” in the box lock. This is especially critical on long clamps because a little movement in the box lock becomes significantly more movement at the tip of the jaw. This could lead to improper meshing of the teeth and potential tearing of delicate vessels because of the movement in the alignment of the jaws.

Spinal Punches and Rongeurs

- A properly sharpened rongeur should cut a business card cleanly or leave an even indentation. Due to the variety of business cards and the materials used in making them, the thickness may vary. When using a thick business card, a clean cut may not be achieved and an even indentation will indicate a sharp instrument.
- Intervertebral disc rongeurs should grasp a human hair firmly and cut it cleanly. The jaws should meet precisely and should always be sharpened from the inside of the jaws (not ground or filed from outside) to maintain proper cutting alignment.
- Squeeze the spinal punch handle closed. The action should be smooth with no grinding or catching. When closed, the moving shaft (slider) should touch the foot plate, not traveling too far, causing stress to the foot plate.

100/6 - inspection & measurement guidelines

100

- The handle should spring back quickly when released. If the handle does not spring back, check to make sure the spinal punch has been properly cleaned and lubricated.
- Hold the spinal punch up to the light in the closed position. The jaws of the instrument should meet precisely to assure proper function (no light should shine through the jaws).
- Double action rongeurs should be free of play in the shanks and jaws.

Curettes

- The cup profile should be flat across the top without nicks or gouges.
- A properly sharpened curette when scraped against a piece of plastic, should plane off "ribbons" of plastic.

Measurement Guidelines

To measure the total length of an instrument, start at the bottom of the instrument and measure to the farthest tip in a straight line. See Figure A.

For curved and angled instruments, the distance of a perpendicular line drawn from the bottom of the instrument to the farthest point will determine the overall instrument length. See Figure B.

The jaw length of a clamp is the distance of a perpendicular line drawn from the beginning of the jaw to the tip of the working end. See Figure C.

Common jaw surfaces on hemostats and clamps are shown in Figure D.

Figure A

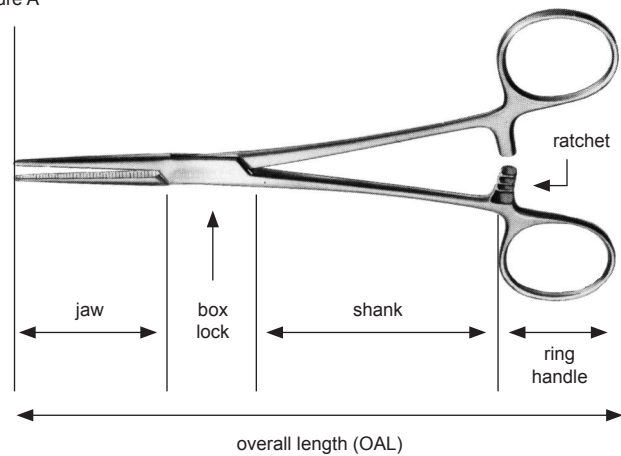


Figure B

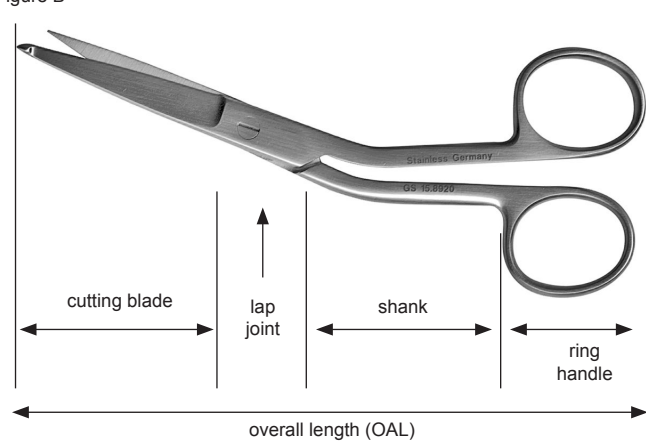


Figure C
Jaw Length

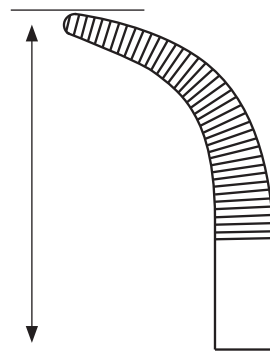
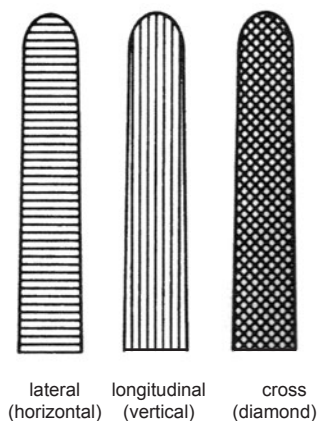


Figure D
Common Jaw Surfaces



set name	page
amputation	2
bone – graft	2
bone – holding, large	3
bone – holding, small	3
bone – large	4
bone – small	4
forefoot	5
fragment – large	8
fragment – mini	6
fragment – small	7
hand	9
hip – basic, total	10
joint – basic, total	11
joint – ortho, small	12-13
knee	14
orthopedic – major	15-16
orthopedic – minor	17-18
pelvic	19
pin removal	18
podiatry – basic	20
podiatry – nail pack	20
shoulder	21
spine – anterior lumbar	22

101/2 - instrument sets

101

Amputation

part number	qty	description
gS 12.1600	2	Scalpel Handle #4 standard 5 1/4"
gS 36.3660	2	Volkman Retractor 8 1/2" 6 prongs sharp
gS 43.3660	1	Key Elevator 8 1/2" width 1"
gS 45.4340	1	Volkman Bone Hook 8" sharp 25mm
gS 52.4650	1	Hibbs Osteotome 9 1/2" straight 1" [25mm]
gS 62.7540	1	Putti Bone Rasp double ended 10 1/2" 18mm flat tapered to 4mm
gS 63.4740	1	Stille-Horsley Forceps 10" angled double action
gS 63.4982	1	Liston Bone Forceps 7 1/2" straight
gS 65.7130	3	Gigli Saw Blade 12" [30cm]
gS 65.7140	3	Gigli Saw Blade 20" [50cm]
gS 65.7170	2	Gigli Saw Handle 2 1/2"
gS 65.7431	1	Satterlee Bone Saw 13" with 10" blade stainless ring handle chrome
gS 65.8120	1	Liston Amputation Knife 6 3/4" blade
gS 66.5580	1	Stille-Luer Rongeur 8 1/2" straight 10mm double action
gS 75.3280	1	Yankauer Suction Tube 11" double angled stainless
gS 75.9340	1	Baron Suction Tube 5 1/2" 5 french 30 degrees working length 75mm

Bone – Graft

part number	qty	description
gS 36.5580	2	Taylor Spinal Retractor 7 1/2" x 3" pointed
gS 40.1010	1	Caspar Distractor Right body 2 1/2" spread
gS 40.1012	1	Caspar Distractor Right body 3 1/4" spread long bar
gS 40.1016	1	Caspar Distractor Right Drill Guide
gS 40.1020	1	Caspar Distractor Left body 2 1/2" spread
gS 40.1022	1	Caspar Distractor Left body 3 1/4" spread long bar
gS 40.1026	1	Caspar Distractor Left Drill Guide
gS 40.1030	1	Caspar Bone Graft Holder and Impactor 8 1/4"
gS 40.1035	1	Screwdriver 8" for Distraction Screws
gS 40.1040	1	Twist Drill 5 3/4" for 1.7mm distraction screws 8mm depth
gS 40.1052	1	Distraction Screws 12mm
gS 40.1054	1	Distraction Screws 14mm
gS 40.1056	1	Distraction Screws 16mm
gS 40.1058	1	Distraction Screws 18mm
gS 43.4220	2	Cushing Elevator 7 1/2" curved 15mm sharp
gS 43.4400	2	Cobb Elevator 9 1/2" hex handle 1/2"
gS 46.2300	2	Lewin Bone Forceps 7"
gS 52.4040	1	Lambotte Osteotome 9" straight 1/4"
gS 52.4060	1	Lambotte Osteotome 9" straight 1/2"
gS 52.4100	1	Lambotte Osteotome 9" straight 3/4"
gS 52.4140	1	Lambotte Osteotome 9" straight 1"
gS 52.4220	1	Lambotte Osteotome 9" straight 1 1/2"
gS 52.4280	1	Lambotte Osteotome 9" curved 1/4"
gS 52.4290	2	Lambotte Osteotome 9" curved 1/2"
gS 52.4300	1	Lambotte Osteotome 9" curved 3/4"
gS 56.4870	2	Hibbs Gouge 9" straight 1/4"
gS 56.5020	2	Hibbs Gouge 9" curved 1/4"
gS 60.9990	1	Bone Tamp 6 1/2" 10mm cross-serrated end

Bone – Holding, Small

part number	qty	description
gS 46.1620	2	Kern Bone Forceps 5 1/2" with ratchet
gS 46.1640	2	Kern Bone Forceps 9 1/2" with ratchet
gS 46.1900	1	Verbrugge Forceps 6" self-centering speedlock
gS 46.1920	1	Verbrugge Forceps 7 1/2" self-centering
gS 46.2210	1	Verbrugge Forceps 7" with ratchet
gS 46.2280	1	Bone Reduction Forceps 6" small curved
gS 46.2300	2	Lewin Bone Forceps 7"
gS 46.2340	1	Bone Reduction Forceps 8" long ratchet
gS 46.2407	1	Bone Holding Forceps 7" with speedlock
gS 46.2520	2	Lowman Bone Clamp 5" 1x2
gS 46.2540	2	Lowman Bone Clamp 7 1/4" 1x2
gS 46.4000	1	Bone Reduction Forceps 5"

Bone – Holding, Large

part number	qty	description
gS 46.1815	2	Lane Bone Forceps 13" light with ratchet
gS 46.1940	1	Verbrugge Forceps 9 1/2" self-centering
gS 46.1960	1	Verbrugge Forceps 10" self-centering
gS 46.1980	1	Verbrugge Forceps 11" self-centering
gS 46.2120	1	Ulrich Bone Forceps straight 9 1/2"
gS 46.2220	1	Verbrugge Forceps 10" with ratchet
gS 46.2240	1	Verbrugge Forceps 10 1/2" with long ratchet
gS 46.2260	1	Verbrugge Forceps 11" with long ratchet
gS 46.2300	2	Lewin Bone Forceps 7"
gS 46.2409	1	Bone Holding Forceps 9" with speedlock
gS 46.2560	2	Lowman Bone Clamp 8" 1x2
gS 46.4685	2	Lambert-Lowman Bone Clamp 8" 2x2 jaws 2 1/2" cap

