

**F · S · T**  
FINE SCIENCE TOOLS

**2023**



**FINE SURGICAL INSTRUMENTS FOR RESEARCH™**



## Letter from the Managing Partner

Dear customers,

As many of you are a part of the world's most essential biomedical research communities – I would like to begin by thanking you for your commitment and dedication to the advancements, breakthroughs, and discoveries in science. The world continues to face challenges, but the innovative minds and hearts of our customers and worldwide team gives us hope for a brighter tomorrow. There has never been a more significant moment to lead with our values – trust, teamwork, empathy, equality, and sustainability, as we are committed to walk alongside this road of optimism with you.

It is important to me that we take you on our journey as a valuable partner of Fine Science Tools. With that said, I am proud to inform you that we have incorporated two bee colonies into our office garden in Germany. The reason behind the idea is the fact that bees have a large impact on ecological growth and preservation which we as a company would like to put focus on. Our catalog cover showcases a symbolic representation of the countless contribution's bees have in relation to a number of areas in our daily lives. Bees have cultural and environmental importance as pollinators and producers of honey and medicinal products. The movement of pollen between flowers is necessary for plants to fertilize and reproduce. Bees control growth and quality of vegetation and work closely together, which is in line with Fine Science Tools striving to contribute to a greener world. Our FST hives are currently flourishing and have produced their first batch of honey which we plan on sharing with our customers.

Therefore, this year we have once again focused on expanding our product range to meet the needs of our customers. As the saying goes, "where focus goes, energy flows." Growth takes time, and it is not about the reward at the end but the values and experiences you gain on the journey and the footprints you leave behind. We have come a long way and have already left many footprints but there is still so much to do, and we are dedicated to doing our part in becoming a more sustainable company. We are extremely excited for you to embark into 2023 alongside us.

On behalf of the entire Fine Science Tools team worldwide, thank you again for your continued partnership and support for nearly 50 years.



Markus Gawenda



Markus Gawenda  
Managing Partner



Hans Gawenda  
Founder



Rob Gawenda  
President

### Please note the following information for your safety.

All surgical instruments and devices from the Fine Science Tools product range are intended exclusively for use in experimental research laboratories and facilities or in veterinary medicine. Our Customer Support is available to answer any questions you may have about the field of application and the material properties.



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The background of the page features a solid olive green color. Overlaid on this background are three high-quality surgical instruments. In the upper right, a pair of surgical scissors is shown, with its blades partially open. The handles are made of polished metal and have the text 'F. S. T 14173-12' and 'stainless germany' engraved on them. In the upper left, the handle of a scalpel is visible, featuring a series of vertical ridges for grip. In the lower left, a pair of long-handled surgical forceps is shown, with the text 'stainless germany' and 'F. S. T 16022-15' engraved on the handles. In the lower right, the tip of a pair of surgical forceps is visible, showing the sharp, pointed jaws.

# Scissors, Bone Instruments, Knives & Scalpels

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| Spring Scissors   | Pages | 3 – 14  |
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Micro Vannas

These Vannas-style spring scissors have the smallest blades ever produced. They are ideal where space is restricted and where absolute precision is demanded.



Straight  
Sharp/Sharp

8 cm  
Cutting edge: 2 mm  
Tip Ø: 0.05 mm

No. 15000-03



Curved  
Sharp/Sharp

8 cm  
Cutting edge: 2 mm  
Tip Ø: 0.05 mm

No. 15000-04

Micro Vannas

The short taper is ideal for small, precise cuts.



Straight  
Sharp/Sharp

8 cm  
Cutting edge: 2.5 mm  
Tip Ø: 0.05 mm

No. 15000-08



Curved  
Sharp/Sharp

8 cm  
Cutting edge: 2.5 mm  
Tip Ø: 0.05 mm

No. 15001-08



Angled to side  
Sharp/Sharp

8 cm  
Cutting edge: 2.5 mm  
Tip Ø: 0.05 mm

No. 15002-08

### Micro Vannas

The long taper is ideal for cutting vessel walls or when a longer cutting edge is needed.



15000-00



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



300%



Straight  
Sharp/Sharp

8 cm  
Cutting edge: 3 mm  
Tip Ø: 0.05 mm

No. 15000-00



Curved  
Sharp/Sharp

8 cm  
Cutting edge: 3 mm  
Tip Ø: 0.05 mm

No. 15000-10

### Vannas



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Straight  
Sharp/Sharp

10.5 cm  
Cutting edge: 4 mm  
Tip Ø: 0.15 mm

No. 15018-10



Curved  
Sharp/Sharp

10.5 cm  
Cutting edge: 4 mm  
Tip Ø: 0.15 mm

No. 15019-10

### Vannas-Tübingen



15003-08



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Straight  
Sharp/Sharp

8.5 cm  
Cutting edge: 5 mm  
Tip Ø: 0.075 mm

No. 15003-08



Angled to side  
Sharp/Sharp

8.5 cm  
Cutting edge: 5 mm  
Tip Ø: 0.075 mm

No. 15008-08



Curved  
Sharp/Sharp

8.5 cm  
Cutting edge: 5 mm  
Tip Ø: 0.075 mm

No. 15004-08



Angled up  
Sharp/Sharp

9.5 cm  
Cutting edge: 5 mm  
Tip Ø: 0.075 mm

No. 15005-08

Vannas Scissors with Microserrations

Microserrated to minimize slippage.



FST  
HAND  
CRAFTED

For more information  
see page 38.



Straight  
Sharp/Sharp

8.5 cm  
Cutting edge: 5 mm  
Tip Ø: 0.1 mm

No. 15070-08



Straight  
Sharp/Sharp

8.5 cm  
Cutting edge: 7 mm  
Tip Ø: 0.1 mm

No. 15007-08



Curved  
Sharp/Sharp

8.5 cm  
Cutting edge: 5 mm  
Tip Ø: 0.1 mm

No. 15071-08

Miniature Vannas

Hand finished under high magnification, these tips are especially useful when incising vessel walls for catheter insertion.



Moria 9600



Straight  
Sharp/Sharp

8 cm  
Cutting edge: 5 mm  
Tip Ø: 0.1 mm

No. 15396-00

Moria 9601



Curved  
Sharp/Sharp

8 cm  
Cutting edge: 5 mm  
Tip Ø: 0.1 mm

No. 15396-01



## Titanium Vannas



For more information  
see page 211.



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Straight  
Sharp/Sharp

9.5 cm  
Cutting edge: 5 mm  
Tip Ø: 0.3 mm

No. 15610-08



Curved  
Sharp/Sharp

9.5 cm  
5 mm  
Tip Ø: 0.3 mm

No. 15615-08



Angled up  
Sharp/Sharp

9.5 cm  
5 mm  
Tip Ø: 0.3 mm

No. 15617-08

## Cohan-Vannas

Long cutting blades for  
a more controlled cut.



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Straight  
Sharp/Sharp

6 cm  
Cutting edge: 6 mm  
Tip Ø: 0.1 mm

No. 15000-02



Curved  
Sharp/Sharp

6 cm  
6 mm  
Tip Ø: 0.1 mm

No. 15000-01

Straight  
Blunt/Blunt

6 cm  
6 mm  
Tip Ø: 0.15 mm

No. 15000-12

Curved  
Blunt/Blunt

6 cm  
6 mm  
Tip Ø: 0.15 mm

No. 15000-11

## ToughCut® Spring Scissors



For more information  
see page 211.



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Straight  
Sharp/Sharp

12.5 cm  
6 mm  
Tip Ø: 0.3 mm

No. 15124-12



Curved  
Sharp/Sharp

12.5 cm  
6 mm  
Tip Ø: 0.3 mm

No. 15123-12

Round Handled Vannas

Round handles allow easy fingertip adjustments.



Straight  
Sharp/Sharp

12.5 cm  
Cutting edge: 6 mm  
Tip Ø: 0.075 mm

No. 15400-12



Curved  
Sharp/Sharp

12.5 cm  
Cutting edge: 6 mm  
Tip Ø: 0.075 mm

No. 15401-12



Straight  
Sharp/Sharp

14 cm  
Cutting edge: 6 mm  
Tip Ø: 0.15 mm

No. 15020-15



Curved  
Sharp/Sharp

14 cm  
Cutting edge: 6 mm  
Tip Ø: 0.15 mm

No. 15021-15



Straight  
Sharp/Sharp

10 cm  
Cutting edge: 7 mm  
Tip Ø: 0.1 mm

No. 15750-11



Curved  
Sharp/Sharp

10 cm  
Cutting edge: 7 mm  
Tip Ø: 0.1 mm

No. 15751-11

## Vannas-Wolff



Moria MC52



Straight  
Sharp/Sharp

10 cm

Cutting edge: 7 mm

Tip Ø: 0.15 mm

No. 15370-52

Moria MC50



Curved  
Sharp/Sharp

10 cm

Cutting edge: 7 mm

Tip Ø: 0.15 mm

No. 15370-50

## Vannas

Ultra long cutting edge  
without sacrificing tip width.



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Straight  
Sharp/Sharp

8.5 cm

Cutting edge: 8 mm

Tip Ø: 0.1 mm

No. 15009-08

## Castroviejo



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Angled to side  
Sharp/Sharp

10 cm

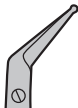
Cutting edge: 10 mm

Tip Ø: 0.125 mm

No. 15006-09

Castroviejo with Ball Tip

Same as No. 15006-09 but with a ball tip to prevent piercing of underlying tissue.



Angled to side  
Sharp/Sharp  
  
9 cm  
Cutting edge: 8 mm  
Tip Ø: 1.3 mm Ball  
  
No. 15033-09

Spring Scissors



Straight  
Sharp/Sharp  
  
10 cm  
Cutting edge: 8 mm  
Tip Ø: 0.15 mm  
  
No. 15024-10



Straight  
Blunt/Blunt  
  
10 cm  
Cutting edge: 8 mm  
Tip Ø: 0.3 mm  
  
No. 15025-10



Curved  
Sharp/Sharp  
  
10 cm  
Cutting edge: 8 mm  
Tip Ø: 0.15 mm  
  
No. 15023-10

Dowell



Straight  
Sharp/Sharp  
  
11.5 cm  
Cutting edge: 10 mm  
Tip Ø: 0.1 mm  
  
No. 15040-11



Angled up  
Sharp/Sharp  
  
11.5 cm  
Cutting edge: 10 mm  
Tip Ø: 0.1 mm  
  
No. 15042-11

## Noyes



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Straight  
Sharp/Sharp

12 cm  
Cutting edge: 14 mm  
Tip Ø: 0.2 mm

No. 15012-12



Curved  
Sharp/Sharp

12 cm  
Cutting edge: 14 mm  
Tip Ø: 0.2 mm

No. 15011-12



Angled up  
Sharp/Sharp

12 cm  
Cutting edge: 14 mm  
Tip Ø: 0.2 mm

No. 15013-12

## Tungsten Carbide Noyes

Tungsten carbide cutting edges  
provide long lasting sharpness.



For more information  
see page 211.



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Straight  
Sharp/Sharp

12 cm  
Cutting edge: 14 mm  
Tip Ø: 0.275 mm

No. 15514-12

## Castroviejo



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Sharply curved  
Sharp/Sharp

10 cm  
Cutting edge: 10 mm  
Tip Ø: 0.2 mm

No. 15017-10



Ceramic Coated Titanium Castroviejo



**FST  
HAND  
CRAFTED**

For more information  
see page 38.

**•TITANIUM•**

For more information  
see page 211.

**CERAMIC  
COATED**

For more information about  
our ceramic instruments  
please visit page 211.



Straight  
Sharp/Sharp

11 cm  
Cutting edge: 5 mm  
Tip Ø: 0.2 mm

No. 15650-11



Curved  
Sharp/Sharp

11 cm  
Cutting edge: 5 mm  
Tip Ø: 0.2 mm

No. 15651-11

Westcott



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Slightly curved  
Sharp/Sharp

11 cm  
Cutting edge: 15 mm  
Tip Ø: 0.25 mm

No. 15015-11

Fine Angled Spring Scissors

These spring scissors aid in cutting  
tissues from various angles.



**FST  
HAND  
CRAFTED**

For more information  
see page 38.



Angled up  
Sharp/Sharp

9.5 cm  
Cutting edge: 2 mm  
Tip Ø: 0.1 mm

No. 15010-09



Angled up  
Sharp/Sharp

10 cm  
Cutting edge: 4 mm  
Tip Ø: 0.125 mm

No. 15010-10

## Trident II

A re-release of a popular spring scissors now with a new innovative design for a better feel.



Straight  
Sharp/Sharp

8 cm  
Cutting edge: 8 mm  
Tip Ø: 0.2 mm

No. 15110-08



Angled to side  
Sharp/Sharp

8 cm  
Cutting edge: 8 mm  
Tip Ø: 0.2 mm

No. 15111-08

## Pascheff-Wolff

Very delicate blades.



Moria MC19/B



Angled up  
Sharp/Sharp

10.5 cm  
Cutting edge: 3 mm  
Tip Ø: 0.15 mm

No. 15371-92

## Long Handle Spring Scissors



Straight  
Sharp/Sharp

18.5 cm  
Cutting edge: 5 mm  
Tip Ø: 0.2 mm

No. 15028-18



Curved  
Sharp/Sharp

18.5 cm  
Cutting edge: 5 mm  
Tip Ø: 0.2 mm

No. 15027-18

Micro Scissors

With microserrations to minimize slippage.

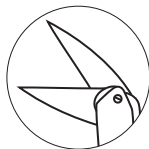


FST  
HAND  
CRAFTED

For more information  
see page 38.



300%



300%



Straight  
Sharp/Sharp

14.5 cm  
Cutting edge: 2.5 mm  
Tip Ø: 0.175 mm

No. 15030-14



Angled to side  
Sharp/Sharp

14.5 cm  
Cutting edge: 2.5 mm  
Tip Ø: 0.175 mm

No. 15031-14

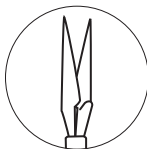
Micro Scissors

The finest blades on spring scissors. Designed for ophthalmic surgery (vitrectomy). The spring handles are made of ribbed plastic to ensure a solid grip. **Autoclavable.**



FST  
HAND  
CRAFTED

For more information  
see page 38.



300%



300%



Straight  
Sharp/Sharp

14 cm  
Cutting edge: 2.2 mm  
Tip Ø: 0.15 mm

No. 15036-14



Angled 90°  
Sharp/Sharp

14 cm  
Cutting edge: 1 mm  
Tip Ø: 0.1 mm

No. 15037-14

## Ultra Fine Clipper Scissors II

For microscopic dissections of soft and mucous tissue. The minute fineness of the blades allows clear visualization of the tissue being dissected.



Uses:

- Removing sheath of ganglia to access neurons in aplysia.
- Cutting single nerve axons in aplysia, mollusk and snail.
- Stripping fascia off arteries and muscles.
- Ultra fine brain tissue dissection.
- Cutting of minute fiber optic strands.



Straight  
Sharp/Sharp

10 cm  
Cutting edge: 1.5–2 mm  
Tip Ø: 0.05–0.08 mm  
Blade shape: Triangular  
Blade thickness: 0.1 mm

No. 15300-00

## Biemer Scissors

These scissors are designed to securely cut vessels without slipping.



Straight  
Blunt/Blunt

8.5 cm  
Cutting edge: 4 mm  
Tip Ø: 2 mm

No. 15032-08



Straight  
Blunt/Blunt

13 cm  
Cutting edge: 2 mm  
Tip Ø: 2 mm

No. 15032-13

**Extra Fine Bonn**

Our finest iris scissors, best suited for microdissection under high magnification.

**MOST  
POPULAR**

14084-08  
14085-08



Straight  
Sharp/Sharp

8.5 cm  
Cutting edge: 10 mm

No. 14084-08



Curved  
Sharp/Sharp

8.5 cm  
Cutting edge: 10 mm

No. 14085-08



Straight  
Sharp/Blunt

8.5 cm  
Cutting edge: 10 mm

No. 14083-08

**Bonn**

Highly polished.



Straight  
Sharp/Sharp

9 cm  
Cutting edge: 10 mm

No. 14184-09



Curved  
Sharp/Sharp

9 cm  
Cutting edge: 10 mm

No. 14185-09

**ToughCut® Bonn-Strabismus**

A fusion of two light and delicate iris scissors with ToughCut cutting edges.

**TOUGH  
CUT**

For more information  
see page 211.



Straight  
Blunt/Blunt

9 cm  
Cutting edge: 10 mm

No. 14084-09



Curved  
Blunt/Blunt

9 cm  
Cutting edge: 10 mm

No. 14085-09

**Hardened Fine Iris Scissors**

These scissors have an anti-reflective finish to reduce glare.

**MOST  
POPULAR**

14090-09



Straight  
Sharp/Sharp

9 cm

Cutting edge: 16 mm

No. 14090-09



Curved  
Sharp/Sharp

9 cm

Cutting edge: 16 mm

No. 14091-09

11 cm

Cutting edge: 16 mm

No. 14090-11

11 cm

Cutting edge: 16 mm

No. 14091-11

**Fine Iris Scissors**

Made from Martensitic stainless steel, combined with Molybdenum and Vanadium.



Straight  
Sharp/Sharp

10.5 cm

Cutting edge: 16 mm

No. 14094-11



Curved  
Sharp/Sharp

10.5 cm

Cutting edge: 16 mm

No. 14095-11



## Iris Scissors

Delicate pattern.