101/4 - instrument sets

101

Bone – Small

part number	qty	description
gS 36.9300	2	Hohmann Retractor Mini 6 1/2" 6mm
gS 36.9320	2	Hohmann Retractor Mini 6 1/2" 8mm
gS 36.9365	2	Hohmann Retractor 8 1/2" x 8mm rounded end 2 holes
gS 36.9382	2	Hohmann Retractor 9 1/2" x 18mm round end 2 holes
gS 43.3060	1	Periosteal Elevator 7 1/4" curved 3mm straight sharp edge phenolic handle
gS 43.3070	1	Periosteal Elevator 7 1/4" curved 6mm straight sharp edge phenolic handle
gS 45.4420	1	Bone Hook 9" small 10mm sharp
gS 46.1900	1	Verbrugge Forceps 6" self-centering speedlock
gS 46.1920	1	Verbrugge Forceps 7 1/2" self-centering speedlock
gS 46.2280	1	Bone Reduction Forceps 6" small curved
gS 63.5100	1	Liston Bone Forceps 5 1/2" angled
gS 66.6256	1	Ruskin Rongeur 6" curved 3mm double action
gS 66.6270	1	Ruskin Rongeur 7 1/2" curved 4mm double action
gS 74.7920	1	Ruler Flexible 6" inch/mm graduations

Bone – Large

part number	qty	description
gS 36.9365	2	Hohmann Retractor 8 1/2" x 8mm rounded end 2 holes
gS 36.9382	2	Hohmann Retractor 9 1/2" x 18mm round end 2 holes
gS 36.9482	2	Hohmann Retractor 10 1/2" x 22mm rounded end 3 holes
gS 36.9505	2	Hohmann Retractor 10 1/2" x 70mm round end 2 holes
gS 36.9800	1	Bennett Retractor 10" x 1 3/4"
gS 36.9840	1	Bennett Retractor 10" x 2 1/2"
gS 36.9920	2	Murphy Bone Skid 12"
gS 37.3040	2	Blount Retractor 10 1/2" 2 prongs 44mm
gS 43.3120	1	Periosteal Elevator 7 1/4" curved 6mm sharp edge phenolic handle
gS 43.3140	1	Periosteal Elevator 7 1/4" angled 14mm curved sharp edge phenolic handle
gS 43.3150	1	Periosteal Elevator 7 1/4" straight 13mm straight sharp edge phenolic handle
gS 45.4430	1	Bone Hook 9" medium 19mm sharp
gS 45.4440	1	Bone Hook 9" large 25mm sharp
gS 46.1940	1	Verbrugge Forceps 9 1/2" self-centering
gS 46.1960	1	Verbrugge Forceps 10" self-centering
gS 46.1980	1	Verbrugge Forceps 11" self-centering
gS 46.2407	1	Bone Holding Forceps 7" with speedlock
gS 46.2409	1	Bone Holding Forceps 9" with speedlock
gS 52.0101	1	Interchangeable Key 3 1/4" 3.0mm hex
gS 52.0105	1	Interchangeable Chisel Blade 5mm straight
gS 52.0106	1	Interchangeable Chisel Blade 10mm straight
gS 52.0107	1	Interchangeable Chisel Blade 16mm straight
gS 52.0108	1	Interchangeable Chisel Blade 25mm straight
gS 52.0110	1	Interchangeable Osteotome Blade 5mm straight
gS 52.0111	1	Interchangeable Osteotome Blade 10mm straight
gS 52.0112	1	Interchangeable Osteotome Blade 16mm straight
gS 52.0113	1	Interchangeable Osteotome Blade 25mm straight
gS 52.0160	1	Interchangeable Gouge Blade 60mm radius
gS 63.4660	1	Stille-Liston Forceps 11" straight double action
gS 63.6380	1	Ruskin Liston Forceps 7 1/2" straight double action
gS 66.5580	1	Stille-Luer Rongeur 8 1/2" straight 10mm double action
gS 66.6200	1	Beyer Rongeur 7" curved 3mm double action
gS 66.6270	1	Ruskin Rongeur 7 1/2" curved 4mm double action
gS 74.7940	1	Ruler Flexible 8" inch/mm graduations

Forefoot

part number	qty	description
gS 12.1580	3	Scalpel Handle #3 standard 5"
gS 13.3580	1	Mayo Scissors 5 1/2" curved beveled
gS 13.4023	1	Operating Scissors 5 1/2" straight blunt/blunt
gS 13.5620	1	Metzenbaum Scissors 5 3/4" curved
gS 17.1630	1	Adson Forceps 4 3/4" serrated 1x2 teeth 1.3mm
gS 17.1929	2	Adson Brown Forceps 4 3/4" 9x9 teeth
gS 17.2120	2	Allis Tissue Forceps 6" 4x5 teeth
gS 17.5060	1	Kocher Forceps 5 1/2" straight serrated 1x2 teeth
gS 19.1600	1	Adson Dressing Forceps 4 3/4" serrated delicate
gS 20.4660	1	Foerster Forceps 7" straight serrated
gS 20.5620	4	Backhaus Towel Forceps 5 1/4"
gS 21.2700	1	Crile-Wood Needle Holder 6" serrated
gS 21.3780	1	Mayo Hegar Needle Holder 7" serrated
gS 22.2560	4	Mosquito Forceps 5" straight (Halsted)
gS 22.2580	8	Mosquito Forceps 5" curved (Halsted)
gS 22.2660	1	Kelly Forceps 5 1/2" straight
gS 22.2680	1	Kelly Forceps 5 1/2" curved
gS 22.2760	1	Crile Forceps 5 1/2" straight
gS 22.2780	1	Crile Forceps 5 1/2" curved
gS 25.1880	2	Joseph Hook 6 1/4" 1 prong sharp
gS 25.1920	2	Joseph Hook 6 1/4" 2 prongs sharp 5mm
gS 34.1845	2	Senn Retractor 6 1/4" 3 prongs sharp
gS 34.1940	2	Ragnell Retractor 5 3/4" double ended
gS 36.9320	2	Hohmann Retractor Mini 6 1/2" 8mm
gS 38.5170	1	Self Retaining Retractor 4" sharp
gS 38.5300	2	Schink Retractor 4 1/2"
gS 38.5920	1	Weitlaner Retractor 4 1/2" sharp 2x3
gS 42.1760	1	Sayre Elevator 6 1/2" 5mm/9mm blunt/blunt
gS 42.7140	1	Freer Elevator 7 1/2" double ended 5mm sharp/blunt
gS 43.3580	1	Key Elevator 7" width 1/4"
gS 43.3620	1	Key Elevator 7 1/2" width 1/2"
gS 46.8870	1	Locke Phalangeal Forceps 6"
gS 52.0400	1	Long Bevel Osteotome 7" straight 10mm calibrated
gS 52.0460	1	Long Bevel Osteotome 7" straight 20mm calibrated
gS 52.0500	1	Long Bevel Osteotome 7" straight 25mm calibrated
gS 52.0700	1	Long Bevel Osteotome 7" curved 5mm calibrated
gS 52.0750	1	Long Bevel Osteotome 7" curved 10mm calibrated
gS 59.7600	1	Lucae Mallet 8" 8oz [227g] head s/s convex/flat Ø 25mm s/s handle
gS 61.6380	1	Nail Rasp #93 double ended 6 3/4" 2mm angled up/down
gS 61.6440	1	Bone File #12A double ended 7" 5mm straight plain/cross serrations
gS 61.6477	1	Bone Rasp double ended 8 1/2" 13mm straight fine/coarse serrations
gS 62.1710	1	Joseph Rasp 6 1/4" 8mm straight fine cross serrations
gS 63.6570	1	Ruskin Liston Forceps 6" straight double action
gS 65.3380	1	Plug Cutter 4 1/2" with obturator 3mm/5mm
gS 66.3660	1	Blumenthal Rongeur 6" 30 degrees 3mm single action
gS 66.6200	1	Beyer Rongeur 7" curved 3mm double action
gS 74.7980	1	Ruler Flexible 12" inch/mm graduations
gS 81.6720	1	Wire Extraction Pliers 7" double action 2mm TC
gS 82.0100	1	Vickers Manual K-Wire Driver 5 1/2"
gS 83.2980	1	Wire Cutting Scissors 4 3/4" angled with notch
gS 83.7310	1	Flush Front & Side Wire Cutter double action 7" TC max cap 1.6mm [.062"]
gS 98.5210	1	Four Chambered K-Wire Dispenser for 4" wires 0.9-1.6mm diameter
gS 99.0100	1	Steel brush with Plastic handle

101/6 - instrument sets

Fragment – Mini

part number	qty	description
gS 11.9500	1	Sharp Hook 6"
gS 36.9300	1	Hohmann Retractor Mini 6 1/2" 6mm
gS 36.9320	1	Hohmann Retractor Mini 6 1/2" 8mm
gS 43.3060	1	Periosteal Elevator 7 1/4" curved 3mm straight sharp edge phenolic handle
gS 46.2190	1	Stagbeetle Forceps 4 3/4"
gS 46.2330	1	Bone Reduction Forceps 5" curved 10mm serrated with pointed tips
gS 46.2350	1	Bone Reduction Forceps 5" curved 15mm serrated with pointed tips
gS 81.3214	1	Needle Nose Pliers 5 1/4" delicate with guide
gS 82.0172	1	Mini Bending Iron 4 3/4" for 1.5mm/2.0mm plates
gS 82.0174	1	Small Bending Iron 5 1/2" for 2.7mm/3.5mm plates
gS 82.0176	1	Small Bending Iron 5 1/2" for 3.5mm/2.7mm plates
gS 82.0980	2	Plate Bending Pliers 5 1/2" max 2.0mm plates
gS 83.7230	1	Wire Cutter double action 7" angled TC max cap 1.6mm [.062"]
gS 83.9000	1	Plate/Pin Cutter double action 9 1/2", max cap 3.2mm [.126"]
gS 86.0035	1	Handle 4 1/4" MQC (mini quick coupling)
gS 86.0040	1	Handle 4 1/2" SQC (small quick coupling)
gS 86.1004	1	Countersink 2 1/4" 1.5/2.0mm MQC (mini quick coupling) 1.1mm tip
gS 86.1006	1	Countersink 2 3/4" 2.7/3.5/4.0mm SQC (small quick coupling) 2.0mm tip
gS 86.1200	2	Tap 2" 1.5mm MQC (mini quick coupling) 0.5mm pitch
gS 86.1202	2	Tap 2 1/4" 2.0mm MQC (mini quick coupling) 0.6mm pitch
gS 86.1204	2	Tap 4" 2.7mm SQC (small quick coupling) 1.0mm pitch
gS 86.1502	1	Screwdriver Bit hex 2" 1.5mm MQC (mini quick coupling)
gS 86.1506	1	Screwdriver Bit hex 4" 2.5mm SQC (small quick coupling)
gS 86.2405	1	Depth Gauge 4 3/4" 30mm
gS 86.2410	1	Depth Gauge 6 1/2" 50mm
gS 86.2500	1	Drill Sleeve Double 4 3/4" 1.1/1.5mm
gS 86.2502	1	Drill Sleeve Double 4 3/4" 2.0/1.5mm
gS 86.2503	1	Drill Sleeve Double 5" 2.7/2.0mm
gS 86.4371	1	Holding Sleeve 1 1/2" for mini cruciform and hex shafts
gS 86.4373	1	Holding Sleeve 2" Split for small hex driver
gS 86.4490	1	Screwdriver 8 1/2" hex 2.5mm with notch black plastic handle
gS 86.6108	1	Screw Holding Forceps 3 1/2" for 1.5mm - 2.7mm
gS 86.8211	2	Drill Bit SQC (small quick coupling) 1.1mm 60/13mm
gS 86.8215	2	Drill Bit SQC (small quick coupling) 1.5mm 85/18mm
gS 86.8220	2	Drill Bit SQC (small quick coupling) 2.0mm 100/22mm
gS 86.8227	2	Drill Bit SQC (small quick coupling) 2.7mm 100/29mm
optional		
gS 36.9270	1	Hohmann Retractor 6" 15mm
gS 43.3120	1	Periosteal Elevator 7 1/4" curved 6mm sharp edge phenolic handle
gS 46.2370	1	Bone Reduction Forceps 5" curved stepped pointed
gS 46.2390	1	Plate and Bone Holding Forceps 5" with footplate
gS 46.2395	1	Plate Holding Forceps 5 1/2" curved
gS 82.2016	1	Gratloch Wire Bender 7 1/2" max cap 1.6mm [.062"]
gS 86.1504	1	Screwdriver Bit cruciform 2 1/2" MQC (mini quick coupling)

Instruments for mini fragment fixation
1.5mm, 2.0mm and 2.7mm screws

Fragment – Small

part number	qty	description
gS 11.9500	1	Sharp Hook 6"
gS 36.9270	2	Hohmann Retractor 6" 15mm
gS 36.9320	2	Hohmann Retractor Mini 6 1/2" 8mm
gS 43.3120	1	Periosteal Elevator 7 1/4" curved 6mm sharp edge phenolic handle
gS 46.1920	1	Verbrugge Forceps 7 1/2" [19cm] self-centering
gS 46.2280	1	Bone Reduction Forceps 6" small curved
gS 46.2330	1	Bone Reduction Forceps 5" curved 10mm serrated with pointed tips
gS 46.2350	1	Bone Reduction Forceps 5" curved 15mm serrated with pointed tips
gS 81.3214	1	Needle Nose Pliers 5 1/4" delicate with guide
gS 82.0174	1	Small Bending Iron 5 1/2" for 2.7mm/3.5mm plates
gS 82.0176	1	Small Bending Iron 5 1/2" for 3.5mm/2.7mm plates
gS 82.0182	2	Bending Iron 7 3/4" for 3.5mm/4.5mm plates
gS 82.4760	1	Wire and Pin Bender 6" max cap 3.2mm [.126"]
gS 86.0045	1	T-Handle 3 1/2" for small/large screw sets SQC (small quick coupling)
gS 86.1002	1	Adaptor 2 1/2" for power drill SQC (small quick coupling)
gS 86.1006	1	Countersink 2 3/4" 2.7/3.5/4.0mm SQC (small quick coupling) 2.0mm tip
gS 86.1206	2	Tap 4 1/4" 3.5mm SQC (small quick coupling) 1.25mm pitch TiN coated
gS 86.1208	2	Tap 4 1/4" 3.5mm SQC (small quick coupling) 1.75mm pitch
gS 86.1510	1	Screwdriver Bit hex 5 1/2" 2.5mm SQC (small quick coupling) with notch
gS 86.2410	1	Depth Gauge 50mm
gS 86.2504	1	Drill Sleeve Double 5" 2.5/3.5mm
gS 86.2507	1	Drill Guide/Sleeve 4 1/2" Parallel 3:1 2.7mm screw/2.0mm drill bit
gS 86.2510	1	Insert Drill Sleeve 1 1/2" 3.5mm screw/2.5mm drill bit
gS 86.2584	1	Drill Guide 6" Neutral/Load 3.5mm screw/2.5mm drill bit
gS 86.2735	1	Universal Drill Guide 5 1/2" 3.5mm screw/2.5mm drill bit
gS 86.4375	1	Holding Sleeve 3" for small hex driver
gS 86.4490	1	Screwdriver 8 1/2" hex 2.5mm with notch black plastic handle
gS 86.6110	1	Screw Holding Forceps 3 1/2" for 3.5mm - 6.5mm
gS 86.8226	2	Drill Bit SQC (small quick coupling) 2.5mm 110/32mm
gS 86.8235	2	Drill Bit SQC (small quick coupling) 3.5mm 110/42mm
optional		
gS 36.9300	1	Hohmann Retractor Mini 6 1/2" 6mm
gS 46.1900	1	Verbrugge Forceps 6" [15cm] self-centering speedlock
gS 46.2370	1	Bone Reduction Forceps 5" curved stepped pointed
gS 82.0315	1	Plate Bending Pliers 8 1/2" for 1.6mm plates
gS 82.2016	1	Gratloch Wire Bender 7 1/2" max cap 1.6mm [.062"]
gS 83.7240	1	Wire Cutter double action 9" angled TC max cap 2.4mm [.079"]
gS 83.7320	1	Pin Cutter double action 10" end cut max cap 3.0mm [.118"]
gS 86.0040	1	Handle 4 1/2" SQC (small quick coupling)
gS 86.1506	1	Screwdriver Bit hex 4" 2.5mm SQC (small quick coupling)
gS 86.4373	1	Holding Sleeve 2" Split for small hex driver

Instruments for small fragment fixation
3.5mm and 4.0mm screws

101/8 - instrument sets

Fragment – Large

part number	qty	description
gS 11.9500	1	Sharp Hook 6"
gS 46.1940	1	Verbrugge Forceps 9 1/2" [24cm] self-centering
gS 46.1980	1	Verbrugge Forceps 11" [28cm] self-centering
gS 46.2340	1	Bone Reduction Forceps 8" long ratchet
gS 46.2409	2	Bone Holding Forceps 9" with speedlock
gS 86.0045	1	T-Handle 3 1/2" for small/large screw sets SQC (small quick coupling)
gS 86.1020	1	Countersink 7" 4.5/6.5mm T-handle 4.3mm tip
gS 86.1212	3	Tap 5" 4.5mm SQC (small quick coupling) 2.0mm pitch
gS 86.1220	1	Tap 8" 6.5mm SQC (small quick coupling) calibrated mm 2.7mm pitch
gS 86.1521	1	Screwdriver Bit hex 6 1/2" 3.5mm SQC (small quick coupling)
gS 86.2420	1	Depth Gauge 11 1/2" 120mm
gS 86.2505	1	Drill Sleeve Double 7" 4.5/3.2mm
gS 86.2506	1	Drill Sleeve Double 6 1/2" 6.5/3.2mm
gS 86.2515	1	Insert Drill Sleeve 3 1/8" 4.5mm screw/3.2mm drill bit
gS 86.2586	1	Drill Guide 6 1/2" Neutral/Load 4.5mm screw/3.2mm drill bit
gS 86.2745	1	Universal Drill Guide 7" 4.5mm screw/3.2mm drill bit
gS 86.4380	1	Holding Sleeve 5" for large hex driver
gS 86.4590	1	Screwdriver 10" hex 3.5mm with notch black plastic handle
gS 86.6110	1	Screw Holding Forceps 3 1/2" for 3.5mm - 6.5mm
gS 86.7220	1	Tension Device 3 1/2" span 20mm articulated
gS 86.8220	2	Drill Bit SQC (small quick coupling) 2.0mm 100/22mm
gS 86.8232	3	Drill Bit SQC (small quick coupling) 3.2mm 145/48mm
gS 86.8245	2	Drill Bit SQC (small quick coupling) 4.5mm 145/50mm
gS 87.0012	1	Combination Wrench 5 1/2" 11mm
gS 87.0014	1	Socket Wrench 7" 11mm stainless
optional		
gS 46.1960	1	Verbrugge Forceps 10" [26cm] self-centering
gS 46.2370	1	Bone Reduction Forceps 5" curved stepped pointed
gS 46.2407	1	Bone Holding Forceps 7" with speedlock
gS 86.1519	1	Screwdriver Bit hex 4" 3.5mm SQC (small quick coupling)
gS 86.2415	1	Depth Gauge 9 1/2" 100mm