MOST  
POPULAR

14060-11

Straight  
Sharp/Sharp9 cm  
Cutting edge: 16 mm

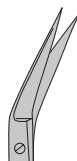
No. 14060-09

Curved  
Sharp/Sharp9 cm  
Cutting edge: 16 mm

No. 14061-09

Curved to side  
Sharp/Sharp9 cm  
Cutting edge: 16 mm

No. 14062-09

Angled to side  
Sharp/Sharp9 cm  
Cutting edge: 16 mm

No. 14063-09

10.5 cm  
Cutting edge: 16 mm

No. 14060-10

10.5 cm  
Cutting edge: 16 mm

No. 14061-10

10.5 cm  
Cutting edge: 16 mm

No. 14062-10

11.5 cm  
Cutting edge: 16 mm

No. 14063-11

11.5 cm  
Cutting edge: 18 mm

No. 14060-11

11.5 cm  
Cutting edge: 18 mm

No. 14061-11

## Left Handed Iris Scissors

LEFT  
HANDEDStraight  
Sharp/Sharp10.5 cm  
Cutting edge: 18 mm

No. 14160-10

Curved  
Sharp/Sharp10.5 cm  
Cutting edge: 18 mm

No. 14161-10

**Moria Iris Scissors**



Moria 4877



Straight  
Sharp/Sharp

12.5 cm  
Cutting edge: 14 mm

No. 14370-22

Moria 4878



Shallow curve  
Sharp/Sharp

10.5 cm  
Cutting edge: 14 mm

No. 14370-23

**Extra Narrow Iris Scissors**

Extra narrow, delicate pattern. Very  
slim blades with gentle cutting action.




Side-view showing  
extra narrow pattern

Straight  
Sharp/Sharp

10.5 cm  
Cutting edge: 16 mm

No. 14088-10

## Large Loops Scissors



Straight  
Sharp/Sharp

10 cm  
Cutting edge: 16 mm

No. 14040-10



Curved  
Sharp/Sharp

10 cm  
Cutting edge: 16 mm

No. 14041-10

## Wagner



14070-12  
14071-12



Straight  
Sharp/Sharp

12 cm  
Cutting edge: 20 mm

No. 14068-12



Curved  
Sharp/Sharp

12 cm  
Cutting edge: 20 mm

No. 14069-12



Straight  
Sharp/Sharp

12 cm  
Cutting edge: 20 mm

No. 14070-12



Curved  
Sharp/Sharp

12 cm  
Cutting edge: 20 mm

No. 14071-12

## ToughCut®

MOST  
POPULAR14058-09  
14058-11TOUGH  
CUTFor more information  
see page 211.Straight  
Sharp/Sharp9 cm  
Cutting edge: 16 mm

No. 14058-09

Curved  
Sharp/Sharp9 cm  
Cutting edge: 16 mm

No. 14059-09

11.5 cm  
Cutting edge: 16 mm

No. 14058-11

11.5 cm  
Cutting edge: 16 mm

No. 14059-11

## Tungsten Carbide

MOST  
POPULAR14568-09  
14568-12TUNGSTEN  
CARBIDEFor more information  
see page 211.Straight  
Sharp/Sharp9 cm  
Cutting edge: 16 mm

No. 14568-09

Curved  
Sharp/Sharp9 cm  
Cutting edge: 16 mm

No. 14569-09

11.5 cm  
Cutting edge: 16 mm

No. 14568-12

11.5 cm  
Cutting edge: 16 mm

No. 14569-12

**ToughCut® and Tungsten Carbide**

For more information  
see page 211.



Straight  
Sharp/Sharp

9 cm  
Cutting edge: 16 mm

No. 14558-09



Curved  
Sharp/Sharp

9 cm  
Cutting edge: 16 mm

No. 14559-09

11.5 cm  
Cutting edge: 16 mm

No. 14558-11

11.5 cm  
Cutting edge: 16 mm

No. 14559-11

**CeramaCut®**

These ceramic-coated scissors are the cleanest cutting, longest lasting scissors ever produced. Utilizing the unique properties of a ceramic coating, they will last six times longer than tungsten carbide instruments and cut even better than ToughCut® scissors. The black, corrosion-resistant coating has a non-glare finish.



For more information  
see page 211.



Straight  
Sharp/Sharp

9 cm  
Cutting edge: 16 mm

No. 14958-09



Curved  
Sharp/Sharp

9 cm  
Cutting edge: 16 mm

No. 14959-09

11.5 cm  
Cutting edge: 16 mm

No. 14958-11

11.5 cm  
Cutting edge: 16 mm

No. 14959-11

## Fine Scissors



Straight  
Sharp/Blunt

10 cm  
Cutting edge: 17 mm

No. 14028-10



Curved  
Sharp/Blunt

10 cm  
Cutting edge: 17 mm

No. 14029-10

## Lexer-Baby



Straight  
Blunt/Blunt

10 cm  
Cutting edge: 16 mm

No. 14078-10



Curved  
Blunt/Blunt

10 cm  
Cutting edge: 16 mm

No. 14079-10

## Strabismus

## Tungsten Carbide Strabismus



Straight  
Blunt/Blunt

9 cm  
Cutting edge: 13 mm

No. 14074-09



Curved  
Blunt/Blunt

9 cm  
Cutting edge: 13 mm

No. 14075-09

11.5 cm  
Cutting edge: 17 mm

No. 14074-11

11.5 cm  
Cutting edge: 17 mm

No. 14075-11

**TUNGSTEN  
CARBIDE**

For more information  
see page 211.



Straight  
Blunt/Blunt

9 cm  
Cutting edge: 13 mm

No. 14574-09



Curved  
Blunt/Blunt

9 cm  
Cutting edge: 13 mm

No. 14575-09

11 cm  
Cutting edge: 18 mm

No. 14574-11

11 cm  
Cutting edge: 18 mm

No. 14575-11



## Walton



Slightly curved  
Sharp/Sharp

9.5 cm  
Cutting edge: 10 mm

No. 14077-09



Slightly curved  
Sharp/Sharp

10.5 cm  
Cutting edge: 12 mm

No. 14077-10

## Stevens Tenotomy



Straight  
Sharp/Sharp

11 cm  
Cutting edge: 13 mm

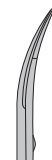
No. 14064-11



Straight  
Blunt/Blunt

11 cm  
Cutting edge: 13 mm

No. 14066-11



Curved  
Sharp/Sharp

11 cm  
Cutting edge: 13 mm

No. 14065-11



Curved  
Blunt/Blunt

11 cm  
Cutting edge: 13 mm

No. 14067-11

**LaGrange**

One edge is serrated to minimize slippage of tissue during cutting. Curved handle helps when cutting from an awkward angle.



Side View



Curved  
Sharp/Sharp

11.5 cm  
Cutting edge: 11 mm

No. 14173-12

**Shea**

Transplant scissors with light and delicate pattern.



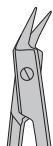
Curved  
Blunt/Blunt

12 cm  
Cutting edge: 13 mm

No. 14105-12

**Dissector Scissors**

Slim blades for cutting tissue.



Angled to side  
Sharp/Sharp

10 cm  
Cutting edge: 5 mm

No. 14081-09

**Dissector Scissors**

Similar to 14081-09, but with stronger blades for cutting fine bone.



Angled to side  
Sharp/Sharp

10.5 cm  
Cutting edge: 8 mm

No. 14082-09

**Spencer Ligature**

Used for cutting stitches or suture.



Straight  
Sharp/Sharp

9 cm  
Cutting edge: 13 mm

No. 14076-09

**Bonn Artery**

Iris scissors with one ball tip to prevent piercing of underlying tissue.



Straight  
Sharp/Ball tip

9 cm  
Cutting edge: 8 mm  
Tip Ø: 1.5 mm Ball

No. 14086-09



Straight  
Sharp/Ball tip

11.5 cm  
Cutting edge: 15 mm  
Tip Ø: 1.5 mm Ball

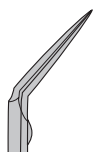
No. 14080-11

**Tissue Separating Scissors**

Straight  
Blunt/Blunt

11.5 cm  
Cutting edge: 15 mm

No. 14072-10

**Graefe**

Sharply angled up  
Sharp/Sharp

10.5 cm  
Cutting edge: 9 mm

No. 14037-10

**Adjustable Loops Fine Scissors**

The finger loops can be enlarged  
to fit almost any size.



Straight  
Sharp/Sharp

9.5 cm  
Cutting edge: 8 mm

No. 14106-09



Straight  
Blunt/Blunt

9.5 cm  
Cutting edge: 8 mm

No. 14108-09

**Kaye**

These scissors have semi-sharp outer  
edges to better facilitate dissection.



Slightly curved  
Blunt/Blunt

10.5 cm  
Cutting edge: 14 mm

No. 14171-10

Standard Pattern

MOST  
POPULAR

14001-12 – 14001-18

LEFT  
HANDED

14008-14

Our standard surgical scissors are recognized for these important features:

- Excellent feel and handling capability.
- Overall execution that marks them as fine examples of German craftsmanship.



| Length (cm) | Cutting edge (mm) | Straight Sharp/Sharp | Price | Straight Sharp/Blunt | Price | Straight Blunt/Blunt | Price |
|-------------|-------------------|----------------------|-------|----------------------|-------|----------------------|-------|
| 12          | 26                | No. 14002-12         |       | No. 14001-12         |       | No. 14000-12         |       |
| 13          | 26                | No. 14002-13         |       | No. 14001-13         |       | No. 14000-13         |       |
| 14.5        | 29                | No. 14002-14         |       | No. 14001-14         |       | No. 14000-14         |       |
| 16.5        | 33                | No. 14002-16         |       | No. 14001-16         |       | No. 14000-16         |       |
| 18.5        | 36                |                      |       | No. 14001-18         |       | No. 14000-18         |       |
| 20          | 39                |                      |       |                      |       | No. 14000-20         |       |

| Length (cm) | Cutting edge (mm) | Straight Sharp/Blunt | Price |
|-------------|-------------------|----------------------|-------|
| 14.5        | 29                | No. 14008-14         |       |



| Length (cm) | Cutting edge (mm) | Curved Sharp/Sharp | Price | Curved Sharp/Blunt | Price | Curved Blunt/Blunt | Price |
|-------------|-------------------|--------------------|-------|--------------------|-------|--------------------|-------|
| 12          | 26                | No. 14005-12       |       | No. 14004-12       |       | No. 14003-12       |       |
| 13          | 26                | No. 14005-13       |       | No. 14004-13       |       | No. 14003-13       |       |
| 14.5        | 29                | No. 14005-14       |       | No. 14004-14       |       | No. 14003-14       |       |
| 16.5        | 33                | No. 14005-16       |       | No. 14004-16       |       | No. 14003-16       |       |
| 18.5        | 36                |                    |       | No. 14004-18       |       | No. 14003-18       |       |
| 20          | 39                |                    |       |                    |       | No. 14003-20       |       |

## ToughCut® Standard Pattern



14054-13



For more information  
see page 211.



80% of  
actual size



Straight  
Sharp/Blunt

13 cm  
Cutting edge: 27 mm

No. 14054-13



Straight  
Sharp/Blunt

17.5 cm  
Cutting edge: 40 mm

No. 14130-17

## Tungsten Carbide Standard Pattern



For more information  
see page 211.



80% of  
actual size



Straight  
Sharp/Sharp

14.5 cm  
33 mm

No. 14502-14



Straight  
Sharp/Blunt

14.5 cm  
33 mm

No. 14501-14



Curved  
Sharp/Sharp

14.5 cm  
33 mm

No. 14505-14



Curved  
Sharp/Blunt

14.5 cm  
33 mm

No. 14504-14

## Standard Pattern with Serrations



80% of  
actual size



Straight  
Sharp/Blunt

14 cm  
29 mm

No. 14007-14

### Standard Pattern with Large Finger Loops



80% of actual size



Straight  
Sharp/Blunt

14.5 cm  
Cutting edge: 27 mm

No. 14101-14

### Tungsten Carbide Mini-Lister



For more information  
see page 211.



Angled to side  
Blunt/Blunt

9 cm  
Cutting edge: 15 mm

No. 14531-09

### Lister

Excellent skin cutting scissors. Longer, blunt blade prevents damaging tissue underneath skin without losing the cutting line.



80% of actual size



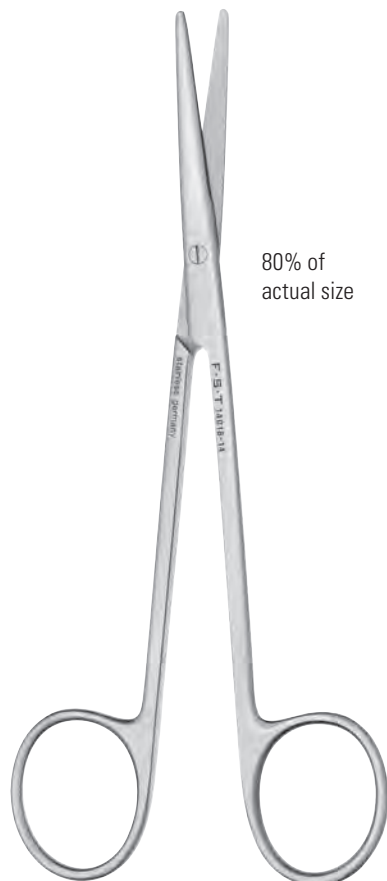
Angled to side  
Blunt/Blunt

14 cm  
Cutting edge: 26 mm

No. 14131-14



Metzenbaum Baby



80% of  
actual size



Straight  
Blunt/Blunt

13 cm  
Cutting edge: 21 mm

No. 14018-13



Curved  
Blunt/Blunt

13 cm  
21 mm

No. 14019-13

14.5 cm  
Cutting edge: 21 mm

No. 14018-14

14.5 cm  
21 mm

No. 14019-14

18 cm  
Cutting edge: 23 mm

No. 14018-18

18 cm  
23 mm

No. 14019-18

Tungsten Carbide Metzenbaum Fino

**TUNGSTEN  
CARBIDE**

For more information  
see page 211.



80% of  
actual size



Straight  
Blunt/Blunt  
Ultra fine tips

14.5 cm  
21 mm

No. 14508-15



Straight  
Blunt/Blunt

14.5 cm  
21 mm

No. 14518-14



Curved  
Blunt/Blunt  
Ultra fine tips

14.5 cm  
21 mm

No. 14509-15



Curved  
Blunt/Blunt

14.5 cm  
21 mm

No. 14519-14

18 cm  
26 mm

No. 14518-18

18 cm  
26 mm

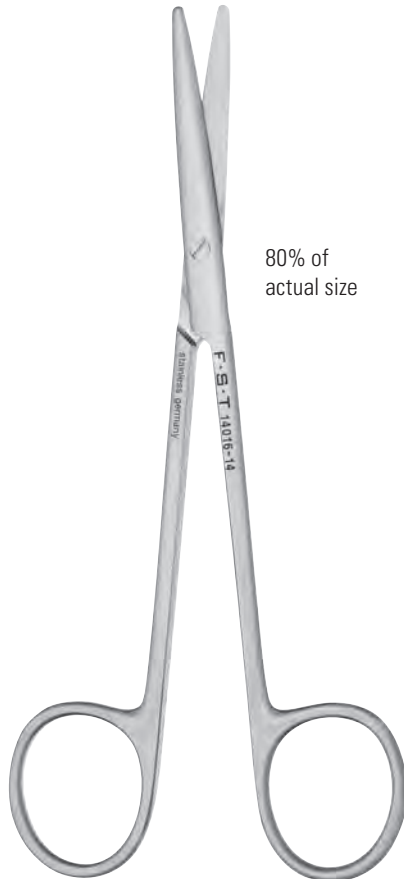
No. 14519-18

Metzenbaum

ToughCut® Metzenbaum



For more information  
see page 211.



80% of  
actual size



80% of  
actual size



Straight  
Sharp/Blunt

14.5 cm  
Cutting edge: 23 mm

No. 14024-14



Straight  
Blunt/Blunt

14.5 cm  
Cutting edge: 23 mm

No. 14016-14



Curved  
Blunt/Blunt

14.5 cm  
Cutting edge: 23 mm

No. 14017-14

18 cm  
Cutting edge: 23 mm

No. 14016-18

18 cm  
Cutting edge: 23 mm

No. 14017-18



Straight  
Blunt/Blunt

14.5 cm  
Cutting edge: 17 mm

No. 14116-14



Curved  
Blunt/Blunt

14.5 cm  
Cutting edge: 17 mm

No. 14117-14

18 cm  
Cutting edge: 21 mm

No. 14116-18

18 cm  
Cutting edge: 21 mm

No. 14117-18

## Mayo



80% of  
actual size



Straight  
Blunt/Blunt

15 cm  
Cutting edge: 27 mm

No. 14010-15



Curved  
Blunt/Blunt

15 cm  
27 mm

No. 14011-15

17 cm  
Cutting edge: 33 mm

No. 14010-17

17 cm  
33 mm

No. 14011-17

## ToughCut® Mayo



For more information  
see page 211.



80% of  
actual size



Straight  
Blunt/Blunt

15 cm  
26 mm

No. 14110-15



Curved  
Blunt/Blunt

15 cm  
26 mm

No. 14111-15

17 cm  
33 mm

No. 14110-17

17 cm  
33 mm

No. 14111-17

## Tungsten Carbide Mayo



For more information  
see page 211.



14512-15 & 14512-17  
For more information  
see page 211.



80% of  
actual size



Straight  
Blunt/Blunt

15 cm  
26 mm

No. 14510-15



Curved  
Blunt/Blunt

15 cm  
26 mm

No. 14511-15



Straight  
Blunt/Blunt

15 cm  
26 mm

No. 14512-15

17 cm  
33 mm

No. 14510-17

17 cm  
33 mm

No. 14511-17

17 cm  
33 mm

No. 14512-17

Mayo-Stille



80% of  
actual size



Straight  
Blunt/Blunt

Curved  
Blunt/Blunt

15 cm  
Cutting edge: 27 mm

15 cm  
Cutting edge: 27 mm

No. 14012-15

No. 14013-15

17 cm  
Cutting edge: 31 mm

17 cm  
Cutting edge: 31 mm

No. 14012-17

No. 14013-17

Mayo-Noble



80% of  
actual size



Straight  
Blunt/Blunt

Curved  
Blunt/Blunt

16.5 cm  
Cutting edge: 29 mm

16.5 cm  
Cutting edge: 29 mm

No. 14014-17

No. 14015-17

Decapitation Scissors

Stop guard at tips to prevent slippage.