Instruments for large fragment fixation
4.5mm and 6.5mm screws

Hand

part number	qty	description
gS 11.1900	1	Lead Hand Adult 14" with tabs
gS 11.1920	1	Lead Hand Child 10" with tabs
gS 12.1580	2	Scalpel Handle #3 standard 5"
gS 13.3975	1	Mayo Scissors 6 3/4" straight TC
gS 15.9299	1	Utility Scissors 5 1/2" black plastic handle
gS 16.4820	1	Super-Cut Metzenbaum Scissors 5 1/2" curved
gS 16.4940	1	Super-Cut Metzenbaum Scissors 7" curved
gS 16.5440	1	Super-Cut Iris Scissors 4 1/2" straight
gS 16.5600	1	Super-Cut Iris Scissors 4 1/2" curved
gS 17.1640	1	Adson Forceps 4 3/4" 1x2 teeth delicate 0.9mm
gS 17.1929	1	Adson Brown Forceps 4 3/4" 9x9 teeth
gS 17.2050	2	Allis Tissue Forceps 4 3/4" 4x5 teeth
gS 17.3760	1	Tissue Forceps 6" 1x2 teeth
gS 17.5060	2	Kocher Forceps 5 1/2" straight serrated 1x2 teeth
gS 19.1620	1	Adson Dressing Forceps 4 3/4" serrated standard
gS 20.4860	2	Foerster Forceps 9 1/2" straight serrated
gS 20.5580	4	Backhaus Towel Forceps 3 1/2"
gS 21.1670	2	Halsey Needle Holder 5" serrated TC
gS 21.2740	1	Crile-Wood Needle Holder 6" serrated TC
gS 22.1812	2	Petit-Point Jacobson Mosquito Forceps 5" straight
gS 22.1813	2	Petit-Point Jacobson Mosquito Forceps 5" curved
gS 22.2560	2	Mosquito Forceps 5" straight (Halsted)
gS 22.2580	2	Mosquito Forceps 5" curved (Halsted)
gS 22.4180	2	Rochester Pean Forceps 16cm [6 1/4"] curved
gS 22.6560	1	Mixter Baby Forceps 7" curved part serrated
gS 22.6570	1	Mixter Forceps Petit-Point 5 1/4" full curved serrated
gS 25.1880	2	Joseph Hook 6 1/4" 1 prong sharp
gS 25.1920	2	Joseph Hook 6 1/4" 2 prongs sharp 5mm
gS 27.5290	1	Iris Forceps 4" straight 1x2
gS 34.1845	2	Senn Retractor 6 1/4" 3 prongs sharp
gS 34.2240	2	Meyerding Finger Retractor 7" #4
gS 36.9300	2	Hohmann Retractor Mini 6 1/2" 6mm
gS 38.5940	1	Weitlaner Retractor 4 1/2" blunt 2x3
gS 38.8760	1	Gelpi Retractor 3 1/2" sharp
gS 43.3010	1	Joseph Raspatory 6 3/4" slight curved 3mm sharp
gS 49.8400	1	Carroll Tendon Pulling Forceps 4 1/2" curved
gS 52.4355	1	Mini Lambotte Osteotome 5" straight 2mm
gS 52.4360	1	Mini Lambotte Osteotome 5" straight 4mm
gS 52.4380	1	Mini Lambotte Osteotome 5" straight 6mm
gS 52.4400	1	Mini Lambotte Osteotome 5" straight 8mm
gS 52.4420	1	Mini Lambotte Osteotome 5" straight 10mm
gS 52.4430	1	Mini Lambotte Osteotome 5" straight 14mm
gS 52.4440	1	Mini Lambotte Osteotome 5" straight 12mm
gS 59.7620	1	Nylon Mallet 7 1/2" 7oz [198g] head s/s Ø 25mm aluminum handle
gS 62.1500	1	Aufricht Rasp 8" 9mm curved upcutting serrations
gS 63.6570	1	Ruskin Liston Forceps 6" straight double action
gS 66.6600	1	Kleinert-Kutz Rongeur 6" slight curved 2mm double action
gS 74.1000	1	Castroviejo Caliper 3 1/2" straight 0-20mm
gS 74.7920	1	Ruler Flexible 6" inch/mm graduations
gS 75.9250	1	Frazier Suction Tube 7" 8 french 30 degrees 85mm working length
gS 83.7510	1	Diamond Pin Cutter 6 1/2" max cap 2.0mm [.079"]
gS 98.2108	1	Instrument Stringer with lock 8" x 2 1/2"

101/10 - instrument sets

101

Hip – Basic, Total

part number	qty	description
gS 12.1600	2	Scalpel Handle #4 standard 5 1/4"
gS 12.1620	1	Scalpel Handle #7 length 6 1/2"
gS 16.3920	2	Super-Cut Mayo Scissors 6 3/4" straight
gS 16.3980	1	Super-Cut Mayo Scissors 6 3/4" curved
gS 16.4220	1	Super-Cut Mayo Scissors 9" curved
gS 16.4940	1	Super-Cut Metzenbaum Scissors 7" curved
gS 16.5020	1	Super-Cut Metzenbaum Scissors 8" curved
gS 17.1640	2	Adson Forceps 4 3/4" 1x2 teeth delicate 0.9mm
gS 17.2240	2	Allis Tissue Forceps 7 1/2" 5x6 teeth
gS 17.2960	2	Russian Tissue Forceps 8"
gS 17.3720	2	Tissue Forceps 5 1/2" 1x2 teeth
gS 17.4040	2	Tissue Forceps 5 1/2" 3x4 teeth
gS 17.5360	2	Rochester Ochsner Forceps 20cm [8"] straight 1x2
gS 20.4860	2	Foerster Forceps 9 1/2" straight serrated
gS 20.5580	6	Backhaus Towel Forceps 3 1/2"
gS 20.5620	2	Backhaus Towel Forceps 5 1/4"
gS 21.2750	2	Crile-Wood Needle Holder 7" serrated TC
gS 21.4140	2	Mayo Hegar Needle Holder 8" serrated TC
gS 22.2560	6	Mosquito Forceps 5" straight (Halsted)
gS 22.2880	6	Rankin-Crile Forceps 6 1/4" curved
gS 22.4380	2	Rochester Pean Forceps 20cm [8"] curved
gS 22.8460	4	Adson Forceps 7 1/4" curved
gS 36.1600	2	Hibbs Retractor 9 1/2" 1" x 3" sharp
gS 36.3120	1	Richardson Eastman Retractor 9 1/2" small
gS 36.3640	2	Volkman Retractor 8 1/2" 4 prongs sharp
gS 36.3660	2	Volkman Retractor 8 1/2" 6 prongs sharp
gS 36.9370	1	Hohmann Retractor 9 1/2" x 10mm rounded end 2 holes
gS 36.9482	1	Hohmann Retractor 10 1/2" x 22mm rounded end 3 holes
gS 36.9505	1	Hohmann Retr 10 1/2" x 70mm round end 2 holes
gS 38.6020	2	Weitlaner Retractor 6 1/2" sharp 3x4
gS 38.8800	1	Gelpi Retractor 5 1/2" sharp
gS 45.4430	1	Bone Hook 9" medium 19mm sharp
gS 45.4440	1	Bone Hook 9" large 25mm sharp
gS 52.4590	1	Hibbs Osteotome 9 1/2" straight 1/4" [6mm]
gS 52.4600	1	Hibbs Osteotome 9 1/2" straight 3/8" [10mm]
gS 52.4610	1	Hibbs Osteotome 9 1/2" straight 1/2" [13mm]
gS 59.7660	1	Ortho Mallet 11" 2lb 2oz [964g] head s/s Ø 35mm s/s handle
gS 62.7520	1	Putti Bone Rasp double ended 12" round tapered
gS 66.5600	1	Stille-Luer Rongeur 8 1/2" curved 10mm double action
gS 66.5720	1	Stille-Luer Rongeur 9" angular 6mm double action
gS 66.6200	1	Beyer Rongeur 7" curved 3mm double action
gS 74.7940	1	Ruler Flexible 8" inch/mm graduations
gS 75.3280	3	Yankauer Suction Tube 11" double angled stainless

Joint – Basic, Total

part number	qty	description
gS 12.1590	2	Scalpel Handle #3S mm/cm scale 5"
gS 12.1610	1	Scalpel Handle #3L long 8"
gS 13.3975	2	Mayo Scissors 6 3/4" straight TC
gS 13.3976	1	Mayo Scissors 6 3/4" curved TC
gS 13.7439	1	Metzenbaum Scissors 7" curved TC
gS 15.8040	1	Lister Bandage Scissors 7 1/4"
gS 17.1630	2	Adson Forceps 4 3/4" serrated 1x2 teeth 1.3mm
gS 17.1929	2	Adson Brown Forceps 4 3/4" 9x9 teeth
gS 17.2070	2	Allis Tissue Forceps 5 1/2" 4x5 teeth
gS 17.4302	2	Bonney Tissue Forceps 6 3/4" serrated 1x2 teeth
gS 17.5360	4	Rochester Ochsner Forceps 20cm [8"] straight 1x2
gS 19.1620	2	Adson Dressing Forceps 4 3/4" serrated standard
gS 20.4860	2	Foerster Forceps 9 1/2" straight serrated
gS 20.5620	12	Backhaus Towel Forceps 5 1/4"
gS 21.4140	4	Mayo Hegar Needle Holder 8" serrated TC
gS 22.2693	6	Coller Forceps 6 1/4" curved delicate
gS 22.2714	2	Gemini Forceps curved 9"
gS 22.4180	4	Rochester Pean Forceps 16cm [6 1/4"] curved
gS 22.4380	4	Rochester Pean Forceps 20cm [8"] curved
gS 36.3000	2	Richardson Retractor 9 1/2" 3/4" x 1" grip handle
gS 36.3660	2	Volkman Retractor 8 1/2" 6 prongs sharp
gS 36.4720	2	US Army Navy Retractor 8 1/2" set of 2
gS 36.9480	2	Hohmann Retractor 10" x 22mm square end 2 holes
gS 36.9800	2	Bennett Retractor 10" x 1 3/4"
gS 43.3620	1	Key Elevator 7 1/2" width 1/2"
gS 43.3660	1	Key Elevator 8 1/2" width 1"
gS 51.6520	1	Brun Curette 9" hex handle straight oval #2/0
gS 51.6540	1	Brun Curette 9" hex handle straight oval #1
gS 51.6560	1	Brun Curette 9" hex handle straight oval #3
gS 59.7890	1	Heavy Mallet 10 1/2" 2lb 9oz [1,162g] head s/s Ø 45mm phenolic handle
gS 63.4660	1	Stille-Liston Forceps 11" straight double action
gS 66.5720	1	Stille-Luer Rongeur 9" angular 6mm double action
gS 81.6740	1	Wire Extraction Pliers 7" double action 6mm TC
gS 83.8400	1	Wire Cutter 7" with silicone inserts max cap 1.6mm [.062"]
gS 98.2112	1	Instrument Stringer with lock 12" x 2 1/2"