70% of  
actual size



Straight  
Blunt/Blunt

21 cm  
Cutting edge: 47 mm

No. 14200-21

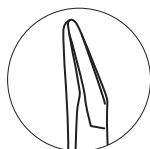
## Friedman-Pearson

This popular, fine-tipped rongeur is suited for delicate work. The fine-cupped jaws have been designed with a longer and slimmer approach for better visibility.

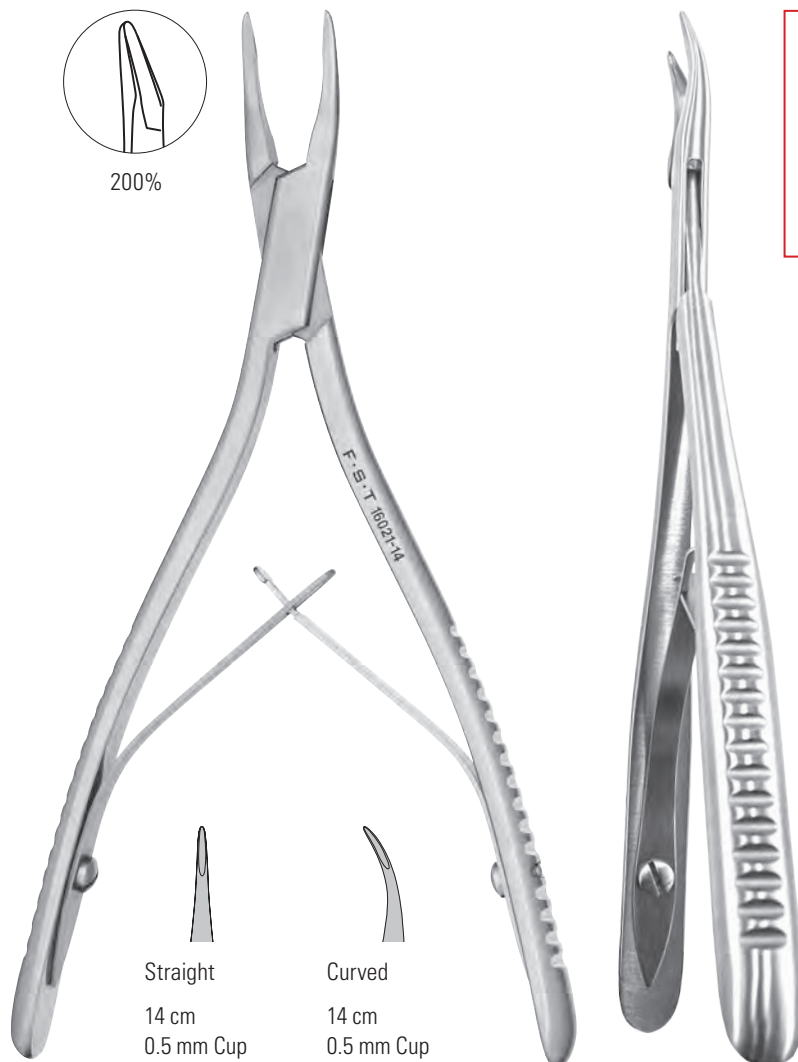


**FST**  
HAND  
CRAFTED

For more information  
see page 38.



200%



### Cautionary note:

The fine rongeur tips shown on this page are extremely fragile. Removal of material with a twisting motion can damage the tips.



Straight

14 cm  
0.5 mm Cup

No. 16220-14



Curved

14 cm  
0.5 mm Cup

No. 16221-14

14 cm  
0.7 mm Cup

No. 16120-14

14 cm  
0.7 mm Cup

No. 16121-14

14 cm  
1 mm Cup

No. 16020-14

14 cm  
1 mm Cup

No. 16021-14

## Pearson

Provides excellent visibility at dissection site due to its extra long and narrow approach to the fine cutting jaws. Especially suitable for larger hands.



**FST  
HAND  
CRAFTED**

For more information  
see page 38.

### Cautionary note:

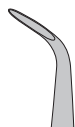
The fine rongeur tips shown on this page are extremely fragile. Removal of material with a twisting motion can damage the tips.



Slightly Curved

17 cm  
1.2 mm Cup

No. 16015-17



Sharply Curved

17 cm  
1.2 mm Cup

No. 16016-17



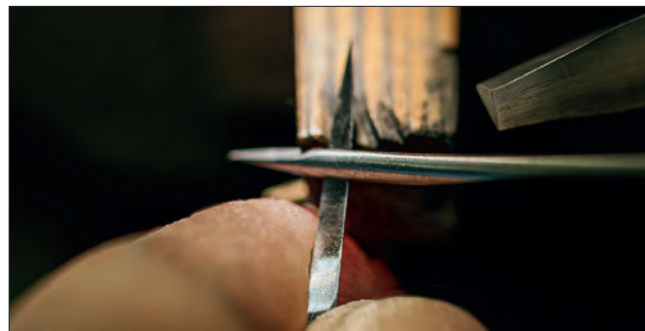
Curved

15 cm  
4 mm Cup

No. 16001-15





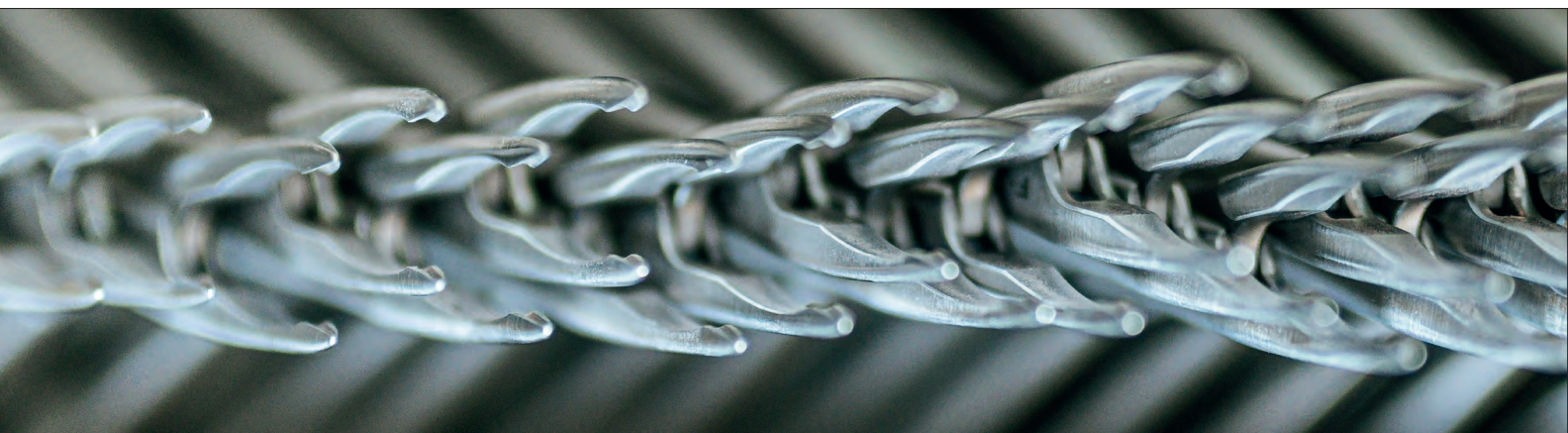


## Precision that makes a mark.

Our surgical mechanics refine and perfect instruments in FST's very own workshop, this is a step that only we take in this form. This is essential for the precision and quality of each and every one of our products.

For example, our Friedman-Pearson rongeurs with tip diameters of 0.5 or 0.7 mm, both are unique in the world. Also, our spring scissors have established themselves in the research industry and are second to none in terms of fineness.

The result: a level of quality that makes its mark - and to which we have now dedicated our own. Our new symbol "Hand-Crafted" stands for 100% guaranteed craftsmanship and instruments you can rely on in any situation.



### Baby-Beyer

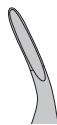
Double-action rongeur with strong jaws helps relieve hand strain.



Straight

15 cm  
2 mm Cup

No. 16023-15



Curved

15 cm  
2 mm Cup

No. 16022-15



**Diameter of this circle determines cup size.**

Form an imaginary circle that will fit in the very tip of the instrument and measure its diameter.

### Beyer

Double-action rongeur with strong jaws helps relieve hand strain.



Curved

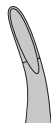
18 cm  
2.5 mm Cup

No. 16002-18



## Friedman

Strong and large jaws are ideal for use on the harder, outer regions of the spinal cord. Also can be used to gain access to delicate structures encased in bone.



Curved  
13 cm  
2.5 mm Cup  
No. 16000-14

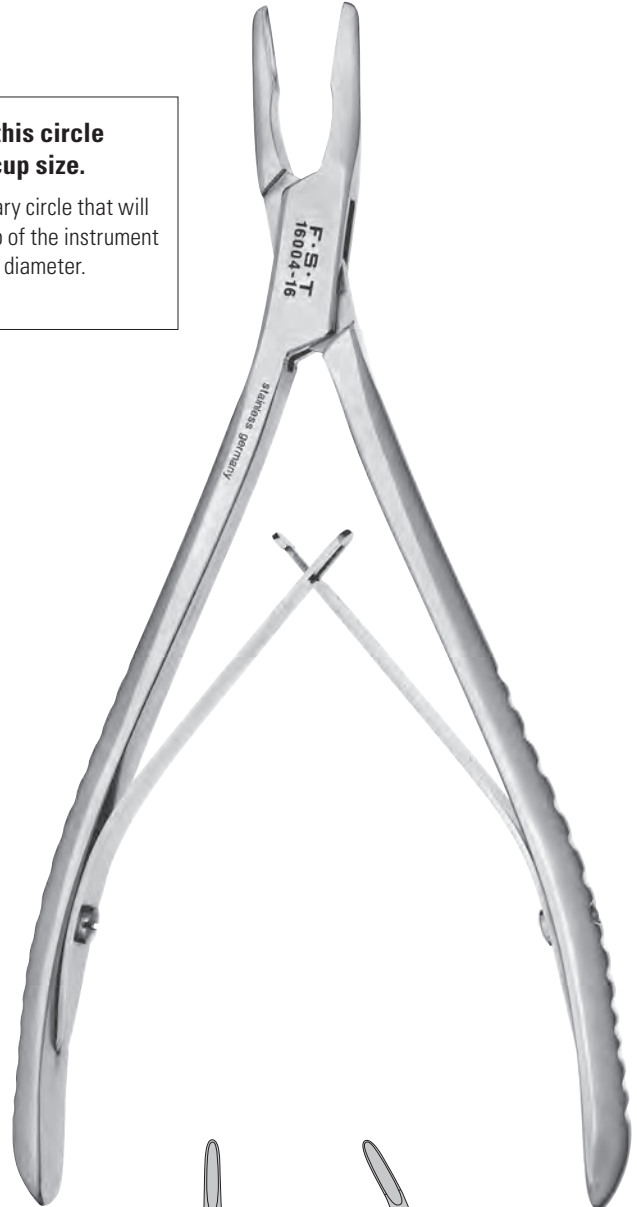


**Diameter of this circle determines cup size.**

Form an imaginary circle that will fit in the very tip of the instrument and measure its diameter.

## Lempert

Extra fine jaws.



Straight  
16 cm  
2.5 mm Cup  
No. 16004-16



Curved  
16 cm  
2.5 mm Cup  
No. 16005-16

**Bone Trimmers**

Curved  
14 cm  
Cutting edge: 8 mm  
No. 16109-14

**Cartilage Cutter**

Round cutting blades for tissue, cartilage and soft bone.



Curved  
14 cm  
Cutting edge: 9 mm  
No. 16107-14

**Dumont #15a Bone Cutter**

Cutting edge on both outside and inside bevel. Cuts suture, cartilage, bone and steel wire to 0.06 mm, and copper wire to 0.15 mm.



Angled

11.5 cm

Cutting edge: 10 mm

Jaw opening: 2.5 mm

Hard carbon steel

No. 11215-01

**Dumont #15a Bone Cutter – Epoxy Coated**

Same structure and functionality as Item No. 11215-01 (left), but with an epoxy coating up to the cutting edge for easier care and maintenance.



Angled

11.5 cm

Cutting edge: 6 mm

Jaw opening: 2.5 mm

Epoxy coated carbon steel

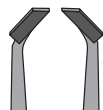
No. 11215-02

For information on  
Dumont alloys  
and tip styles,  
see page 217.

## Tungsten Carbide Bone Cutter

**TUNGSTEN  
CARBIDE**

For more information  
see page 211.



Angled

11.5 cm

Cutting edge: 10 mm

Stainless Steel handle with  
Tungsten Carbide Tips

No. 11515-02

## Micro Bone Cutter



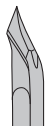
Angled 25°

13 cm

Cutting edge: 5 mm

Rolling Bearing Steel handle  
with TPE Grip

No. 16103-11

**Bone Nipper**

Angled

11 cm

Cutting edge: 5 mm

No. 16102-11

**Offset Bone Nipper**

Strong jaws for cutting  
tough cartilage.



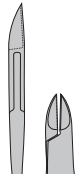
Angled

10 cm

Cutting edge: 7 mm

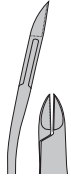
No. 16101-10

Malleus Nipper



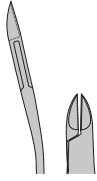
Straight

11 cm  
Cutting edge: 9 mm  
No. 16140-11



Angled down

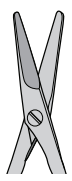
11 cm  
Cutting edge: 9 mm  
No. 16141-11



Angled up

11 cm  
Cutting edge: 9 mm  
No. 16142-11

Bone Cutting Spring Scissors

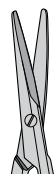


Straight

13 cm  
Cutting edge: 12 mm  
No. 16144-13

Delicate Bone Cutting Spring Scissors

Slim, strong blades for cutting fine bones and tissues.



Curved

12 cm  
Cutting edge: 12 mm  
No. 16143-12

## Littauer Bone Cutter



Straight

11 cm

Cutting edge: 15 mm

No. 16152-11



Straight

12.5 cm

Cutting edge: 17 mm

No. 16152-12



Straight

15 cm

Cutting edge: 19 mm

No. 16152-15

## Beebee Bone Scissors

Very strong jaws with sharp points.

MOST  
POPULAR

Straight

10 cm

Cutting edge: 15 mm

No. 16044-10

## Tungsten Carbide Bone Scissors

Strong heavy blades for cutting bone.

TUNGSTEN  
CARBIDE

SERRATED

For more information  
see page 211.

Straight

12.5 cm

Cutting edge: 15 mm

No. 16030-12



Straight

16 cm

Cutting edge: 15 mm

No. 16030-16

**Boehler**

Bone splitting cutter with very fine tips and double action joint to relieve strain on your hand.



Angled up 10°

15 cm

Cutting edge: 18 mm

No. 16130-15

**Skull Flap Cutter**

One tip has a flat and narrow platform which fits between dura and skull. Other tip has sharp cutting edge. The double action joint relieves strain on your hand.



Angled up 15°

14 cm

Cutting edge: 10 mm

No. 16050-15



**Cleveland Cutter**

Slightly angled

15 cm

Cutting edge: 14 mm

No. 16106-14

17 cm

Cutting edge: 15 mm

No. 16105-16

**Liston**

Gross anatomy bone cutter.



Straight

14 cm

Cutting edge: 20 mm

No. 16104-14

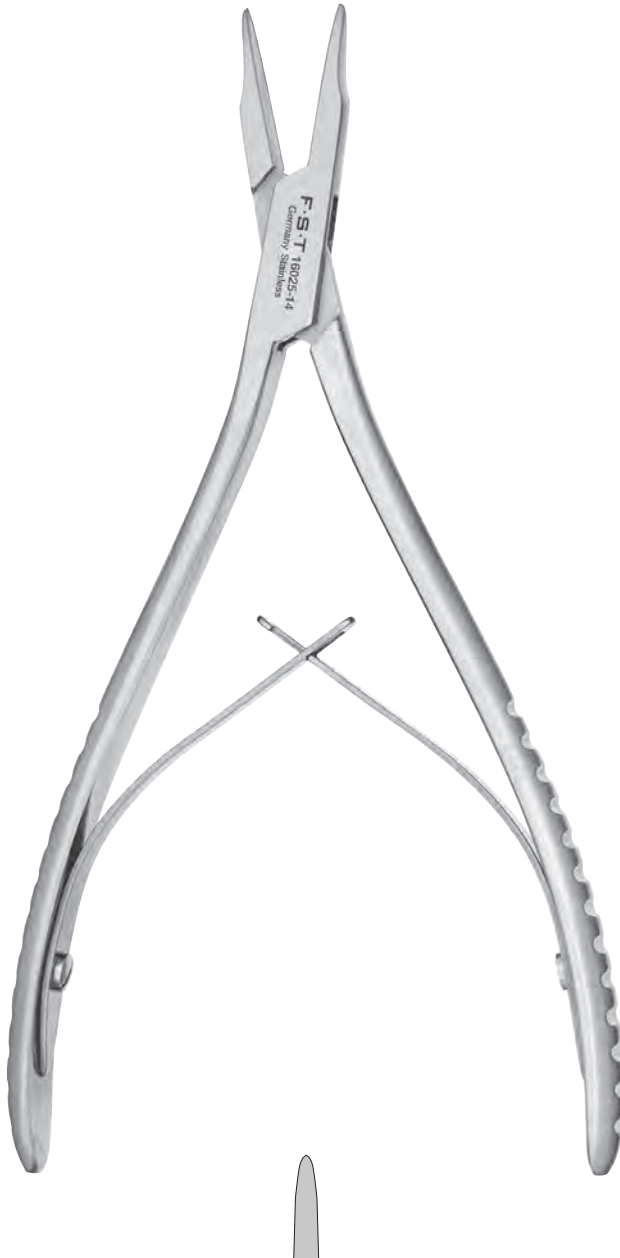
20 cm

Cutting edge: 30 mm

No. 16104-19

**Bone Pliers**

To peel back skull flaps.



Straight

15.5 cm

Flat surface

No. 16025-14

**Bone Shears**

60% of  
actual size

Curved

24 cm

Cutting edge: 6.5 cm

No. 16150-24

**Bone Forceps**

Strong cross-serrated tips for bone crushing and removal.