101/12 - instrument sets

Joint – Ortho, Small

part number	qty	description
gS 12.1590	3	Scalpel Handle #3S mm/cm scale 5"
gS 12.1605	1	Scalpel Handle #3K Beaver-style 4"
gS 13.1842	1	Iris Scissors 4 1/2" straight TC
gS 13.1844	1	Iris Scissors 4 1/2" curved TC
gS 13.2644	1	Strabismus Scissors 4" curved TC
gS 13.2720	1	Stevens Tenotomy Scissors 4 1/4" curved blunt/blunt
gS 13.3012	1	Littler Scissors 4 3/4" fine curved point with hole for suture
gS 13.3975	1	Mayo Scissors 6 3/4" straight TC
gS 13.3976	1	Mayo Scissors 6 3/4" curved TC
gS 13.7433	1	Metzenbaum Scissors 5 3/4" curved TC
gS 13.7439	1	Metzenbaum Scissors 7" curved TC
gS 16.5960	1	Super-Cut Jamison (Stevens) Scissors 6 1/4" curved
gS 17.1660	2	Adson Forceps 4 3/4" 1x2 teeth 1.3mm
gS 17.1920	2	Adson Brown Forceps 4 3/4" 7x7 teeth
gS 17.2120	2	Allis Tissue Forceps 6" 4x5 teeth
gS 17.3760	2	Tissue Forceps 6" 1x2 teeth
gS 17.5160	2	Rochester Ochsner Forceps 16cm [6 1/4"] str 1x2
gS 19.1880	2	Dressing Forceps 6" serrated
gS 20.5580	4	Backhaus Towel Forceps 3 1/2"
gS 20.5620	2	Backhaus Towel Forceps 5 1/4"
gS 20.5680	4	Lorna Towel Forceps (Edna) 5 1/4"
gS 21.1714	1	Webster Needle Holder 4 3/4" serrated TC
gS 21.1940	1	Derf Needle Holder 4 3/4" serrated TC
gS 21.3640	2	Ryder Needle Holder 6" serrated 2mm TC
gS 21.4020	2	Mayo Hegar Needle Holder 6" serrated TC
gS 22.1730	2	Micro Hartmann Forceps 4" curved
gS 22.2580	2	Mosquito Forceps 5" curved (Halsted)
gS 22.2760	2	Crile Forceps 5 1/2" straight
gS 22.2780	2	Crile Forceps 5 1/2" curved
gS 22.4180	2	Rochester Pean Forceps 16cm [6 1/4"] curved
gS 22.6550	1	Mixer Baby Forceps 5" curved partially serrated
gS 22.6560	1	Mixer Baby Forceps 7" curved partially serrated
gS 25.1880	2	Joseph Hook 6 1/4" 1 prong sharp
gS 25.1910	2	Joseph Hook 6 1/4" 2 prongs sharp 2mm
gS 25.1920	2	Joseph Hook 6 1/4" 2 prongs sharp 5mm
gS 25.1930	2	Joseph Hook 6 1/4" 2 prongs sharp 7mm
gS 25.1940	2	Joseph Hook 6 1/4" 2 prongs sharp 10mm
gS 34.1760	2	Davis Retractor 6" double ended
gS 34.1845	2	Senn Retractor 6 1/4" 3 prongs sharp
gS 34.1855	2	Senn Retractor 6 1/4" 3 prongs blunt
gS 34.1940	2	Ragnell Retractor 5 3/4" double ended
gS 36.4720	2	US Army Navy Retractor 8 1/2" set of 2
gS 36.8518	1	Baby Ribbon Retractor 6" x 1/4" malleable
gS 36.8550	1	Baby Ribbon Retractor 7 1/2" x 1" malleable
gS 36.8561	1	Ribbon Retractor 8" x 3/8" malleable
gS 36.8563	1	Ribbon Retractor 8" x 1/2" malleable
gS 36.8564	1	Ribbon Retractor 8" x 5/8" malleable
gS 36.9270	2	Hohmann Retractor 6" 15mm
gS 36.9300	2	Hohmann Retractor Mini 6 1/2" 6mm
gS 38.5140	2	Alm Retractor 3" blunt
gS 38.5920	2	Weitlaner Retractor 4 1/2" sharp 2x3
gS 38.6020	2	Weitlaner Retractor 6 1/2" sharp 3x4
gS 40.3170	1	Inge Retractor 6 1/2" with teeth

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Joint – Ortho, Small (continued)

part number	qty	description
gS 42.5980	1	Spatula and Packer 5 3/4" #91 double ended
gS 42.7140	1	Freer Elevator 7 1/2" double ended 5mm sharp/blunt
gS 42.7170	1	Woodson Dura Separator and Packer with groove 7" double ended 3mm blunt
gS 43.3575	1	Key Elevator 7" width 1/8"
gS 43.3580	1	Key Elevator 7" width 1/4"
gS 43.4220	1	Cushing Elevator 7 1/2" curved 15mm sharp
gS 45.4430	1	Bone Hook 9" medium 19mm sharp
gS 46.2280	1	Bone Reduction Forceps 6" small curved
gS 46.2342	1	Bone Reduction Forceps 8" speed lock
gS 46.2370	2	Bone Reduction Forceps 5" curved stepped pointed
gS 51.6130	1	Brun Curette 7" hollow handle straight oval #3/0
gS 51.6170	1	Brun Curette 7" hollow handle straight oval #0
gS 51.6210	1	Brun Curette 7" hollow handle straight oval #2
gS 52.4902	1	Converse Osteotome 7" straight 2mm
gS 52.4904	1	Converse Osteotome 7" straight 4mm
gS 52.4906	1	Converse Osteotome 7" straight 6mm
gS 52.4908	1	Converse Osteotome 7" straight 8mm
gS 52.4910	1	Converse Osteotome 7" straight 10mm
gS 52.4912	1	Converse Osteotome 7" straight 12mm
gS 56.1500	1	Alexander Gouge 7" straight 4mm
gS 56.1510	1	Alexander Gouge 7" straight 6mm
gS 56.1520	1	Alexander Gouge 7" straight 8mm
gS 59.7624	1	Ortho Short Mallet 7" 1lb 2oz [510g] head s/s Ø 30mm s/s handle
gS 62.1665	1	Maltz Rasp 7" 9mm straight downcutting serrations
gS 62.7540	1	Putti Bone Rasp double ended 10 1/2" 18mm flat taper to 4mm
gS 63.4980	1	Liston Bone Forceps 5 1/2" straight
gS 63.6380	1	Ruskin Liston Forceps 7 1/2" straight double action
gS 66.3772	1	Luer Rongeur 6" full curved 3mm single action
gS 66.5900	1	Leksell-Stille Rongeur 9 1/2" curved 8mm double action
gS 66.6620	1	Kleinert-Kutz Rongeur 6" curved 3mm double action
gS 74.7800	1	K-Wire Ruler and Pin Gauge 6"
gS 75.9310	1	Frazier Suction Tube 9 1/2" 10 french 75 degrees working length 170mm
gS 81.3610	1	Long Jaw Pliers 7"
gS 82.4235	1	Wire Twisting Forceps 6" TC 3mm rounded tip
gS 83.3000	1	Wire Cutting Scissors 4 3/4" angled with notch TC
gS 83.7226	1	Wire Cutter 7" TC max cap 1.6mm [.062"]
gS 83.7310	1	Flush Front & Side Wire Cutter double action 7" TC max cap 1.6mm [.062"]
gS 86.4373	1	Holding Sleeve 2" Split for small hex driver
gS 86.4400	1	Screwdriver 7 3/4" hex 2.5mm black plastic handle
gS 86.4520	1	Screwdriver 10" hex 3.5mm black plastic handle
gS 98.2114	1	Instrument Stringer with lock 14" x 2 1/2"

101/14 - instrument sets

Knee

part number	qty	description
gS 12.1580	2	Scalpel Handle #3 standard 5"
gS 12.1600	1	Scalpel Handle #4 standard 5 1/4"
gS 12.1620	1	Scalpel Handle #7 length 6 1/2"
gS 16.3100	1	Super-Cut Lister Scissors 5 1/2"
gS 16.3920	2	Super-Cut Mayo Scissors 6 3/4" straight
gS 16.3980	1	Super-Cut Mayo Scissors 6 3/4" curved
gS 16.4940	1	Super-Cut Metzenbaum Scissors 7" curved
gS 17.1630	2	Adson Forceps 4 3/4" serrated 1x2 teeth 1.3mm
gS 17.2100	4	Allis Tissue Forceps 6" 3x4 teeth
gS 17.3720	2	Tissue Forceps 5 1/2" 1x2 teeth
gS 17.4040	2	Tissue Forceps 5 1/2" 3x4 teeth
gS 17.5080	2	Kocher Forceps 5 1/2" curved serrated 1x2 teeth
gS 17.5160	4	Rochester Ochsner Forceps 16cm [6 1/4"] straight 1x2
gS 20.5620	6	Backhaus Towel Forceps 5 1/4"
gS 21.2750	2	Crile-Wood Needle Holder 7" serrated TC
gS 22.2760	4	Crile Forceps 5 1/2" straight
gS 22.2860	4	Rankin-Crile Forceps 6 1/4" straight
gS 34.1845	2	Senn Retractor 6 1/4" 3 prongs sharp
gS 35.2980	1	Smillie Retractor "T" handle small angled 19x32mm
gS 36.3580	2	Volkman Retractor 8 1/2" 2 prongs sharp
gS 36.3640	2	Volkman Retractor 8 1/2" 4 prongs sharp
gS 36.4720	1	US Army Navy Retractor 8 1/2" set of 2
gS 37.3060	2	Blount Knee Retractor 7" 7mm blunt
gS 38.5980	2	Weitlaner Retractor 5 1/2" sharp 3x4
gS 42.7140	1	Freer Elevator 7 1/2" DE 5mm sharp/blunt
gS 43.3580	1	Key Elevator 7" width 1/4"
gS 43.3620	1	Key Elevator 7 1/2" width 1/2"
gS 43.4120	1	Adson Elevator 6 3/4" curved 7mm semi-sharp
gS 49.2018	1	Martin Cartilage Clamp 7 1/2" straight
gS 49.2220	1	Walton Cartilage Clamp 8" curved up
gS 49.8620	1	Smillie Knife 6 3/4" straight
gS 49.8660	1	Smillie Knife 6 3/4" curved left
gS 49.8700	1	Smillie Knife 6 3/4" curved right
gS 49.8800	1	Downing Cartilage Knife 10" concave edge with guards
gS 49.9280	1	Martin Cartilage Scissors 8" serrated blades
gS 62.7500	1	Bone File 9 1/2" 15mm fine serrated bayonet handle
gS 75.9250	1	Frazier Suction Tube 7" 8 french 30 degrees working length 85mm