Angled

11.5 cm

Tip Ø: 1 mm

Cross serrated

No. 16060-11

**Miniature Self-Tapping Bone Screws**

Used extensively to anchor dental cement to bone, these self-tapping screws have superior holding strength over ordinary machine screws. Stainless steel with fillister flat head.



4 mm  
Shaft diameter: 0.86 mm  
Pkg. of 100 screws

No. 19010-10

Pkg. of 10 screws

No. 19010-11

For pre-drilling use our  
0.7 mm burs, see page 167.

4.8 mm  
Shaft diameter: 1.19 mm  
Pkg. of 100 screws

No. 19010-00

Pkg. of 10 screws

No. 19010-01

For pre-drilling use our  
0.9 mm burs, see page 167.

**Bone Wax**

A beeswax-based compound for bone hemostasis. Soft, kneadable and ready to use.

**Sterile.**



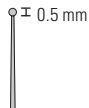
Box of 12 foil packs (2.5 g each)

No. 19009-00

Micro Curette

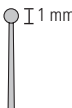
Curette tips consist of a scoop with sharp edges and are used for scraping or cleaning. They can also be used for separating and transporting, inoculating plates or transferring small amounts of chemicals.



- 

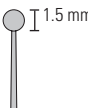
± 0.5 mm

13 cm

No. 10080-05
- 

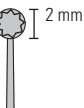
1 mm

13 cm

No. 10081-10
- 

1.5 mm

13 cm

No. 10082-15
- 

2 mm

12.5 cm

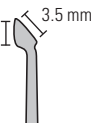
No. 10083-20

Serrations on cutting edge

Delicate Bone Scraper

For scraping tissue without cutting into bone.



- 

3.5 mm

3.5 mm

16.5 cm

No. 10075-16

Austin Chisel



- 

1 mm

16 cm

No. 10096-16
- 

1.5 mm

16 cm

No. 10097-16

Dissecting Chisel



- 

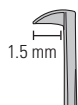
5 mm

12.5 cm

No. 10095-12

**Von Graefe Knife**

Used for cutting dura.



Angled 90°

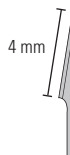
13 cm

Cutting edge: 1.5 mm

No. 10059-13

**Cataract Knife**

One of the most popular dissecting knives with a microfine point. The cutting edge is lance shaped to provide the ideal cutting angle.

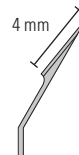


Straight

12.5 cm

Cutting edge: 4 mm

No. 10055-12

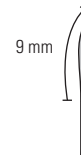


Angled 30°

12.5 cm

Cutting edge: 4 mm

No. 10056-12

**Sichel**

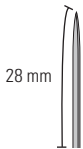
Curved

12 cm

Cutting edge: 9 mm

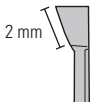
No. 10073-14

Micro Knife



Straight  
13 cm  
Cutting edge: 28 mm  
No. 10370-13

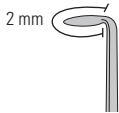
Micro Knife Side Cut



Side blade 20°  
15 cm  
Cutting edge: 2 mm  
No. 10058-15

Circle Knife

Sharp cutting edge around tip.



Angled 90°  
16 cm  
Cutting edge: 2 mm  
No. 10059-15

Gross Anatomy Knives

Handles are made of fiberglass reinforced yellow nylon with a slip resistant surface that allows little chance of bacterial accumulation. The blades are made of German Molybdenum Stainless Steel.



40% of  
actual size

Dissection knife

28 cm  
Cutting edge: 13 cm  
No. 10157-13

30 cm  
Cutting edge: 15 cm  
No. 10157-15

33 cm  
Cutting edge: 18 cm  
No. 10157-18



40% of  
actual size

Brain sectioning knife

45 cm  
Cutting edge: 30 cm  
No. 10152-30

Obsidian Stone Age Scalpels

For applications where extremely fine cuts are required or for studies where trace metals from ordinary scalpel blades cannot be tolerated. These ultra fine cutting edges have been used in human surgical procedures where objectionable scar tissue results from the use of standard scalpels.

The blade is made from obsidian—a type of volcanic glass—which allows a much finer blade than is possible with the conventional steel blade. In some cases this makes the relatively inexpensive obsidian scalpel a suitable substitute for an expensive diamond knife.

Patterned after “stone age” knives which first made their appearance about 18.000 years ago, these modern versions utilize hard wood and plastic dowels for handles. Plastic dowels are made of polyoxymethylene.

Cautionary note:

Obsidian is a very fragile material. Great care should be taken to not exert any lateral pressure on the blade during cutting. Each blade is hand-fashioned, so sizes, shapes and points will vary. While all the blades will have at least one sharp edge, some will have two.



Wood Dowel  
 Not autoclavable

Straight  
 Approximate blade length: 6 mm  
 No. 10110-01

Straight  
 Approximate blade length: 12 mm  
 No. 10110-03



Plastic Dowel  
 Autoclavable

Straight  
 Approximate blade length: 6 mm  
 No. 10110-05



Plastic Dowel  
 Autoclavable

Angled  
 Approximate blade length: 6 mm  
 No. 10110-07



## Ceramic Blades

Advantages:

- Ceramic edge stays sharp 100 times longer than steel edge
- Rust and corrosion free
- Chemical and acid resistant
- Withstands up to 2400°C (4352°F)
- No electrostatic discharge concerns
- No trace metal contamination
- Fully nonmagnetic



### Ceramic Blades



45° Cutting Edge  
33 x 6 x 0.5 mm  
Cutting edge: 4.5 mm  
Pkg. of 5 blades  
No. 10025-44



45° Cutting Edge  
33 x 6 x 0.5 mm  
Cutting edge: 2.5 mm  
Pkg. of 5 blades  
No. 10025-43



23° Cutting Edge  
33 x 6 x 0.5 mm  
Cutting edge: 14 mm  
Pkg. of 5 blades  
No. 10025-23



Aluminum  
Alloyed Handle  
12.5 cm  
No. 10025-50

45° Cutting Edge  
33 x 6 x 0.5 mm  
Cutting edge: 8 mm  
Pkg. of 5 blades  
No. 10025-45

## Diamond Knives

This knife has a gem-quality, neutral diamond blade which is honed to the finest cutting edge possible. The blade is made to an ophthalmic surgical standard and is inspected under 400x magnification. The retractable handle aids in care and storage.

### Cautionary note:

This blade is extremely fragile and vulnerable to lateral pressure.



Cutting angle: 30°  
12 cm  
Cutting edge: 1 mm  
Tip thickness: 0.15 mm  
No. 10100-30



Cutting angle: 45°  
12 cm  
Cutting edge: 1 mm  
Tip thickness: 0.15 mm  
No. 10100-45



Grip slides up the handle to protect the tip for safe storage and packing.

## Blade Holders and Breakers



11 cm  
Jaw width: 4 mm  
Flat surface  
No. 10052-11



9 cm  
Jaw width: 4 mm  
Surface with concave  
and convex jaws  
Handle diameter: 5.5 mm  
No. 10053-09



13 cm  
Jaw width: 4 mm  
Surface with concave  
and convex jaws  
Handle diameter: 8 mm  
No. 10053-13

## Breakable Carbon Steel Blades

These special, high carbon content blades are the only blades that will break cleanly.  
**Not autoclavable.**



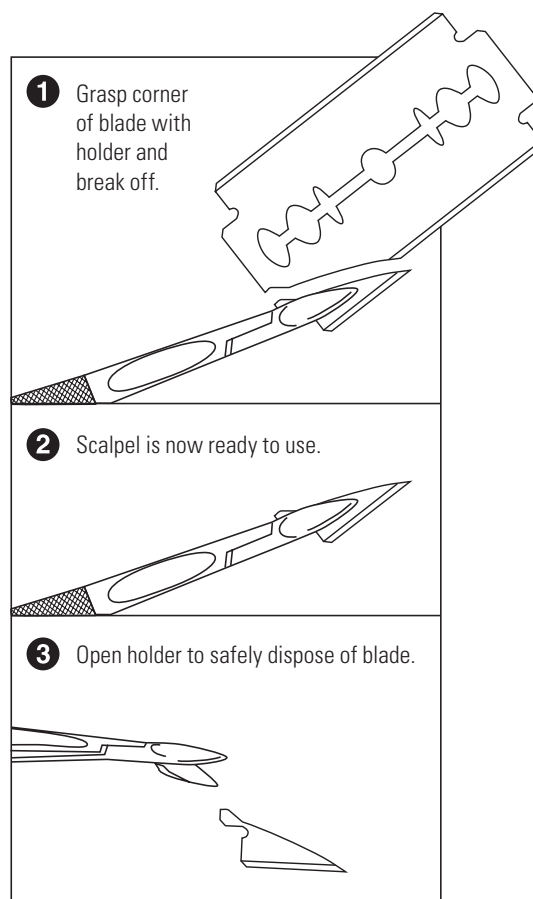
Blade thickness: 0.1 mm

Box of 10 blades

No. 10050-00

## Create Your Own Blade

With these blade holders/breakers and our special carbon steel blades, No. 10050-00, you can produce microblades in sizes that meet your own individual needs.

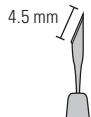


## Carbon Steel Scalpel

Cold forged from carbon steel and sharpened to eliminate tissue distortion and blade drag. 12.5 cm plastic handle with slip-proof grip. **Sterile.**

**MOST  
POPULAR**

10316-14  
10315-12



Cutting angle: 22.5°

13.5 cm

Cutting edge: 4.5 mm

Tip thickness: 0.15 mm

No. 10316-14



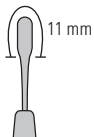
Cutting angle: 15°

13 cm

Cutting edge: 5 mm

Tip thickness: 0.15 mm

No. 10315-12



Crescent blade

14 cm

Cutting edge: 11 mm

Tip thickness: 0.20 mm

No. 10317-14



Needle blade

14.5 cm

Cutting edge: 4 mm

Tip thickness: 0.20 mm

No. 10318-14

## Interchangeable Carbon Steel Blades

**NOT  
AUTOCLAVABLE**



Angled blade  
Carbon steel

Cutting edge: 10 mm  
Pkg. of 5 blades

No. 10035-15



Curved blade  
Carbon steel

Cutting edge: 10 mm  
Pkg. of 5 blades

No. 10035-20



Small flat blade  
Carbon steel

Cutting edge: 1.5 mm  
Pkg. of 5 blades

No. 10035-05



Large flat blade  
Carbon steel

Cutting edge: 2.75 mm  
Pkg. of 5 blades

No. 10035-10



Cane blade  
Carbon steel

Cutting edge: 12 mm  
Pkg. of 5 blades

No. 10035-25



Arc blade  
Carbon steel

Cutting edge: 12 mm  
Pkg. of 5 blades

No. 10035-30

Handle for  
Interchangeable  
Blades

9.5 cm

No. 10035-00

12.5 cm

No. 10035-12

**Scalpel Handle #4 with Silicone**

For heavy, gross anatomy work.  
Molded to fit hand.



13.5 cm

No. 10009-13

**Standard Scalpel Handle #4 Solid**

Especially suitable for large dissections.



13 cm

No. 10004-13

**Blades for #4 Scalpel Handle**

The alloy used has a high carbon content which provides a longer lasting edge. Blades come individually wrapped. **Non-sterile.**



Box of 100 blades

No. 10020-00



Box of 100 blades

No. 10021-00



Box of 100 blades

No. 10022-00



Box of 100 blades

No. 10023-00

## #3 Standard

MOST  
POPULAR

12 cm

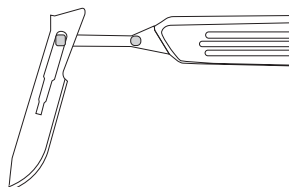
No. 10003-12

## #3 Secure

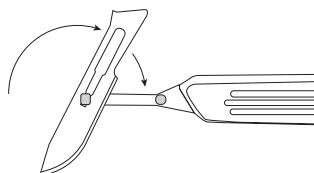
A safety lock holds the blade securely, and allows simple and safe blade attachment and removal.



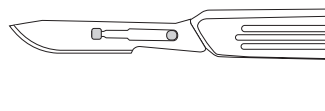
- 1 Slide blade onto front pin of the handle.



- 2 Then slide pin to front slot of blade. Rotate blade clockwise and secure blade to back pin on handle.



- 3 Scalpel is ready to use.



12 cm

No. 10003-13

## Blades for #3 and #7 Scalpel Handles

The alloy used has a high carbon content which provides a longer lasting edge. Blades come individually wrapped. **Non-sterile.**

 **NOT**  
AUTOCLAVABLE


Box of 100 blades

No. 10010-00



Box of 100 blades

No. 10011-00



Box of 100 blades

No. 10012-00



Box of 100 blades

No. 10015-00

**Short Scalpel  
Handle #7**

12 cm

No. 10007-12

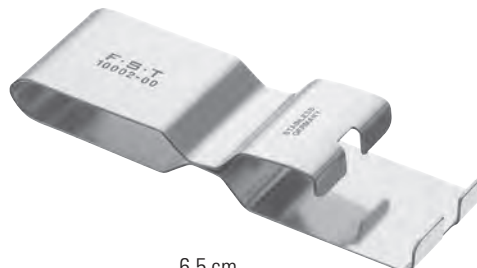
**Standard Scalpel  
Handle #7**

16.5 cm

No. 10007-16

**Scalpel Blade Remover**

For safe removal of scalpel blades, simply insert scalpel with blade into the Scalpel Blade Remover and press the sides together. This will dislodge the blade from handle and hold the blade securely for release.



6.5 cm

No. 10002-00

**Scalpel Blade Removal and Disposal Box**

This plastic device will remove used scalpel blades safely and retain them for safe disposal. Can be used for blades that fit the #3, #4, #7 and Gross Anatomy handles.



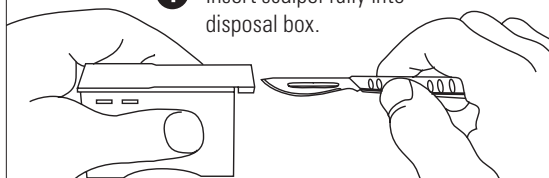
7.5 x 5 x 2.5 cm

Capacity approximately 80 blades  
Carton of 10 boxes

No. 10002-50

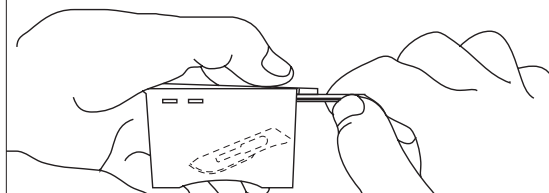
**Your fingers will never come in contact with the blade.**

- 1** Insert scalpel fully into disposal box.



- 2** Press down on disposal box cover.

- 3** Withdraw scalpel handle.



## Gross Anatomy Blade and Handle



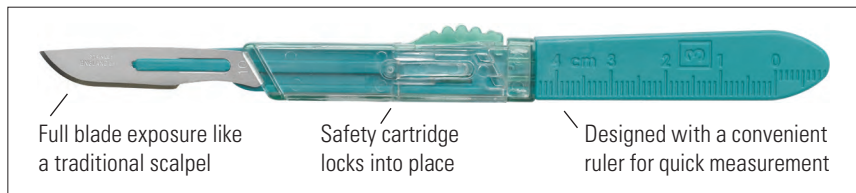
7.5 cm  
Box of 100 blades  
No. 10060-00



13 cm  
No. 10060-13

## Disposable Safety Scalpels

Plastic handle #3 with stainless steel blades. The protective cartridge completely covers the blade for safe, fast, and easy disposal. **Single-use and non-sterile.**



#10 scalpels  
Pkg. of 10  
No. 10000-10



#11 scalpels  
Pkg. of 10  
No. 10000-11



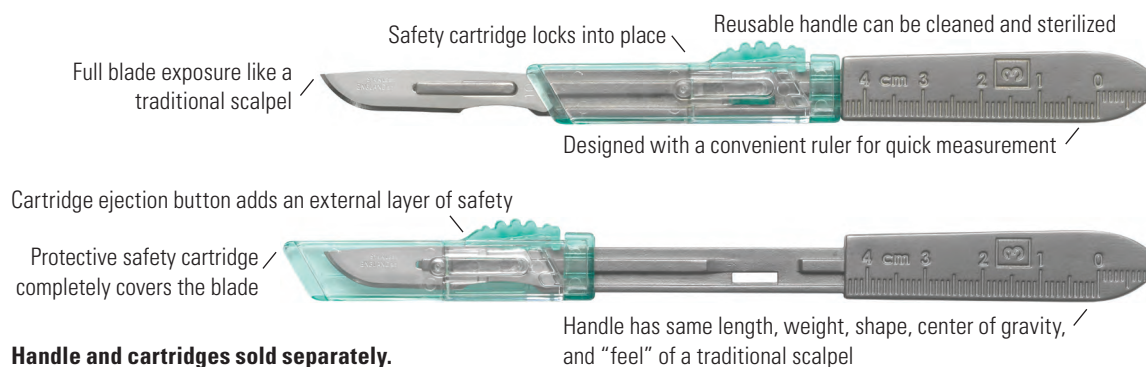
#15 scalpels  
Pkg. of 10  
No. 10000-15



Scalpel shown with safety cartridge closed and locked into place.

### Safety Scalpel Handle #3 and Blade Cartridges

The Safety Scalpel Handle #3 is compatible with all Safety Scalpel Blades. The handle is reusable and made of Teflon coated stainless steel which provides a non-stick surface. The Blade Cartridges are color-coded with clear windows for easy identification. The protective cartridge completely covers the blade for safe, fast, and easy disposal. **Handle is reusable and autoclavable. Blades are single-use and non-sterile.**



#### Safety Scalpel Handle #3



12.5 cm  
Teflon coated stainless steel  
No. 10006-12

#### Safety Scalpel Blade Cartridges



Safety Scalpel Blade Cartridges shown open and attached to handle.  
**Handle and cartridges sold separately.**

#10 blades

Pkg. of 10

No. 10010-10

#11 blades

Pkg. of 10

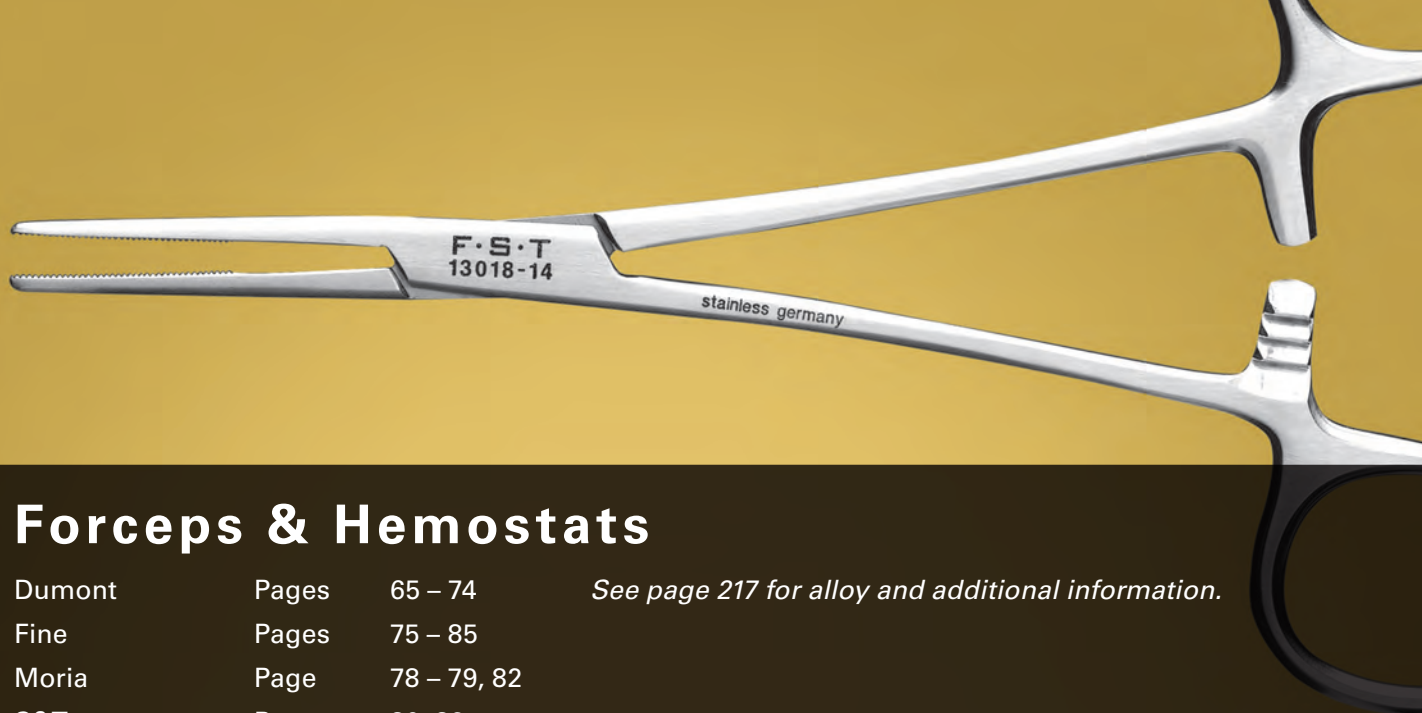
No. 10011-10

#15 blades

Pkg. of 10

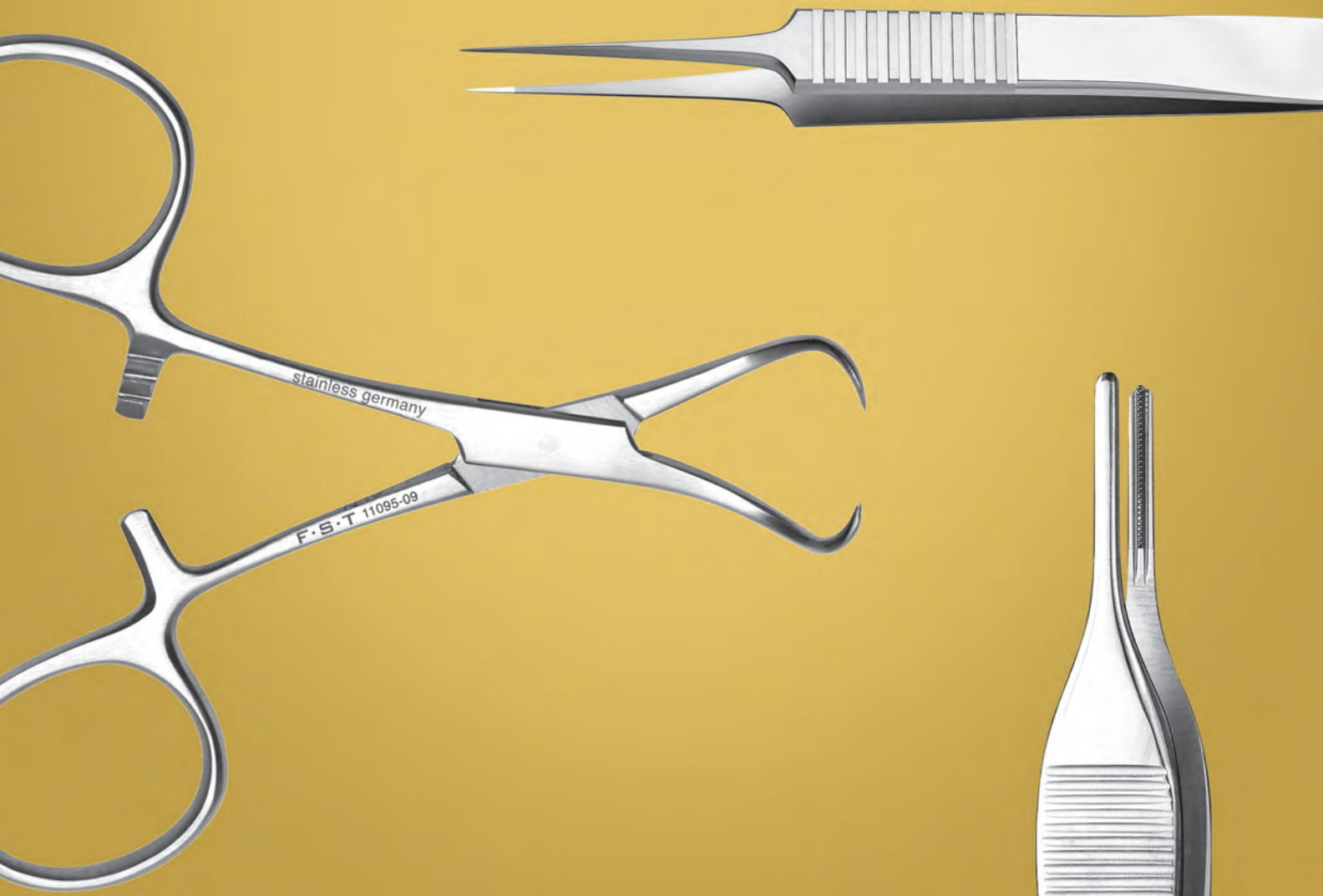
No. 10015-10





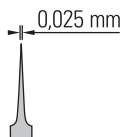
## Forceps & Hemostats

|           |       |             |                                                           |
|-----------|-------|-------------|-----------------------------------------------------------|
| Dumont    | Pages | 65 – 74     | <i>See page 217 for alloy and additional information.</i> |
| Fine      | Pages | 75 – 85     |                                                           |
| Moria     | Page  | 78 – 79, 82 |                                                           |
| S&T       | Pages | 80, 82      |                                                           |
| Standard  | Pages | 86 – 97     |                                                           |
| Hemostats | Pages | 98 – 103    |                                                           |



### Dumont #5SF

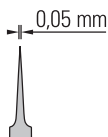
The finest tips ever produced by Dumont.



Super fine tip  
11 cm  
Inox  
0.025 x 0.005 mm  
No. 11252-00

### Dumont #5 Fine Tips

Finished under magnification and polished on the inside, the tips close flat to 3 mm and are less likely to open under excess pressure.



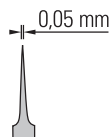
Biology tip  
11 cm  
Inox  
0.05 x 0.01 mm  
No. 11254-20

### Dumont #5 Ceramic Coated

These forceps are non-reflective. The scratch and corrosion resistant coating guarantees durability.



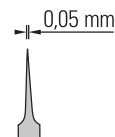
For more information about our ceramic instruments please visit page 211.



Biology tip  
11 cm  
Ceramic coated inox  
0.05 x 0.01 mm  
No. 11252-50

### Dumont #5C0

These forceps have been honed down to make this the lightest and most precise Dumont forceps available.



Biology tip  
11 cm  
Dumostar  
0.05 x 0.01 mm  
No. 11295-20

For information on Dumont alloys and tip styles, see page 217.

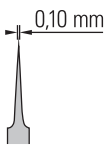
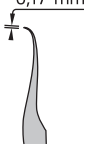
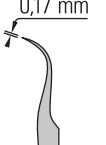
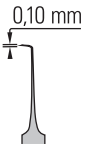
Dumont Micro-Blunted, Atraumatic Tipped Forceps

The sides of these forceps are distinctively ribbed to provide a better holding surface for maximum control of the instrument. The shanks are arched toward each other to transmit more holding strength to the points. The smooth inside surfaces at the tips will close flat to 5 mm with gentle pressure, increasing the total holding area considerably. The microscopically matched tips are gently blunted to prevent tissue puncture and are recommended as micro needle holders.

FORCEPS

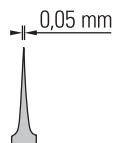
For information on  
Dumont alloys  
and tip styles,  
see page 217.



|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| Medical #5                                                                          | Medical #5A                                                                         | Medical #7S                                                                         | Medical #7                                                                          | Medical #5/45                                                                         | Medical #5/90                                                                         |
| Straight                                                                            | Off-center                                                                          | Short curve                                                                         | Curved                                                                              | Angled 45°                                                                            | Angled 90°                                                                            |
| 11 cm                                                                               | 11.5 cm                                                                             | 12 cm                                                                               | 11.5 cm                                                                             | 11 cm                                                                                 | 11 cm                                                                                 |
| Inox                                                                                | Inox                                                                                | Inox                                                                                | Inox                                                                                | Inox                                                                                  | Inox                                                                                  |
| 0.10 x 0.06 mm                                                                      | 0.13 x 0.08 mm                                                                      | 0.17 x 0.10 mm                                                                      | 0.17 x 0.10 mm                                                                      | 0.10 x 0.06 mm                                                                        | 0.10 x 0.06 mm                                                                        |
| No. 11253-20                                                                        | No. 11253-21                                                                        | No. 11273-22                                                                        | No. 11273-20                                                                        | No. 11253-25                                                                          | No. 11253-29                                                                          |

## Dumont #55

Bevelled, like #5 but with extra light and fine shanks.

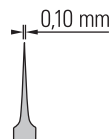


Biology tip  
11 cm  
Inox  
0.05 x 0.02 mm  
No. 11255-20

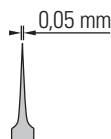
11 cm  
Dumostar  
0.05 x 0.02 mm  
No. 11295-51

## Dumont #5 Mirror Finish Forceps

The last 5 mm on the inside of the tips are highly polished to help prevent tissue from sticking. Ideal for embryos, nerves, or any other adhesive tissue.



Standard tip  
11 cm  
Inox  
0.10 x 0.06 mm  
No. 11251-23



Biology tip  
11 cm  
Inox  
0.05 x 0.02 mm  
No. 11252-23

## Dumont #5

These are the most widely used Dumont forceps. Bevelled, very fine shanks for best visibility.



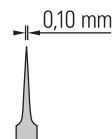
11251-20  
11252-20



11251-10



11252-40  
For more information  
see page 211.

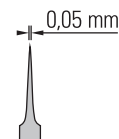


Standard tip  
11 cm  
Inox  
0.10 x 0.06 mm  
No. 11251-20

Dumoxel  
No. 11251-30

Dumostar  
No. 11295-00

11 cm  
Carbon  
0.08 x 0.04 mm  
No. 11251-10



Biology tip  
11 cm  
Inox  
0.05 x 0.02 mm  
No. 11252-20

Dumoxel  
No. 11252-30

Dumostar  
No. 11295-10

Titanium  
No. 11252-40

For information on  
Dumont alloys  
and tip styles,  
see page 217.

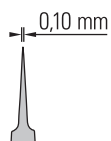
**Dumont WA #5**

These specially designed forceps offer improved stability with an ergonomic body that allows the forceps to fit more comfortably in your hand. A domed end with no soldering grooves allows the forceps to be thoroughly and easily cleaned, preventing biofilm residues.

For information on  
Dumont alloys  
and tip styles,  
see page 217.



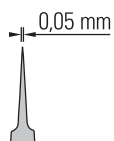
Side View



Standard tip

12 cm  
Inox  
0.10 x 0.06 mm

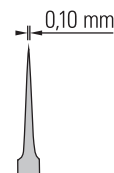
No. 11251-21



Biology tip

12 cm  
Inox  
0.05 x 0.02 mm

No. 11252-21

**Dumont #5XL**

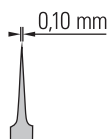
Standard tip

15 cm  
Inox  
0.10 x 0.06 mm

No. 11253-10

### Dumont #L5

Slide sleeve keeps tips together so specimens may be securely held and retained. Slide may be locked in place so that forceps can be used in regular fashion.

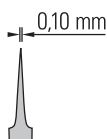


Standard tip  
11 cm  
Inox  
0.10 x 0.06 mm

No. 11253-27

### Dumont #5 Teflon® Coated

These antimagnetic forceps are ideal for use in cryogenic environments and for EM samples. Teflon® coating provides a non-stick surface.



Standard tip  
11 cm  
Teflon coated inox  
0.10 x 0.06 mm

No. 11626-11

### Dumont #5/45

45° tips for improved visibility and control.

MOST  
POPULAR



Standard tip  
11 cm  
Dumoxel  
0.10 x 0.06 mm

No. 11251-35

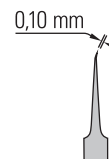
### Dumont #5/45 Cover Slip Forceps

Designed to pick up cover slips out of multi-well plates. The tip width is squared for a better grip.



300%

For information on  
Dumont alloys  
and tip styles,  
see page 217.



1 mm from tip to bend  
11.5 cm  
Dumoxel  
Upper tip: 0.10 x 0.08 mm  
Lower tip: 0.10 x 0.02 mm

No. 11251-33

FORCEPS

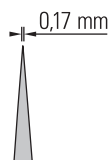
**Dumont #3**

Tapered and  
sturdy shanks.



FORCEPS

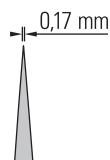
For information on  
Dumont alloys  
and tip styles,  
see page 217.



Standard tip

12 cm  
Dumoxel  
0.17 x 0.10 mm

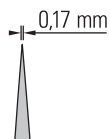
No. 11231-30



Standard tip

12 cm  
Dumostar  
0.17 x 0.10 mm

No. 11293-00

**Dumont #3c**

Standard tip

11 cm  
Inox  
0.17 x 0.10 mm

No. 11231-20

**Dumont #6**

Sharply angled tips for  
access to difficult areas.



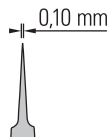
Standard tip

11.5 cm  
Inox  
0.17 x 0.10 mm

No. 11260-20

## Dumont #7 Fine Tips

Finished under magnification and polished on the inside, the tips close flat to 3 mm and therefore less likely to open under excess pressure.



Biology tip

11 cm  
Inox  
0.07 x 0.03 mm  
No. 11274-20

## Dumont #7

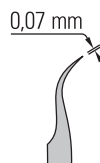
**•TITANIUM•**

11272-40  
For more information  
see page 211.



Biology tip

11.5 cm  
Dumoxel  
0.07 x 0.04 mm  
No. 11272-30



Standard tip

Dumoxel  
No. 11271-30  
  
Dumostar  
No. 11297-00

Dumostar  
No. 11297-10  
  
Titanium  
No. 11272-40

## Dumont #7 Ceramic Coated

**CERAMIC  
COATED**

For more information about  
our ceramic instruments  
please visit page 211.



Biology tip

11 cm  
Ceramic coated inox  
0.07 x 0.04 mm  
No. 11272-50

## Dumont #7B

**SERRATED**



Standard tip

11 cm  
Inox  
0.17 x 0.10 mm  
No. 11270-20

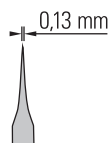
FORCEPS

For information on  
Dumont alloys  
and tip styles,  
see page 217.



**Dumont #4**

Similar to #5, but  
with broader shanks.



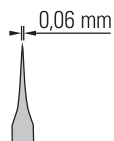
Standard tip

11 cm  
Dumoxel  
0.13 x 0.08 mm

No. 11241-30

Dumostar

No. 11294-00



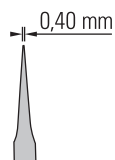
Biology tip

11 cm  
Dumoxel  
0.06 x 0.04 mm

No. 11242-40

**Dumont #2 Laminectomy Forceps**

These forceps can be used to break off  
delicate bone during mouse laminectomies,  
as well as fine skull bone removal.



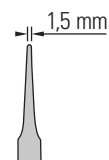
Standard tip

12 cm  
Inox  
0.40 x 0.02 mm

No. 11223-20

**Dumont #2AP Epoxy Coated**

Provides good insulation for up to 220 AC voltage  
work and highly impervious to chemical  
solutions. Frozen or super cold sections will  
not adhere to the gripping surfaces.



Standard tip

12 cm  
Epoxy coated Inox  
Tip width: 1.5 mm

No. 11220-21

For information on  
Dumont alloys  
and tip styles,  
see page 217.

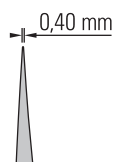
## Dumont AA

## Dumont AA Epoxy Coated

Slip-proof acid and electric shock resistant epoxy coating covering 17.5 mm from the tips.