Orthopedic – Major

part number	qty	description
gS 12.1590	2	Scalpel Handle #3S mm/cm scale 5"
gS 12.1600	1	Scalpel Handle #4 standard 5 1/4"
gS 16.3120	1	Super-Cut Lister Scissors 7 1/4"
gS 16.3200	1	Super-Cut Operating Scissors 5 1/2" straight sharp/blunt
gS 16.3920	1	Super-Cut Mayo Scissors 6 3/4" straight
gS 16.3980	1	Super-Cut Mayo Scissors 6 3/4" curved
gS 16.4940	1	Super-Cut Metzenbaum Scissors 7" curved
gS 16.5900	1	Super-Cut Stevens Tenotomy Scissors 4 1/2" curved
gS 17.1640	2	Adson Forceps 4 3/4" 1x2 teeth delicate 0.9mm
gS 17.1929	2	Adson Brown Forceps 4 3/4" 9x9 teeth
gS 17.2240	2	Allis Tissue Forceps 7 1/2" 5x6 teeth
gS 17.3720	2	Tissue Forceps 5 1/2" 1x2 teeth
gS 17.3760	2	Tissue Forceps 6" 1x2 teeth
gS 17.3800	2	Tissue Forceps 8" 1x2 teeth
gS 17.4040	2	Tissue Forceps 5 1/2" 3x4 teeth
gS 17.5260	4	Rochester Ochsner Forceps 18cm [7"] straight 1x2
gS 19.1840	2	Dressing Forceps 5 1/2" serrated
gS 19.1884	2	Dressing Forceps 8" serrated
gS 20.4860	6	Foerster Forceps 9 1/2" straight serrated
gS 20.5620	12	Backhaus Towel Forceps 5 1/4"
gS 21.2740	2	Crile-Wood Needle Holder 6" serrated TC
gS 21.2750	2	Crile-Wood Needle Holder 7" serrated TC
gS 21.4140	2	Mayo Hegar Needle Holder 8" serrated TC
gS 22.2560	12	Mosquito Forceps 5" straight (Halsted)
gS 22.2580	12	Mosquito Forceps 5" curved (Halsted)
gS 22.2660	12	Kelly Forceps 5 1/2" straight
gS 22.2680	6	Kelly Forceps 5 1/2" curved
gS 22.2860	6	Rankin-Crile Forceps 6 1/4" straight
gS 22.2880	6	Rankin-Crile Forceps 6 1/4" curved
gS 22.4180	2	Rochester Pean Forceps 16cm [6 1/4"] curved
gS 22.4280	2	Rochester Pean Forceps 18cm [7"] curved
gS 22.8460	2	Adson Forceps 7 1/4" curved
gS 25.1880	2	Joseph Hook 6 1/4" 1 prong sharp
gS 25.1920	2	Joseph Hook 6 1/4" 2 prongs sharp 5mm
gS 34.1855	2	Senn Retractor 6 1/4" 3 prongs blunt
gS 36.1600	2	Hibbs Retractor 9 1/2" 1" x 3" sharp
gS 36.1800	2	Israel Retractor 9 1/2" 4 prgs blunt
gS 36.3070	1	Richardson Retractor 9 1/2" 3/4" x 1" loop handle
gS 36.3072	1	Richardson Retractor 9 1/2" 1" x 1 1/4" loop handle
gS 36.3074	1	Richardson Retractor 9 1/2" 1 1/2" x 1 1/2" loop handle
gS 36.3076	1	Richardson Retractor 9 1/2" 3/4" x 2" loop handle
gS 36.3300	1	Deaver Retractor 10" x 1" hollow handle
gS 36.3320	1	Deaver Retractor 12" x 1" hollow handle
gS 36.3400	1	Deaver Retractor 12" x 2" hollow handle
gS 36.3580	2	Volkman Retractor 8 1/2" 2 prongs sharp
gS 36.3640	2	Volkman Retractor 8 1/2" 4 prongs sharp
gS 36.3660	2	Volkman Retractor 8 1/2" 6 prongs sharp
gS 36.3740	2	Volkman Retractor 8 1/2" 4 prongs blunt
gS 36.3760	2	Volkman Retractor 8 1/2" 6 prongs blunt
gS 36.4720	2	US Army Navy Retractor 8 1/2" set of 2
gS 36.6210	2	Cushing Vein Retractor 9" 13mm fenestrated handle
gS 38.6020	2	Weitlaner Retractor 6 1/2" sharp 3x4
gS 38.8820	2	Gelpi Retractor 7 1/2" sharp

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101/16 - instrument sets

Orthopedic – Major (continued)

part number	qty	description
gS 42.7140	1	Freer Elevator 7 1/2" double ended 5mm sharp/blunt
gS 43.3580	1	Key Elevator 7" width 1/4"
gS 43.3620	1	Key Elevator 7 1/2" width 1/2"
gS 45.4430	1	Bone Hook 9" medium 19mm sharp
gS 45.4440	1	Bone Hook 9" large 25mm sharp
gS 51.6650	1	Brun Curette 9" hollow handle straight oval #0
gS 51.6660	1	Brun Curette 9" hollow handle straight oval #1
gS 51.6670	1	Brun Curette 9" hollow handle straight oval #2
gS 51.6680	1	Brun Curette 9" hollow handle straight oval #3
gS 51.6690	1	Brun Curette 9" hollow handle straight oval #4
gS 52.5480	1	Smith Peterson Osteotome 8" straight 1/4" [6mm]
gS 52.5500	1	Smith Peterson Osteotome 8" straight 1/2" [13mm]
gS 52.5520	1	Smith Peterson Osteotome 8" straight 3/4" [19mm]
gS 52.5530	1	Smith Peterson Osteotome 8" straight 1" [25mm]
gS 52.5580	1	Smith Peterson Osteotome 8" curved 3/8" [10mm]
gS 52.5600	1	Smith Peterson Osteotome 8" curved 5/8" [16mm]
gS 52.5620	1	Smith Peterson Osteotome 8" curved 1" [25mm]
gS 56.5660	1	Smith Peterson Gouge 8" straight 1/4"
gS 56.5680	1	Smith Peterson Gouge 8" straight 1/2"
gS 56.5770	1	Smith Peterson Gouge 8" straight 3/4"
gS 56.5880	1	Smith Peterson Gouge 8" curved 3/8"
gS 56.5900	1	Smith Peterson Gouge 8" curved 5/8"
gS 56.5930	1	Smith Peterson Gouge 8" curved 1"
gS 59.7670	1	Ortho Heavy Mallet 10 1/2" 3lb 3oz [1,446g] head s/s Ø 50mm s/s handle
gS 63.6380	1	Ruskin Liston Forceps 7 1/2" straight double action
gS 66.6260	1	Ruskin Rongeur 7 1/2" straight 4mm double action
gS 74.7940	1	Ruler Flexible 8" inch/mm graduations
gS 75.9240	1	Frazier Suction Tube 7" 7 french 30 degrees working length 85mm
gS 75.9250	1	Frazier Suction Tube 7" 8 french 30 degrees working length 85mm
gS 75.9260	1	Frazier Suction Tube 7" 10 french 30 degrees working length 85mm
gS 83.2980	1	Wire Cutting Scissors 4 3/4" angled with notch

Orthopedic – Minor

part number	qty	description
gS 12.1580	2	Scalpel Handle #3 standard 5"
gS 12.1600	1	Scalpel Handle #4 standard 5 1/4"
gS 16.3100	1	Super-Cut Lister Scissors 5 1/2"
gS 16.3200	1	Super-Cut Operating Scissors 5 1/2" straight sharp/blunt
gS 16.3980	1	Super-Cut Mayo Scissors 6 3/4" curved
gS 16.4940	1	Super-Cut Metzenbaum Scissors 7" curved
gS 16.5900	1	Super-Cut Stevens Tenotomy Scissors 4 1/2" curved
gS 17.1640	2	Adson Forceps 4 3/4" 1x2 teeth delicate 0.9mm
gS 17.1929	2	Adson Brown Forceps 4 3/4" 9x9 teeth
gS 17.3720	2	Tissue Forceps 5 1/2" 1x2 teeth
gS 17.3760	2	Tissue Forceps 6" 1x2 teeth
gS 17.3800	2	Tissue Forceps 8" 1x2 teeth
gS 17.5160	2	Rochester Ochsner Forceps 16cm [6 1/4"] straight 1x2
gS 17.5260	2	Rochester Ochsner Forceps 18cm [7"] straight 1x2
gS 19.1840	2	Dressing Forceps 5 1/2" serrated
gS 19.1884	2	Dressing Forceps 8" serrated
gS 20.4860	6	Foerster Forceps 9 1/2" straight serrated
gS 20.5580	6	Backhaus Towel Forceps 3 1/2"
gS 20.5620	6	Backhaus Towel Forceps 5 1/4"
gS 21.2740	2	Crile-Wood Needle Holder 6" serrated TC
gS 21.4020	4	Mayo Hegar Needle Holder 6" serrated TC
gS 22.2560	6	Mosquito Forceps 5" straight (Halsted)
gS 22.2580	6	Mosquito Forceps 5" curved (Halsted)
gS 22.2660	6	Kelly Forceps 5 1/2" straight
gS 22.2680	12	Kelly Forceps 5 1/2" curved
gS 22.2880	2	Rankin-Crile Forceps 6 1/4" curved
gS 22.4180	6	Rochester Pean Forceps 16cm [6 1/4"] curved
gS 25.1880	2	Joseph Hook 6 1/4" 1 prong sharp
gS 25.1920	2	Joseph Hook 6 1/4" 2 prongs sharp 5mm
gS 34.1845	2	Senn Retractor 6 1/4" 3 prongs sharp
gS 34.2160	1	Meyerding Finger Retractor 7" #1
gS 34.2180	1	Meyerding Finger Retractor 7" #2
gS 34.2220	1	Meyerding Finger Retractor 7" #3
gS 34.2240	1	Meyerding Finger Retractor 7" #4
gS 34.2280	1	Meyerding Finger Retractor 7" #5
gS 34.2300	1	Meyerding Finger Retractor 7" #6
gS 36.3070	1	Richardson Retractor 9 1/2" 3/4" x 1" loop handle
gS 36.3072	1	Richardson Retractor 9 1/2" 1" x 1 1/4" loop handle
gS 36.3074	1	Richardson Retractor 9 1/2" 1 1/2" x 1 1/2" loop handle
gS 36.3076	1	Richardson Retractor 9 1/2" 3/4" x 2" loop handle
gS 36.3300	2	Deaver Retractor 10" x 1" hollow handle
gS 36.3580	1	Volkman Retractor 8 1/2" 2 prongs sharp
gS 36.3620	1	Volkman Retractor 8 1/2" 3 prongs sharp
gS 36.4720	2	US Army Navy Retractor 8 1/2" set of 2
gS 36.6210	2	Cushing Vein Retractor 9" 13mm fenestrated handle
gS 38.5160	1	Alm Retractor 4" blunt
gS 38.5980	2	Weitlaner Retractor 5 1/2" sharp 3x4
gS 38.8760	1	Gelpi Retractor 3 1/2" sharp
gS 38.8780	1	Gelpi Retractor 4 1/2" sharp angled delicate
gS 42.7140	1	Freer Elevator 7 1/2" double ended 5mm sharp/blunt
gS 51.6170	1	Brun Curette 7" hollow handle straight oval #0
gS 51.6190	1	Brun Curette 7" hollow handle straight oval #1
gS 51.6210	1	Brun Curette 7" hollow handle straight oval #2

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101/18 - instrument sets

Orthopedic – Minor (continued)

part number	qty	description
gS 51.6230	1	Brun Curette 7" hollow handle straight oval #3
gS 52.5980	1	Hoke Osteotome 5 1/4" straight 3/16" [4mm]
gS 52.5990	1	Hoke Osteotome 5 1/4" straight 1/4" [6mm]
gS 52.6000	1	Hoke Osteotome 5 1/4" straight 5/16" [8mm]
gS 52.6010	1	Hoke Osteotome 5 1/4" straight 3/8" [10mm]
gS 52.6020	1	Hoke Osteotome 5 1/4" straight 1/2" [13mm]
gS 52.6030	1	Hoke Osteotome 5 1/4" straight 5/8" [16mm]
gS 59.7670	1	Ortho Heavy Mallet 10 1/2" 3lb 3oz [1,446g] head s/s Ø 50mm s/s handle
gS 66.6260	1	Ruskin Rongeur 7 1/2" straight 4mm double action
gS 74.7920	1	Ruler Flexible 6" inch/mm graduations
gS 75.9240	1	Frazier Suction Tube 7" 7 french 30 degrees working length 85mm
gS 75.9250	1	Frazier Suction Tube 7" 8 french 30 degrees working length 85mm
gS 75.9260	1	Frazier Suction Tube 7" 10 french 30 degrees working length 85mm
gS 83.2980	1	Wire Cutting Scissors 4 3/4" angled with notch