## Dumont SS

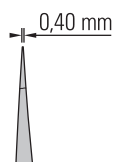
The tips are smooth on the inside for a gentle grip. Applying full strength will not separate tips and a strong hold on the smallest specimen is ensured.



Standard tip

12.5 cm  
Inox  
0.4 x 0.2 mm

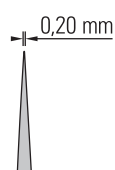
No. 11210-20



Standard tip

12.5 cm  
Epoxy coated inox  
0.4 x 0.2 mm

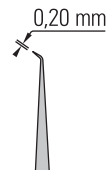
No. 11210-10



Standard tip

13.5 cm  
Inox  
0.20 x 0.12 mm

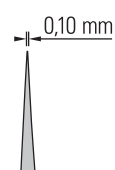
No. 11203-23



Angled 45°

13.5 cm  
Inox  
0.20 x 0.12 mm

No. 11203-25



Biology tip

13.5 cm  
Dumoxel  
0.10 x 0.06 mm

No. 11200-33

For information on  
Dumont alloys  
and tip styles,  
see page 217.

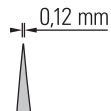
FORCEPS

## Dumont Mini Forceps

Dumont #2E  
Components Forceps

## Dumont #5AC

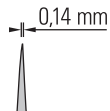
FORCEPS

For information on  
Dumont alloys  
and tip styles,  
see page 217.

Style 3

7 cm  
Inox  
0.12 x 0.07 mm

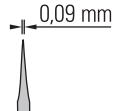
No. 11200-10



Style 4

7 cm  
Inox  
0.14 x 0.06 mm

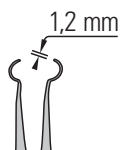
No. 11200-12



Style 5

8 cm  
Inox  
0.09 x 0.05 mm

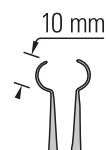
No. 11200-14

NEW  
ITEM

For components

11.5 cm  
Dumoxel  
8 x 1.2 mm

No. 11229-08



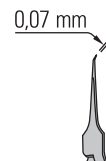
For components

11.5 cm  
Dumoxel  
10 x 1.2 mm

No. 11229-10



300%

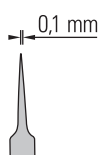
Biology Tip  
Type #5 Anti-Capillary

11.5 cm  
Inox  
0.07 x 0.02 mm

No. 11258-20

**Gold Plated Forceps**

Gold-plating gives corrosion resistance to most chemicals, salts and acids. These forceps are perfect for any application where corrosion resistance and toughness are primary requirements.

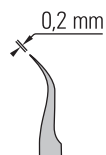


Straight

11.5 cm  
0.1 x 0.06 mm

Gold Plated  
Stainless Steel

No. 11915-11

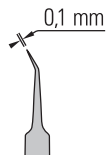


Curved

11.5 cm  
0.2 x 0.1 mm

Gold Plated  
Stainless Steel

No. 11917-12



Angled 30°

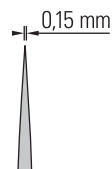
11.5 cm  
0.1 x 0.06 mm

Gold Plated  
Stainless Steel

No. 11911-11

**Diamond Coated Forceps**

Diamond coating provides increased corrosion resistance and greater protection from wear and tear, which extends the operational life of the forceps, as well as providing a stronger grip at the tips.

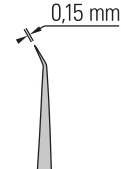


Straight

14 cm  
0.15 x 0.1 mm

Diamond Coated  
Stainless Steel

No. 11990-14

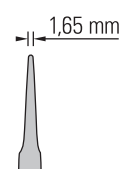


Angled 30°

14 cm  
0.15 x 0.1 mm

Diamond Coated  
Stainless Steel

No. 11991-14



Straight

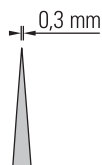
12 cm  
1.65 x 0.05 mm

Diamond Coated  
Stainless Steel

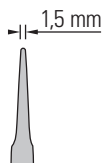
No. 11992-12

**Mirror Finish Broad Shanks**

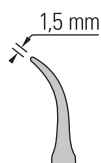
These forceps have long and narrow shanks with thin, highly polished tips to prevent tissue from sticking. Ideal for embryos, nerves, or other adhesive tissues.



Straight  
13 cm  
0.3 x 0.15 mm  
No. 11923-13

**#2A Forceps**

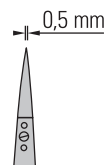
Straight  
12 cm  
1.5 x 0.13 mm  
Stainless Steel  
No. 11992-20



Curved  
13 cm  
1.5 x 0.1 mm  
Stainless Steel  
No. 11972-20

**Forceps with Replaceable Tips**

Stainless steel body with replaceable plastic tips. Tips are made of polyvinylidene fluoride (PVDF) and are electrostatic discharge (ESD) safe. Body and plastic tips are corrosion and abrasion resistant.



Straight  
13 cm  
0.5 x 0.5 mm  
Stainless Steel body  
with replaceable  
plastic tips  
No. 11980-13



Pkg. of 2 tips and 3 screws  
Replacement plastic tips  
Straight, strong  
4 cm  
0.5 mm  
No. 11988-01



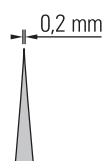
Pkg. of 2 tips and 3 screws  
Replacement plastic tips  
Straight, very fine  
4 cm  
0.5 mm  
No. 11988-02



Pkg. of 2 tips and 3 screws  
Replacement plastic tips  
Curved  
4 cm  
0.5 mm  
No. 11988-03

**Fine Forceps Broad Shanks**

Straight forceps with sturdy coarse tips.

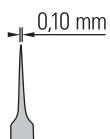


12 cm  
0.2 x 0.12 mm

No. 11445-12

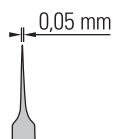
**Fine Forceps Mirror Finish**

The last 5 mm on the inside of the tips are highly polished to help prevent tissue from sticking. Ideal for embryos, nerves, or other adhesive tissue.



11 cm  
0.10 x 0.06 mm

No. 11412-11

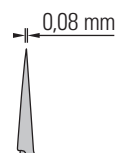


11 cm  
0.05 x 0.02 mm

No. 11413-11

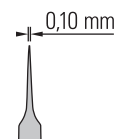
**Fine Forceps Self-Closing**

Ideal for lifting and holding EM grids. Consistent pressure at tips. Correctly tensioned "cross-over" shanks come to a microscopically matched point.



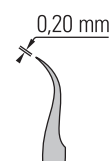
11.5 cm  
0.08 x 0.04 mm

No. 11480-11



11 cm  
0.10 x 0.06 mm

No. 11485-11



11.5 cm  
0.20 x 0.12 mm

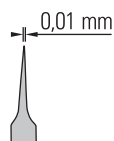
No. 11487-11

### Moria Ultra Fine Forceps

These forceps have the most finely executed points available. They are extremely light, superbly balanced, and have a gentle spring action. The shanks are specially designed with an arch which ensures maximum force to the tips. The tips close flat for 6 mm from the points to give a large holding area. The tips have been expertly finished under magnification.



Moria MC40

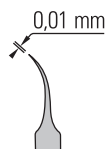


Straight

11 cm

No. 11370-40

Moria MC40/B



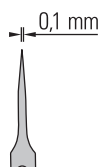
Curved

11 cm

No. 11370-42



Moria 9980

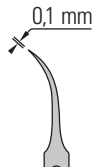


Straight

13 cm

No. 11399-80

Moria 9987



Curved

13 cm

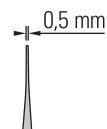
No. 11399-87

### Moria Iris Forceps

Balanced with gentle spring action and tips that are perfectly matched.

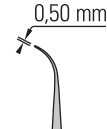


Moria MC32/B

Smooth  
Blunt10 cm  
Tip width: 0.5 mm

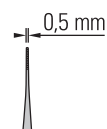
No. 11373-22

Moria MC31/B

Smooth  
Blunt10 cm  
Tip width: 0.5 mm

No. 11373-12

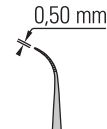
Moria MC32



Microserrated

No. 11370-32

Moria MC31



Microserrated

No. 11370-31

## Moria Bonn Forceps

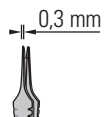


• TITANIUM •

11383-56  
For more information  
see page 211.



Moria 7835

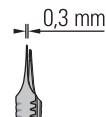


Straight  
1x2 teeth and tying  
platform

7.5 cm  
Tip width: 0.3 mm  
Tying platform: 4 mm  
Stainless Steel

No. 11383-50

Moria T17835

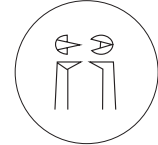


Straight  
1x2 teeth and tying  
platform

7.5 cm  
Tip width: 0.3 mm  
Tying platform: 4 mm  
Titanium

No. 11383-56

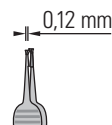
## Moria Paufigue Forceps



20x magnification



Moria 3225



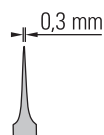
Straight  
1x2 teeth with tying  
platform

8.5 cm  
Tip width: 0.12 mm  
Tying platform: 5 mm

No. 11390-25



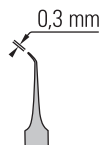
## Fine Forceps



Straight

11 cm  
0.3 x 0.25 mm

No. 00108-11



Angled 45°

11 cm  
0.3 x 0.25 mm

No. 00109-11

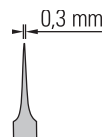
## SuperGrip Forceps

The tips are processed with MicroCrystals®, a method developed by S&T® to infuse tungsten carbide on stainless steel. The formation of this ultra-fine coating guarantees atraumatic handling of tissue while improving the grip dramatically. The recommended use is where forceps are utilized as needle holders or when slippery tissues might be encountered.



300%

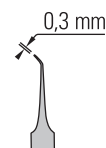
The gripping surface is similar to a match head.



Straight

11 cm  
0.3 x 0.25 mm

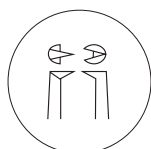
No. 00632-11



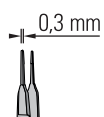
Angled 45°

11 cm  
0.3 x 0.25 mm

No. 00649-11

**Bonn**

20x magnification



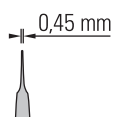
Smooth

7 cm

Tip width: 0.3 mm

Tying Platform: 5 mm

No. 11083-07



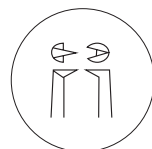
1x2 teeth

7 cm

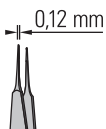
Tip width: 0.45 mm

Teeth width: 0.1 mm

No. 11084-07

**Mirror Finish Bonn Forceps**

20x magnification

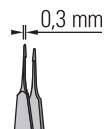
Straight  
1x2 teeth

10.5 cm

Tip width: 0.12 mm

Tying Platform: 5 mm  
Partly polished

No. 11090-10



Straight

10.5 cm

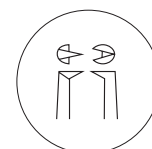
Tip diameter: 0.3 mm

Tying Platform: 5 mm  
Partly polished

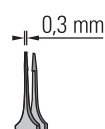
No. 11093-10

**Mirror Finish Suture Tying Forceps with Teeth**

A unique tip style fusing a suture tying platform and a 1x2 teeth tip for tissue manipulation.



20x magnification



Straight

9 cm

Tip width: 0.3 mm

Platform with 1x2 teeth

No. 11090-09

**Moria Suture Tying Forceps**

Used to suture after surgery is complete. This requires the manipulation of a calibrated nylon thread and the use of a specific instrument: a tying forceps, straight or curved, without teeth.

**Moria**MOST  
POPULAR**Suture Tying Forceps**

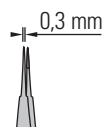
The platform tips close flat. This ensures a reliable grip on sutures.

**S&T®****Suture Tying Forceps**

The platform tips close flat. This ensures a reliable grip on sutures.



Moria 9604

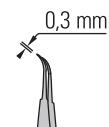


Straight  
Smooth

9.5 cm  
Tip diameter: 0.3 mm  
Tying Platform: 8 mm

No. 11393-04

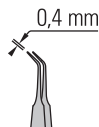
Moria 9605



Curved  
Smooth

9.5 cm  
Tip diameter: 0.3 mm  
Tying Platform: 7.5 mm

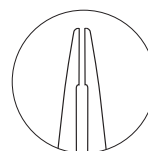
No. 11393-05



Angled 45°  
Smooth

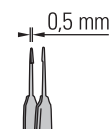
9 cm  
Tip width: 0.4 mm  
Tying Platform: 6 mm

No. 11063-07



13.5 cm  
Tip diameter: 0.3 mm  
Tying platform: 6 mm

No. 00272-13

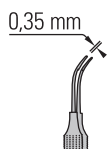


10 cm  
Tip diameter: 0.5 mm  
Tying platform: 5 mm

No. 18025-10

### Round Handled Suture Tying Forceps

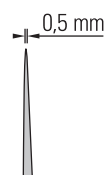
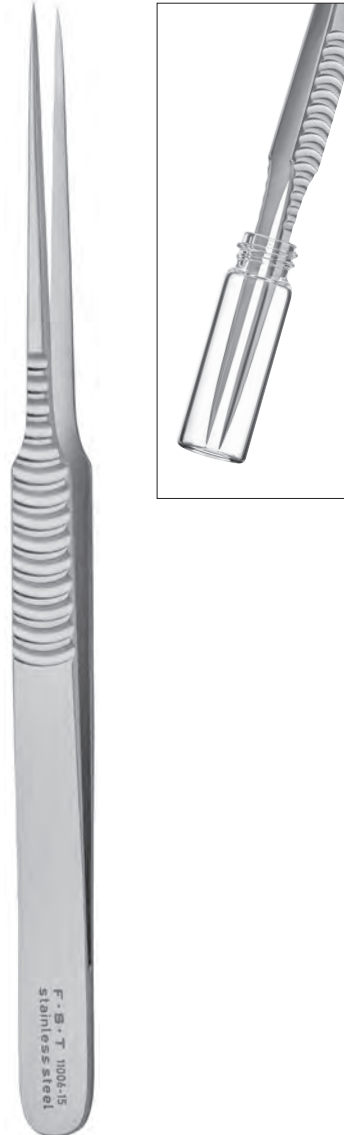
Round handles allow easy fingertip adjustments.



10.5 cm  
Tip diameter: 0.35 mm  
Tying platform: 5.5 mm  
No. 18026-10

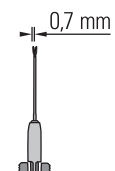
### Vial Forceps

Tips taper for 6 cm allowing easy access to specimens in vials.

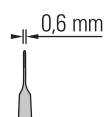


15 cm  
Tip diameter: 0.5 mm  
No. 11006-15

### Vitro Grasping Forceps

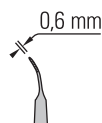


14 cm  
Serrated  
Tip diameter: 0.7 mm  
No. 11900-14

**Graefe Forceps**

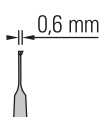
Straight  
Serrated

7 cm  
Tip width: 0.6 mm  
No. 11064-07



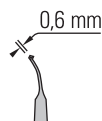
Curved  
Serrated

7 cm  
Tip width: 0.6 mm  
No. 11065-07



Straight  
1x2 teeth

No. 11066-07

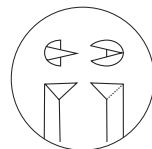


Curved  
1x2 teeth

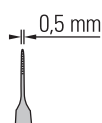
No. 11067-07

**Bishop-Harman**

Extra light, fenestrated handles ensure a good grip.

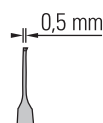


10x magnification



Serrated

8.5 cm  
Tip width: 0.5 mm  
No. 11069-08

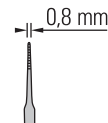


1x2 teeth

8.5 cm  
Tip width: 0.5 mm  
No. 11070-08

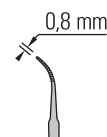
**Octagon Forceps**

The octagon shaped grip provides a particularly secure finger hold.



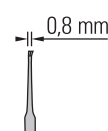
Straight  
Serrated

9.5 cm  
Tip width: 0.8 mm  
No. 11040-08



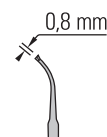
Curved  
Serrated

9.5 cm  
Tip width: 0.8 mm  
No. 11041-08



Straight  
1x2 teeth

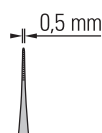
No. 11042-08



Curved  
1x2 teeth

No. 11043-08

## Extra Fine Graefe Forceps

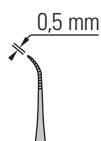
80% of  
actual size

Serrated

10 cm

Tip width: 0.5 mm

No. 11150-10

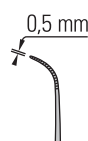


Serrated

10 cm

Tip width: 0.5 mm

No. 11151-10

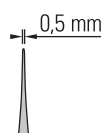


Serrated

10 cm

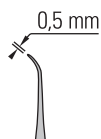
Tip width: 0.5 mm

No. 11152-10



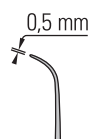
Smooth

No. 11158-10



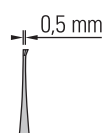
Smooth

No. 11159-10



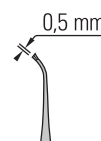
Smooth

No. 11160-10



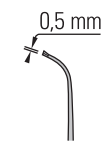
1x2 teeth

No. 11153-10



1x2 teeth

No. 11154-10



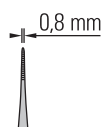
1x2 teeth

No. 11155-10

## Graefe Forceps

MOST  
POPULAR11051-10  
11054-10

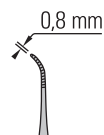
• TITANIUM •

11650-10 – 11652-10  
For more information  
see page 211.

Serrated

Tip width: 0.8 mm

No. 11050-10



Serrated

Tip width: 0.8 mm

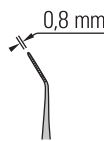
No. 11051-10



Serrated

Tip width: 0.8 mm

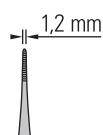
No. 11052-10



Serrated

Tip width: 0.8 mm

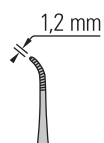
No. 11049-10



Titanium

Tip width: 1.2 mm

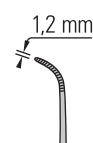
No. 11650-10



Titanium

Tip width: 1.2 mm

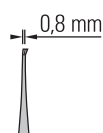
No. 11651-10



Titanium

Tip width: 1.2 mm

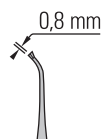
No. 11652-10



1x2 teeth

Tip width: 0.8 mm

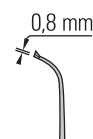
No. 11053-10



1x2 teeth

Tip width: 0.8 mm

No. 11054-10



1x2 teeth

Tip width: 0.8 mm

No. 11055-10

**Sliding Lock Forceps**

Smooth

11 cm  
Tip width: 1 mm  
Slide lock

No. 11062-10

**Episcleral Forceps**

The tips of these forceps arch toward each other, closing flat. Exceptional gripping power is possible with minimal damage to tissue. A limit pin prevents excessive applied pressure.



10 cm

Tip thickness: 0.2 mm  
Tip Dimension: 1.3 x 3 mm

No. 11071-10

**Pierse Fixation Forceps**

For exceptional gripping power with no damage to sclera, vascular sheath and epineurium.



Straight

13 cm  
Tip Dimension: 0.1 x 0.4 mm

No. 18155-13

**Plastic Forceps**

These forceps are non-magnetic, acid resistant and able to withstand temperatures up to 240°C (464°F). Tips do not spread under pressure. Plastic forceps are made of Acetyl and will be sold in packages of 10 pieces.



Sharp  
Straight

11.5 cm  
0.40 x 0.25 mm

No. 11700-00



Blunt  
Straight

11.5 cm  
1.5 x 0.40 mm

No. 11700-03



Sharp  
Curved

11.5 cm  
0.30 x 0.20 mm

No. 11700-01



Blunt  
Curved

11.5 cm  
1.5 x 0.40 mm

No. 11700-04



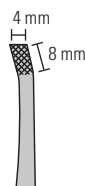
Sharp  
Angled 45°

11.5 cm  
0.30 x 0.20 mm

No. 11700-02

**Cross Action Forceps**

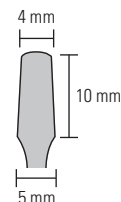
These tissue transport forceps have a gentle action.



Cross serrated

10 cm  
Tip Dimension: 4 x 8 mm

No. 11075-00

**Cover Glass Forceps**

Straight

10.5 cm  
Tip Dimension:  
4 x 5 x 10 mm

No. 11074-02



Angled

10.5 cm  
Tip Dimension:  
4 x 5 x 10 mm

No. 11073-10



**Ring Forceps**

For transport of tissue and organs. With limit screw to prevent excessive applied pressure.



8.5 cm  
Inner Diameter: 1 mm  
Outer Diameter: 1.5 mm  
Ring width: 0.5 mm

No. 11101-09



9 cm  
Inner Diameter: 2.2 mm  
Outer Diameter: 3 mm  
Ring width: 1.3 mm

No. 11103-09



9 cm  
Inner Diameter: 4.8 mm  
Outer Diameter: 6 mm  
Ring width: 1.5 mm

No. 11106-09

**Circle Forceps**

Cupped forceps for atraumatic gripping of organs and tissues.



11.5 cm  
Tip diameter: 0.7 mm

No. 11072-11

**Live Insect Handling Forceps**

Very delicate.



Narrow  
10 cm

No. 26029-10

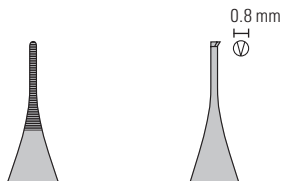


Wide  
10 cm

No. 26030-10

**Micro-Adson**

Our most delicate version of the popular Adson forceps.



Serrated

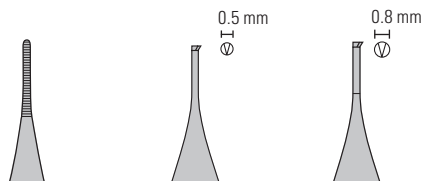
1x2 teeth

12 cm  
Tip width: 0.8 mm

No. 11018-12

**Micro-Adson with Fenestrated Handle**

Our delicate Micro-Adson forceps, with five windows to aid in stability and easy finger adjustments.



Serrated

1x2 teeth

12 cm  
0.8 mm

No. 11020-12

1x2 teeth with  
6 mm platform

12 cm  
0.8 mm

No. 11022-12

**Adson**

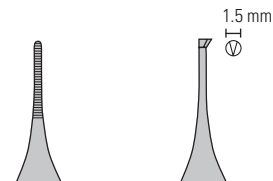
Wide, strong grip with narrow tips.

**MOST  
POPULAR**

11006-12  
11027-12

**TUNGSTEN  
CARBIDE**

11506-12  
For more information  
see page 211.



Serrated

1x2 teeth

12 cm  
1.5 mm

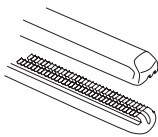
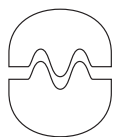
No. 11006-12

Cross serrated  
tungsten carbide  
inlaid tip

12 cm  
1.5 mm

No. 11506-12

## Adson DeBakey

**Atraumatic  
DeBakey Serrations**

This tooth pattern, as shown, consists of one row of atraumatic teeth meshed with two opposite rows of atraumatic teeth.

These two forceps are ideal for gentle, atraumatic gripping of vessels, tissue and other delicate structures.



DeBakey serrations

12.5 cm  
Tip width: 1.5 mm

No. 11617-12



DeBakey serrations

15 cm  
Tip width: 1.5 mm

No. 11616-15

## Adson-Graefe

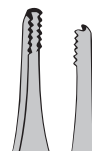


Fine sharp teeth

12.5 cm  
Tip width: 4.5 mm

No. 11030-12

## Adson-Brown



Shark teeth

12 cm  
Tip width: 1.4 mm

No. 11027-12

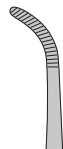
**Standard Pattern**

Broad pattern with strong spring action.



Straight  
Serrated

| Tip width<br>(mm) | Length<br>(cm) | Item         | Price |
|-------------------|----------------|--------------|-------|
| 2.5               | 12             | No. 11000-12 |       |
| 2.8               | 13             | No. 11000-13 |       |
| 3.25              | 14.5           | No. 11000-14 |       |
| 3.3               | 16             | No. 11000-16 |       |
| 3.7               | 18             | No. 11000-18 |       |
| 3.75              | 20             | No. 11000-20 |       |
| 3.9               | 25             | No. 11000-25 |       |
| 4                 | 30             | No. 11000-30 |       |



Curved  
Serrated

| Tip width<br>(mm) | Length<br>(cm) | Item         | Price |
|-------------------|----------------|--------------|-------|
| 2.5               | 12             | No. 11001-12 |       |
| 2.8               | 13             | No. 11001-13 |       |
| 3.25              | 14.5           | No. 11001-14 |       |
| 3.3               | 16             | No. 11001-16 |       |
| 3.7               | 18             | No. 11001-18 |       |
| 3.75              | 20             | No. 11001-20 |       |

**Narrow Pattern**

Lighter spring action than standard pattern  
for grasping more delicate tissue.

•TITANIUM•

11602-14  
For more information  
see page 211.



Straight  
Serrated

| Tip width<br>(mm) | Length<br>(cm) | Item         | Price |
|-------------------|----------------|--------------|-------|
| 2                 | 12             | No. 11002-12 |       |
| 2.15              | 13             | No. 11002-13 |       |
| 2.25              | 14.5           | No. 11002-14 |       |
| 2.25              | 14.5           | No. 11602-14 |       |
| 2.35              | 16             | No. 11002-16 |       |
| 2.4               | 18             | No. 11002-18 |       |
| 2.75              | 20             | No. 11002-20 |       |
| 3.2               | 25             | No. 11002-25 |       |



Curved  
Serrated

| Tip width<br>(mm) | Length<br>(cm) | Item         | Price |
|-------------------|----------------|--------------|-------|
| 2                 | 12             | No. 11003-12 |       |
| 2.15              | 13             | No. 11003-13 |       |
| 2.25              | 14.5           | No. 11003-14 |       |
| 2.35              | 16             | No. 11003-16 |       |
| 2.4               | 18             | No. 11003-18 |       |
| 2.75              | 20             | No. 11003-20 |       |

Semken

Slim pattern with long, narrow shanks and gentle spring action.

•TITANIUM•

11608-15  
For more information  
see page 211.



Straight  
Serrated

| Tip width<br>(mm) | Length<br>(cm) | Item         | Price |
|-------------------|----------------|--------------|-------|
| 1.3               | 13             | No. 11008-13 |       |
| 1.5               | 15             | No. 11008-15 |       |
| 1.5               | 15             | No. 11608-15 |       |



Curved  
Serrated

| Tip width<br>(mm) | Length<br>(cm) | Item         | Price |
|-------------------|----------------|--------------|-------|
| 1.3               | 13             | No. 11009-13 |       |
| 1.5               | 15             | No. 11009-15 |       |

DeBakey Round Handle Forceps

Ideal for gentle, atraumatic gripping of vessels, tissue and other delicate structures. Two rows of atraumatic teeth interfit with one opposite row of atraumatic teeth. The round handles allow easy fingertip adjustments.



DeBakey serrations  
15 cm  
Tip width: 1.2 mm  
No. 11076-15

## Multipurpose Forceps

Balanced instruments are designed to put the center of gravity between the thumb and index finger. This is accomplished by adding a slight counter weight to the proximal end of the instruments. The design enhances tactile feel, aiding in better control and precision.

The tips of these multipurpose forceps are configured to enable their use as dilators at the front, as well as needle holders and tying forceps further in the back. The platform at the tips close parallel ensuring a reliable grip.



80% of  
actual size



Straight

14.5 cm  
Suture tying platform  
Tip diameter: 0.1 mm

No. 18601-15



80% of  
actual size



Straight

15 cm  
Suture tying platform  
Tip diameter: 0.3 mm

No. 18602-15



80% of  
actual size



Angled

14.5 cm  
Smooth  
Tip diameter: 0.2 mm

No. 18603-14

Tissue Forceps



Straight  
Narrow 1x2 teeth  
10 cm  
No. 11023-10

12 cm  
No. 11023-12

Straight  
Narrow 1x2 teeth  
14.5 cm  
No. 11023-14

15.5 cm  
No. 11023-15

Straight  
Standard 1x2 teeth  
12 cm  
No. 11021-12

14.5 cm  
No. 11021-14

15.5 cm  
No. 11021-15

Straight  
Standard 2x3 teeth  
14.5 cm  
No. 11022-14

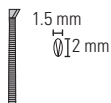
15.5 cm  
No. 11022-15



Curved  
Narrow 1x2 teeth  
14 cm  
No. 11029-14

Tissue Forceps

Used with rongeur No. 16021-14 (page 36) in laminectomy to securely hold spinal column.

**Gillies**

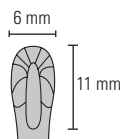
Cross-Serrated  
1x2 teeth

15 cm  
Tip Dimension: 1.5 x 2 mm

No. 11028-15

**Russian**

Special cupped pattern  
for superior grip.

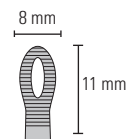


15 cm  
Tip Dimension: 6 x 11 mm

No. 11026-15

**Organ Holding Forceps**

With limit screw to prevent  
excessive applied pressure.

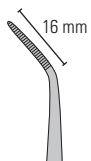


Serrated  
14.5 cm  
Tip Dimension: 8 x 11 mm

No. 11031-15



## London Forceps



Angled  
Serrated

16 cm

No. 11080-02

## Titanium Forceps

•TITANIUM•

For more information  
see page 211.



Straight  
Serrated

16 cm

No. 11602-16

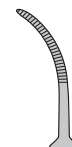
## Gerald Forceps



Straight  
Serrated

18 cm

No. 11014-18



Curved  
Serrated

18 cm

No. 11015-18

**Taylor Forceps**

Serrated and smooth versions available.

**Potts-Smith Forceps****Mouse Handling Forceps**

Long handles make picking up small rodents easy and help prevent bites.



Ultra Fine Hemostat



Straight  
Smooth

12 cm  
Tip width: 0.6 mm

No. 13020-12



Curved  
Smooth

12 cm  
Tip width: 0.6 mm

No. 13021-12

Fine Hemostat



Straight  
Smooth

12 cm  
Tip width: 1 mm

No. 13006-12



Curved  
Smooth

12 cm  
Tip width: 1 mm

No. 13007-12

Micro-Mosquito



Straight  
Serrated

12 cm  
Tip width: 1.3 mm

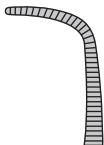
No. 13010-12



Curved  
Serrated

12 cm  
Tip width: 1.3 mm

No. 13011-12



Angled 90°  
Serrated

12 cm  
Tip width: 1.3 mm

No. 13012-12

Halsted-Mosquito



13108-12



13008-12



13109-12



Straight  
Serrated

12.5 cm  
Tip width: 1 mm

No. 13008-12



Curved  
Serrated

12.5 cm  
Tip width: 1 mm

No. 13009-12



Straight  
Serrated

12.5 cm  
Tip width: 1 mm  
Left handed

No. 13108-12



Curved  
Serrated

12.5 cm  
Tip width: 1 mm  
Left handed

No. 13109-12

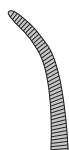
Crile



Straight  
Serrated

14 cm  
Tip width: 1.5 mm

No. 13004-14



Curved  
Serrated

14 cm  
Tip width: 1.5 mm

No. 13005-14

Kelly



Straight  
Serrated

14 cm  
Tip width: 1.5 mm

No. 13018-14

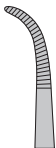


Curved  
Serrated

14 cm  
Tip width: 1.5 mm

No. 13019-14

Baby-Mixer



Curved  
Serrated  
14 cm  
Tip width: 1.3 mm  
No. 13013-14

Providence-Hospital



Straight  
Serrated  
14 cm  
Tip width: 1.5 mm  
No. 13014-14



Curved  
Serrated  
14 cm  
Tip width: 1.5 mm  
No. 13015-14

HEMOSTATS

Hartman

MOST  
POPULAR

13003-10



Straight  
Serrated

10 cm  
Tip width: 1 mm

No. 13002-10



Curved  
Serrated

10 cm  
Tip width: 1 mm

No. 13003-10

Backhaus Towel Clamp



9 cm

No. 11095-09



13 cm

No. 11095-13

Allis Clamp

Tissue and organ holding forceps.



Allis



5x6 teeth  
15 cm  
Tip width: 4 mm  
No. 11091-15

Allis-Baby



4x5 teeth  
12 cm  
Tip width: 3 mm  
No. 11092-12

Lorna Towel Clamp



Serrated  
10 cm  
Tip width: 6 mm  
No. 11096-10



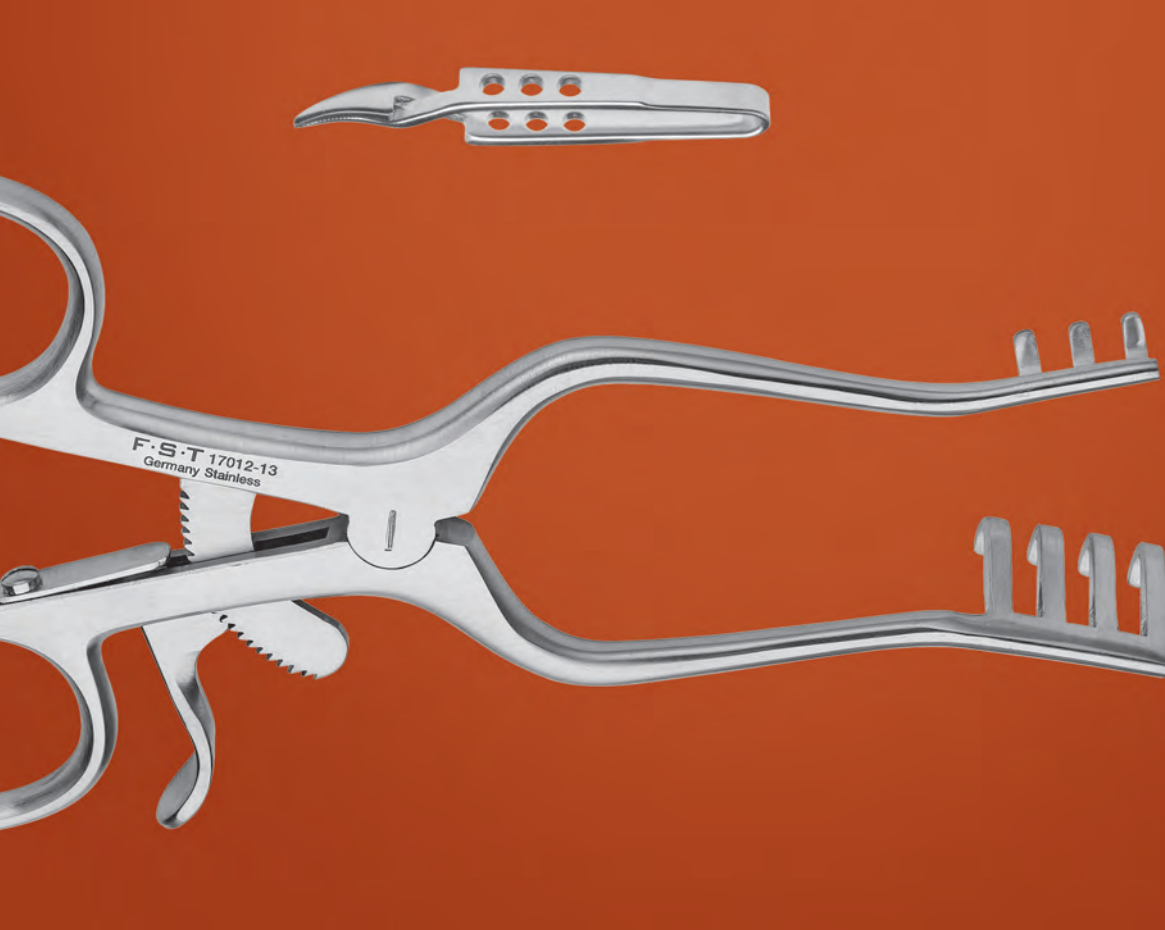
Serrated  
13 cm  
Tip width: 7 mm  
No. 11096-13





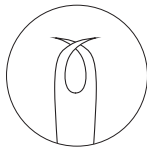
## Probes, Needle Holders, Wound Closure, Retractors & Clamps

|                      |       |           |
|----------------------|-------|-----------|
| Probes & Hooks       | Pages | 105 – 109 |
| Spatulae             | Pages | 108 – 112 |
| Hippocampal Tools    | Page  | 112       |
| Spoons               | Page  | 113       |
| Pins & Holders       | Pages | 114 – 115 |
| Wound Closure        | Pages | 116 – 127 |
| Retractors           | Pages | 128 – 135 |
| Vascular Instruments | Pages | 136 – 145 |

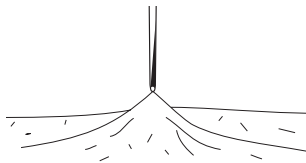


## Double Pronged Pick

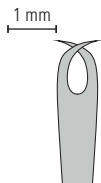
For peritoneum, pleura, endocardium, organ capsules and skin.  
Grasps and lifts skin, tissue and dura, etc.