Pin Removal

part number	qty	description
gS 22.4160	2	Rochester Pean Forceps 16cm [6 1/4"] straight
gS 81.3214	1	Needle Nose Pliers 5 1/4" delicate with guide
gS 81.3464	1	Flat Nose Pliers 7" with end and side grooves
gS 81.3466	1	Flat Nose Pliers 7"
gS 81.3610	1	Long Jaw Pliers 7"
gS 82.4240	1	Wire Twisting Forceps 7 1/2" TC 6mm rounded tip
gS 83.7250	1	Side Cutter double action 9" TC max cap 2.4mm [.079"]

Pelvic

part number	qty	description
gS 37.2100	1	Pelvic Retractor 10 1/2" x 1" blunt
gS 45.4320	1	Bone Hook 8" sharp 20mm t-handle
gS 45.4346	1	Volkman Bone Hook 8 1/2" sharp 20mm
gS 46.2340	1	Bone Reduction Forceps 8" long ratchet
gS 47.0919	1	Farabeuf Lambotte Forceps 7 1/2" adjustable jaw with ratchet
gS 47.1020	1	Farabeuf Lambotte Forceps 10" adjustable jaw with ratchet
gS 47.6190	1	Pelvic Reduction Forceps 7 3/4" angled short ball tips
gS 47.6192	1	Pelvic Reduction Forceps 9 1/2" angled long ball tips
gS 47.6196	1	Pelvic Reduction Forceps 10" straight long ball tips
gS 47.6200	1	Pelvic Reduction Forceps 16" straight long ball tips
gS 47.6204	1	Pelvic Reduction Forceps 16" asymmetric ball tips
gS 47.6208	1	Pelvic Reduction Forceps 16" 1x2 long ball tips
gS 47.6212	1	Pelvic Reduction Forceps 13 1/2" for screws
gS 82.0182	2	Bending Iron 7 3/4" for 3.5mm/4.5mm plates
gS 82.0300	1	Plate Bending Pliers 10" for reconstruction plates
gS 82.4740	1	Steinmann Pin Chuck key 4" cannulated max 5.0/7.0mm
gS 86.0045	1	T-Handle for small/large screw sets SQC (small quick coupling)
gS 86.1209	2	Tap 7" 3.5mm SQC (small quick coupling) calibrated mm
gS 86.1216	2	Tap 7" 4.5mm SQC (small quick coupling) calibrated mm
gS 86.1515	1	Screwdriver Bit hex 6 1/2" 2.5mm SQC (small quick coupling) with notch
gS 86.1521	1	Screwdriver Bit hex 6 1/2" 3.5mm SQC (small quick coupling)
gS 86.2420	1	Depth Gauge 11 1/2" 120mm
gS 86.4375	1	Holding Sleeve 3" for small hex driver
gS 86.4380	1	Holding Sleeve 5" for large hex driver
gS 86.4585	1	Screwdriver 10 1/2" hex 2.5mm with notch phenolic handle
gS 86.4595	1	Screwdriver 12" hex 3.5mm with notch black plastic handle
gS 86.6110	1	Screw Holding Forceps 3 1/2" for 3.5mm - 6.5mm
gS 86.8236	2	Drill Bit SQC (small quick coupling) 3.5mm 195/50mm
gS 86.8246	2	Drill Bit SQC (small quick coupling) 4.5mm 195/50mm
gS 86.8725	2	Drill Bit SQC (small quick coupling) 3 flute calibrated 2.5mm 230mm/30mm
gS 86.8732	2	Drill Bit SQC (small quick coupling) 3 flute calibrated 3.2mm 230mm/30mm
gS 86.8765	2	Drill Bit SQC (small quick coupling) 3 flute 4.5mm 195mm/45mm
gS 87.0020	1	Straight Ball Spike 12"
gS 87.0022	4	Spiked Disc 25mm diameter

101/20 - instrument sets

101

Podiatry – Basic

part number	qty	description
gS 12.1580	1	Scalpel Handle #3 standard 5"
gS 13.4021	1	Operating Scissors 5 1/2" straight sharp/blunt
gS 13.4022	1	Operating Scissors 5 1/2" straight sharp/sharp
gS 15.1920	1	Spencer Stitch Scissors 5"
gS 15.1950	1	Stitch Scissors 4 1/2" angled delicate
gS 15.2200	1	Littauer Stitch Scissors 5 1/2"
gS 15.7920	1	Lister Bandage Scissors 5 1/2"
gS 15.9040	1	Knowles Bandage Scissors 5 1/2" straight one serrated blade
gS 17.1666	2	Adson Tissue Forceps 4 3/4" 1x2 teeth with fenestrated handles
gS 17.3720	1	Tissue Forceps 5 1/2" 1x2 teeth
gS 18.4660	1	Plain Splinter Forceps 4 1/2" straight serrations
gS 19.1620	2	Adson Dressing Forceps 4 3/4" serrations standard
gS 19.1840	2	Dressing Forceps 5 1/2" serrations
gS 20.5580	6	Backhaus Towel Forceps 3 1/2"
gS 21.1700	1	Webster Needle Holder 5" smooth TC
gS 21.5480	1	Olsen Hegar Needle Holder 5 1/2" serrated TC
gS 22.2560	3	Mosquito Forceps 5" straight (Halsted)
gS 22.2580	3	Mosquito Forceps 5" curved (Halsted)
gS 22.2760	3	Crile Forceps 5 1/2" straight
gS 22.2780	3	Crile Forceps 5 1/2" curved
gS 42.5980	1	Spatula and Packer 5 3/4" #91 double ended
gS 42.7140	1	Freer Elevator 7 1/2" double ended 5mm sharp/blunt
gS 50.4050	1	Ingrown Nail Shaver 5" single ended with fenestrated blade
gS 50.5080	1	Curette Excavator 5 1/2" double ended hole 1.5x2.0mm
gS 50.5920	1	Curette Excavator 5 1/2" double ended hole 1.5x2.5mm
gS 54.7500	1	Chisel Spade 5 1/4" curved edge
gS 62.1710	1	Joseph Rasp 6 1/4" 8mm straight fine cross serrations
gS 75.9230	2	Frazier Suction Tube 7" 6 french 30 degrees working length 85mm
gS 77.3910	1	Tissue Nipper 4" 9mm
gS 77.4480	1	Ingrown Nail Splitter 5" English Anvil
gS 81.8520	1	Platypus Nail Pulling Fcps 5 1/2" standard wide jaws
gS 83.3000	1	Wire Cutting Scissors 4 3/4" angled with notch TC

Podiatry – Nail Pack

part number	qty	description
gS 12.1580	1	Scalpel Handle #3 standard 5"
gS 13.4021	1	Operating Scissors 5 1/2" straight sharp/blunt
gS 17.1929	1	Adson Brown Forceps 4 3/4" 9x9 teeth
gS 21.2700	1	Crile-Wood Needle Holder 6" serrated
gS 22.2560	1	Mosquito Forceps 5" straight (Halsted)
gS 22.2580	1	Mosquito Forceps 5" curved (Halsted)
gS 22.2660	1	Kelly Forceps 5 1/2" straight
gS 42.6790	1	Locke Elevator narrow 4 1/2"
gS 42.6900	1	Locke Elevator wide 5"
gS 42.7140	1	Freer Elevator 7 1/2" double ended 5mm sharp/blunt
gS 50.5040	1	Curette Excavator #58 - 3 hole 2.5mm
gS 50.5570	1	Curette #4 McGlamry Bullneck 5" 4mm without hole
gS 61.6380	1	Nail Rasp #93 DE 6 3/4" 2mm angled up/down
gS 77.3940	1	Tissue Nipper 5" 14mm
gS 77.4260	1	Nail Splitter 5" heavy jaw
gS 77.4440	1	Nail Splitter 6" tapered jaw
gS 77.5480	1	Nail Splitter 4 1/2" delicate

Shoulder

part number	qty	description
gS 36.0000	1	Fukuda Style Retractor 7 1/2" 32x81mm
gS 36.0001	1	Fukuda Style Retractor 7 1/2" 38x81mm
gS 36.3072	1	Richardson Retractor 9 1/2" 1" x 1 1/4" loop handle
gS 36.3074	1	Richardson Retractor 9 1/2" 1 1/2" x 1 1/2" loop handle
gS 36.3076	1	Richardson Retractor 9 1/2" 3/4" x 2" loop handle
gS 36.9482	1	Hohmann Retractor 10 1/2" x 22mm rounded end 3 holes
gS 36.9731	1	Capsule Retractor 10" 3 prongs sharp 22mm
gS 36.9920	1	Murphy Bone Skid 12"
gS 38.8830	1	Gelpi Retractor 7 1/2" blunt
gS 40.3260	1	Lamina Spreader 10 1/2" flat blades with teeth
gS 40.5820	1	Adson Retractor 12 1/2" 4x5 blunt
gS 43.9020	1	Darrach Elevator 10" width 1/2"
gS 43.9030	1	Darrach Elevator 10" width 5/8"
gS 43.9040	1	Darrach Elevator 14" width 1"
gS 44.0130	1	Shoulder Percussion Awl 8 1/2" curved small
gS 44.0140	1	Shoulder Percussion Awl 8 1/2" curved medium
gS 44.0150	1	Shoulder Percussion Awl 8 1/2" curved large
gS 44.0160	1	Shoulder Penetrating Awl 9" curved phenolic handle
gS 45.4343	1	Volkman Bone Hook 8 1/2" blunt 20mm
gS 46.4116	1	Glenoid Perforating Forceps 6 1/2" strong angle
gS 46.4117	1	Glenoid Perforating Forceps 6 1/2" slight angle
gS 51.5600	1	Cone Ring Curette 9" aluminum handle 35 degrees angled #3 8mm s/s
gS 56.0190	1	Shoulder Penetrating Gouge 8 1/2" 3mm
gS 82.4940	1	Suture Passer 9" curved with crochet hook phenolic handle
gS 82.4942	1	Suture Passer 9" curved with hole phenolic handle

101/22 - instrument sets

Spine – Anterior Lumbar

part number	qty	description
gS 25.2030	1	gProbe Ball 12" ball outside diameter 2.6mm angled 90 degree knurled handle
gS 43.9920	1	gElevator Endplate Double Handed 17" straight plastic handle 9" black Ø 20mm sharp
gS 51.7706	1	gCurette Box Double Handed 17" straight plastic handle 9" black 6x10mm fenestration sharp/blunt
gS 51.7812	1	gCurette Double Handed 17" angled plastic handle 9" black oval 2.5mm
gS 51.7814	1	gCurette Double Handed 17" angled plastic handle 9" black oval 4.5mm
gS 51.7817	1	gCurette Double Handed 17" angled plastic handle 9" black oval 7.5mm
gS 51.7820	1	gCurette Double Handed 17" angled plastic handle 9" black oval 10.0mm
gS 51.7908	1	gCurette Teardrop Ring Double Handed 17" angled plastic handle 9" black 8.0mm fenestration sharp/sharp
gS 66.4840	1	Sypert Rongeur 14 1/2" 8mm double action
gS 68.9824	1	gRongeur Disc 13" straight 4mm
gS 68.9826	1	gRongeur Disc 13" straight 6mm
gS 68.9843	1	gRongeur Disc 13" up 3mm serrated jaws
gS 70.6302	1	gPunch Spurling Kerrison 13" forward 2mm ejector
gS 70.6304	1	gPunch Spurling Kerrison 13" forward 4mm ejector
gS 70.6306	1	gPunch Spurling Kerrison 13" forward 6mm ejector
optional		
gS 43.9286	1	gDissector 10 1/2" slight curved knurled handle 6" 6mm blunt
gS 43.9817	1	gElevator Bone Double Handed 17" curved plastic handle 9" black 17mm sharp
gS 43.9925	1	gElevator Endplate Double Handed 17" straight plastic handle 9" black Ø 25mm sharp
gS 51.7710	1	gCurette Triangle Double Handed 17" straight plastic handle 9" black 10mm fenestration sharp/blunt
gS 51.7802	1	gCurette Double Handed 17" straight plastic handle 9" black oval 2.5mm
gS 51.7804	1	gCurette Double Handed 17" straight plastic handle 9" black oval 4.5mm
gS 51.7807	1	gCurette Double Handed 17" straight plastic handle 9" black oval 7.5mm
gS 51.7810	1	gCurette Double Handed 17" straight plastic handle 9" black oval 10.0mm
gS 53.7918	1	gOsteotome Double Handed 17" straight plastic handle 9" black 18mm
gS 53.7925	1	gOsteotome Double Handed 17" straight plastic handle 9" black 25mm
gS 62.9910	1	gRasp Double Handed 17" straight plastic handle 9" black 10mm plain and cross serrations
gS 68.9844	1	gRongeur Disc 13" up 4mm serrated jaws
gS 68.9848	1	gRongeur Disc 13" up 8mm serrated jaws

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gSource Verified Quality

Every gSource instrument must pass detailed Quality Assurance (QA) tests before it can be sold.

Instruments are tested for:

- Critical Dimensions
- Function
- Pattern Consistency
- Workmanship
- Material

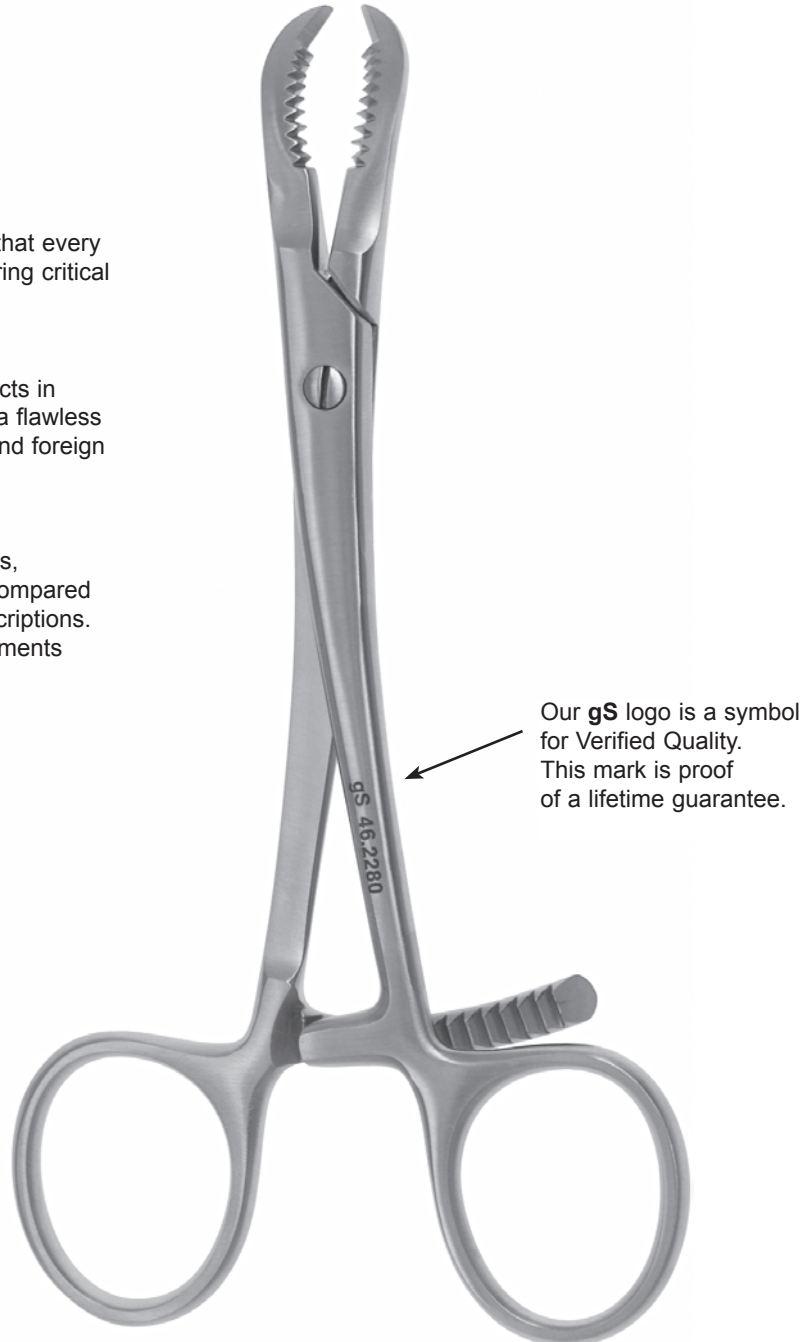
We perform the following QA tests to ensure that every instrument we sell will perform its function during critical surgical procedures.

Surface inspection

All instruments are visually inspected for defects in material and surface finish. They must have a flawless satin finish and be free of excess lubricants and foreign substances.

Dimensions verified

Critical dimensions are measured with calipers, micrometers, or other specialty gauges and compared to technical drawings or gSource catalog descriptions. To ensure pattern consistency selected instruments are compared to inspection samples.



Our **gS** logo is a symbol for Verified Quality. This mark is proof of a lifetime guarantee.

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gS 17.5152	17	10	gS 19.1840	19	1	gS 20.8000	20	2	gS 21.3700	21	2
gS 17.5154	17	10	gS 19.1880	19	1	21			gS 21.3720	21	2
gS 17.5160	17	10	gS 19.1882	19	1	gS 21.1640	21	1	gS 21.3780	21	2
gS 17.5180	17	10	gS 19.1884	19	1	gS 21.1650	21	1	gS 21.3840	21	2
gS 17.5260	17	10	gS 19.1886	19	1	gS 21.1660	21	1	gS 21.3845	21	2
gS 17.5280	17	10	gS 19.1888	19	1	gS 21.1670	21	1	gS 21.3860	21	2
gS 17.5360	17	10	gS 19.1920	19	1	gS 21.1680	21	1	gS 21.3865	21	2
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gS 52.3760	52-53	4	gS 52.4508	52-53	2	gS 52.5570	52-53	7	gS 54.1086	54	2
gS 52.3780	52-53	4	gS 52.4510	52-53	2	gS 52.5580	52-53	7	gS 54.1087	54	2
gS 52.3800	52-53	4	gS 52.4520	52-53	2	gS 52.5590	52-53	7	gS 54.1090	54	2
gS 52.3840	52-53	7	gS 52.4530	52-53	2	gS 52.5600	52-53	7	gS 54.1092	54	2
gS 52.3860	52-53	7	gS 52.4540	52-53	2	gS 52.5610	52-53	7	gS 54.1094	54	2
gS 52.3880	52-53	7	gS 52.4550	52-53	2	gS 52.5620	52-53	7	gS 54.1100	54	5
gS 52.3903	52-53	2	gS 52.4560	52-53	2	gS 52.5630	52-53	7	gS 54.1120	54	5
gS 52.3904	52-53	2	gS 52.4590	52-53	8	gS 52.5970	52-53	4	gS 54.1140	54	5
gS 52.3905	52-53	2	gS 52.4600	52-53	8	gS 52.5980	52-53	4	gS 54.1160	54	5
gS 52.3906	52-53	2	gS 52.4610	52-53	8	gS 52.5990	52-53	4	gS 54.1400	54	4
gS 52.3907	52-53	2	gS 52.4620	52-53	8	gS 52.6000	52-53	4	gS 54.1410	54	4
gS 52.3908	52-53	2	gS 52.4630	52-53	8	gS 52.6010	52-53	4	gS 54.1420	54	4
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gS 52.3916	52-53	2	gS 52.4660	52-53	8	gS 52.6040	52-53	4	gS 54.1450	54	4
gS 52.3919	52-53	2	gS 52.4670	52-53	8	gS 52.6053	52-53	4	gS 54.1590	54	5
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gS 52.3925	52-53	2	gS 52.4730	52-53	8	gS 52.6056	52-53	4	gS 54.1610	54	5
gS 52.4040	52-53	2	gS 52.4760	52-53	8	gS 52.6058	52-53	4	gS 54.1620	54	5
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gS 52.4140	52-53	2	gS 52.4790	52-53	8	gS 52.6066	52-53	4	gS 54.1650	54	5
gS 52.4180	52-53	2	gS 52.4800	52-53	8	gS 52.6069	52-53	4	gS 54.1660	54	5
gS 52.4220	52-53	2	gS 52.4810	52-53	8	gS 52.6073	52-53	4	gS 54.1670	54	5
gS 52.4280	52-53	2	gS 52.4820	52-53	8	gS 52.6074	52-53	4	gS 54.1680	54	5
gS 52.4290	52-53	2	gS 52.4830	52-53	8	gS 52.6076	52-53	4	gS 54.1730	54	5
gS 52.4300	52-53	2	gS 52.4840	52-53	8	gS 52.6078	52-53	4	gS 54.1740	54	5
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