700%



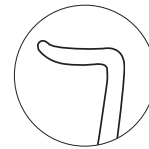
The tip consists of two very sharp, nearly horizontally opposed points. By applying gentle downward pressure and twisting slightly in a clockwise fashion, the points will embed themselves horizontally into fine membranes or skin, etc., so that it may be lifted upward. This instrument also has been used successfully when separating fine tissue from an underlying area that is not to be cut.



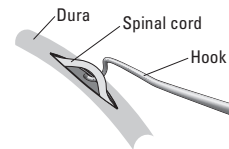
11 cm  
Tip diameter: 1 mm

No. 18067-11

## Spinal Cord Hook



300%



Shaped like a ligation aid and sized to isolate the spinal cord from the dura of adult mice and neonatal rats. The cord can then be cut with minimal damage to the dura.



12 cm  
Tip diameter: 3 mm

No. 10162-12

Bonn Micro Probes

Micro Points



Actual size  
Angled 45°  
13.5 cm  
Tip diameter: 0.025 mm  
No. 10032-13



Actual size  
Straight  
13.5 cm  
Tip diameter: 0.025 mm  
No. 10030-13



Actual size  
Large curve  
13.5 cm  
Tip diameter: 0.038 mm  
No. 10033-13



Actual size  
Curved  
13.5 cm  
Tip diameter: 0.025 mm  
No. 10031-13



300%  
Angled 90° short  
15.5 cm  
Tip diameter: 0.05 mm  
No. 10063-15



300%  
Angled 45°  
15.5 cm  
Tip diameter: 0.038 mm  
No. 10066-15



300%  
Angled 90°  
15.5 cm  
Tip diameter: 0.02 mm  
No. 10065-15



Probes and Explorers

Micro Hooks

MOST  
POPULAR

10140-01



Actual size

Short angle

15.5 cm  
Tip diameter: 0.12 mm

No. 10140-04



Actual size

Straight

15.5 cm  
Tip diameter: 0.25 mm

No. 10140-01



Actual size

Long angled

15.5 cm  
Tip diameter: 0.15 mm

No. 10140-03



Actual size

Angled

15.5 cm  
Tip diameter: 0.15 mm

No. 10140-02



175%

Short round hook

13 cm  
Tip diameter: 0.05 mm

No. 10064-14



175%

Blunt hook

12 cm  
Tip diameter: 0.30 mm

No. 10062-12



175%

Sharp hook

12 cm  
Tip diameter: 0.075 mm

No. 10061-12

## Titanium Micro Point, Y-Hook, and Spatula

These instruments are lightweight, color coded for easy identification, have an ergonomic design and a non-reflective surface.

•TITANIUM•

For more information  
see page 211.



**Micro Point**



Angled 45°

12.5 cm  
Tip diameter: 0.4 mm

No. 10165-11

•TITANIUM•

For more information  
see page 211.



**Y-Hook**



Angled 45°

12.5 cm  
Tip width: 0.5 mm

No. 10166-11

•TITANIUM•

For more information  
see page 211.



**Micro Spatula**



Angled 30°

12.5 cm  
Tip width: 0.6 mm  
Tip thickness: 0.25 mm

No. 10167-11

Vessel Dilating Probe



200%

Angled 45°

12.5 cm  
Tip diameter: 0.6 mm

No. 10160-13

Gross Anatomy Probe

MOST  
POPULAR

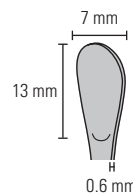


Angled 45°

15 cm  
Tip diameter: 1.2 mm

No. 10088-15

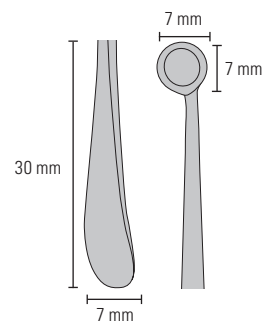
Combination Probe  
and Spatula



14 cm  
Spatula dimension: 13 x 7 x 0.6 mm  
Tip diameter: 0.1 mm

No. 10090-13

Combination Spoon and Spatula



17.5 cm  
Spatula dimension: 30 x 7 mm  
Spoon diameter: 7 mm

No. 10090-17

SPATULAE

# SPATULAE

## Micro Spatula

## Mirror Finish Micro Spatula

Mirror finished to provide a non-stick spatula.

## Double-Ended Micro Spatula

MOST POPULAR

## Iris Spatulae

SPATULAE



Straight

11 cm  
Tip width: 1 mm  
Tip thickness: 0.25 mm

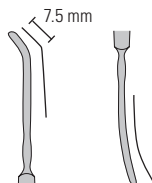
No. 10089-11



Slightly curved

12 cm  
Tip width: 0.8 mm  
Tip thickness: 0.25 mm

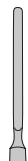
No. 10087-12



Angled

13 cm  
Tip width: 2 mm  
Tip thickness: 0.3 mm

No. 10091-12



Straight

13 cm  
Tip width: 3 mm  
Tip thickness: 0.4 mm

No. 10094-13



Slightly curved

13 cm  
Tip width: 1.7 mm  
Tip thickness: 0.3 mm

No. 10093-13

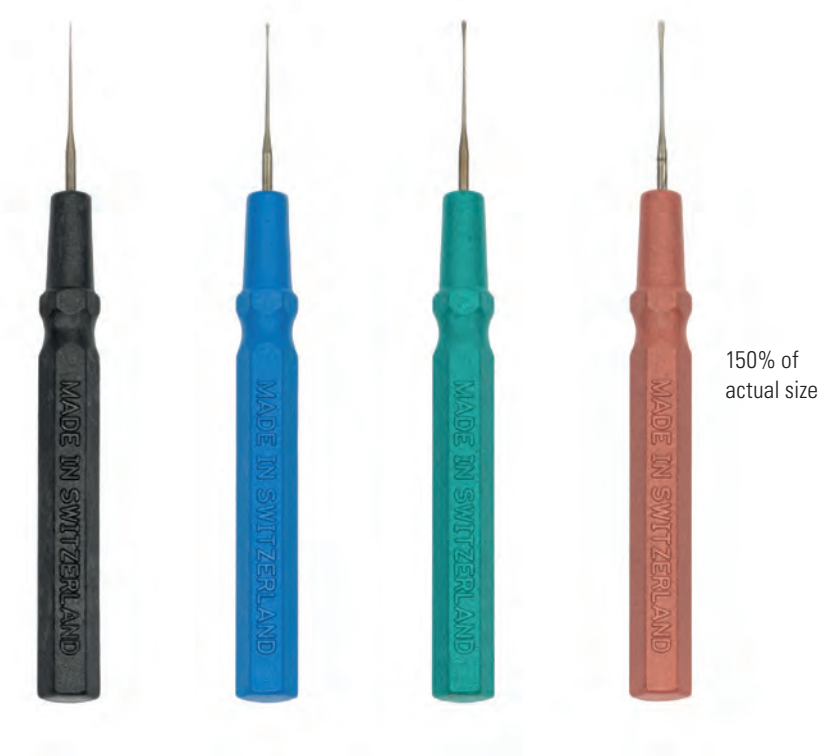


Curved

12 cm  
Tip width: 1.8 mm  
Tip thickness: 0.3 mm

No. 10092-12

Micro Spatula Kit  
Kit with 4 pieces



|                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Black                                                                               | Blue                                                                                | Green                                                                               | Red                                                                                   |
|  |  |  |  |
| Straight                                                                            | Straight                                                                            | Straight                                                                            | Straight                                                                              |
| 6 cm<br>Tip width: 0.2 mm                                                           | 6 cm<br>Tip width: 0.3 mm                                                           | 6 cm<br>Tip width: 0.5 mm                                                           | 6 cm<br>Tip width: 0.7 mm                                                             |
| No. 10098-06                                                                        |                                                                                     |                                                                                     |                                                                                       |



## Mini Hippocampal Dissecting Tool

The instrument ends are malleable to allow you to adjust their shape to the correct angle for optimal positioning.



14.5 cm  
Spatula dimension: 20 x 6 mm & 13 x 3 mm  
Tip thickness: 0.5 mm

No. 10099-12

## Hippocampal Dissecting Tool

The instrument ends are malleable to allow you to adjust their shape to the correct angle for optimal positioning.



16 cm  
Spatula dimension: 27 x 14 mm & 27 x 6 mm  
Tip thickness: 0.5 mm

No. 10099-15

**Spoon**

Moria



Moria 1121B

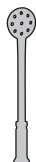
12.5 cm  
Diameter: 8 mm  
Depth: 2 mm

No. 10321-08

**Mini Perforated Spoon**

Most commonly used to take embryos out of solution and handling very small organs.

Moria



Moria MC 17C

10 cm  
Diameter: 8 mm  
Depth: 1 mm

Perforations: 0.8 mm  
in diameter

No. 10370-19

**Perforated Spoon**

Most commonly used to take embryos out of solution and handling very small organs.

MOST POPULAR

Moria



Moria MC 17 BIS

14.5 cm  
Diameter: 15 mm  
Depth: 3 mm

Perforations: 0.9 mm  
in diameter

No. 10370-18



Moria MC 17

14.5 cm  
Diameter: 20 mm  
Depth: 5 mm

Perforations: 0.9 mm  
in diameter

No. 10370-17

**Mirror Finish  
Cutting Spoon**

Non stick cutting spoon.



13 cm  
Diameter: 4.5 mm  
Depth: 0.15 mm

No. 10360-13

## Pin Holder

Light weight



90% of  
actual size

17 cm  
Nickel-plated chuck  
Aluminum handle  
Jaw opening: 0–1 mm

No. 26018-17

## Pin Holder



Moria MC1

12 cm  
Nickel-plated  
Jaw opening: 0–1 mm

No. 26016-12

### Insert Pins

All insert pins fit any of our pin holders.  
Pins are antimagnetic and acid resistant.



### Black Anodized Minutien Pins

These high quality pins are black for best visibility under high magnification and bright light.

Tip diameter: 0.0175 mm  
Rod diameter: 0.15 mm  
12 mm

Box of 500 pins  
No. 26002-15

**MOST  
POPULAR**



### Stainless Steel Minutien Pins

The thinnest and finest pins available.

**NEW  
ITEM**

Tip diameter: 0.0125 mm  
Rod diameter: 0.1 mm  
12 mm

Box of 500 pins  
No. 26002-10

**MOST  
POPULAR**

Tip diameter: 0.0175 mm  
Rod diameter: 0.15 mm  
12 mm

Box of 500 pins  
No. 26003-15

**MOST  
POPULAR**

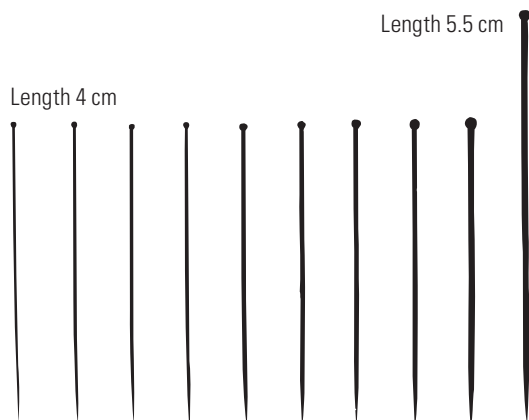
Tip diameter: 0.02 mm  
Rod diameter: 0.2 mm  
12 mm

Box of 500 pins  
No. 26002-20

**MOST  
POPULAR**

### Black Anodized Insect Pins

Nylon heads  
Tip diameter: 0.03 mm  
Pkg. of 100 pins



| Size              | 000  | 00   | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    |
|-------------------|------|------|------|------|------|------|------|------|------|------|
| Rod diameter (mm) | 0.25 | 0.30 | 0.35 | 0.40 | 0.45 | 0.50 | 0.55 | 0.60 | 0.65 | 0.70 |
| No. 26000         | -25  | -30  | -35  | -40  | -45  | -50  | -55  | -60  | -65  | -70  |

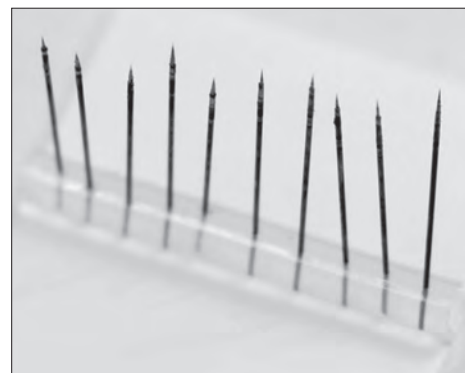
### Stainless Steel Insect Pins

Nylon heads  
Tip diameter: 0.03 mm  
Pkg. of 100 pins

| Size              | 000  | 00   | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    |
|-------------------|------|------|------|------|------|------|------|------|------|------|
| Rod diameter (mm) | 0.25 | 0.30 | 0.35 | 0.40 | 0.45 | 0.50 | 0.55 | 0.60 | 0.65 | 0.70 |
| No. 26001         | -25  | -30  | -35  | -40  | -45  | -50  | -55  | -60  | -65  | -70  |

### Etched Tungsten Micro Needles

These tungsten micro needles are drawn to a 1 micron tip and three different rod diameters are offered. Each provides lateral stability as well as minimal spring action during manipulation. The micro needles can be used with our pin holders shown on page 114.



Tip diameter: 1  $\mu$ m (0.001 mm)  
12 mm

Box of 10 needles

| Rod diameter (mm) | Item         | Price |
|-------------------|--------------|-------|
| 0.125             | No. 10130-05 |       |
| 0.25              | No. 10130-10 |       |
| 0.5               | No. 10130-20 |       |

## Castroviejo

Micro pattern, with slightly blunted tips.

## Round Handled Needle Holder with Suture Cutter

Round handles allow easy fingertip adjustments.

## Round Handled Needle Holder

Round handles allow easy fingertip adjustments.

**Cautionary note:** Never use a micro needle holder with needles that are too thick, as this can easily damage the fine jaws. Use only micro needles of less than 0.2 mm diameter (see page 122).



Straight

9 cm

With lock  
No. 12060-01

Without lock  
No. 12060-02

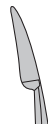


Curved

9 cm

With lock  
No. 12061-01

Without lock  
No. 12061-02



Curved  
Cutting edge: 3.5 mm

14 cm

Without lock  
No. 12075-14



Straight

12.5 cm

With lock  
No. 12075-12

Without lock  
No. 12076-12



Curved

12.5 cm

Without lock  
No. 12074-12

Mathieu

Extra slim and narrow profile, with squeeze-lock.  
Facilitates excellent wrist motion for suturing.

TUNGSTEN  
CARBIDE

For more information  
see page 211.



14 cm

With lock  
No. 12010-14



With tungsten  
carbide jaws  
14 cm

With lock  
No. 12510-14

Castroviejo with Tungsten Carbide Jaws

TUNGSTEN  
CARBIDE

For more information  
see page 211.



With tungsten carbide jaws  
14 cm

With lock  
No. 12565-14

WOUND CLOSURE

## Halsey

**MOST  
POPULAR**

**TUNGSTEN  
CARBIDE**

For more information  
see page 211.



13 cm  
Smooth  
With lock

No. 12001-13



13 cm  
With tungsten  
carbide jaws  
With lock

No. 12501-13

## Halsey with Tungsten Carbide Jaws

**TUNGSTEN  
CARBIDE**

For more information  
see page 211.



12.5 cm  
With tungsten  
carbide jaws  
With lock

No. 12500-12

Olsen-Hegar with Suture Cutter

MOST  
POPULAR

LEFT  
HANDED

12102-12



12 cm  
10 mm cutting edge  
With lock

No. 12002-12

No. 12102-12

14 cm  
15 mm cutting edge  
With lock

No. 12002-14

Olsen-Hegar with Suture Cutter  
and Tungsten Carbide Jaws

TUNGSTEN  
CARBIDE

LEFT  
HANDED

12512-12

For more information  
see page 211.



12 cm  
With tungsten  
carbide jaws  
10 mm cutting edge  
With lock

No. 12502-12

No. 12512-12

14 cm  
With tungsten  
carbide jaws  
15 mm cutting edge  
With lock

No. 12502-14

WOUND CLOSURE



## Crile-Wood

**TUNGSTEN  
CARBIDE**

For more information  
see page 211.

**LEFT  
HANDED** 

12504-15



15 cm  
With lock

No. 12003-15

15 cm  
With tungsten  
carbide jaws  
With lock

No. 12503-15

No. 12504-15

## Mayo-Hegar



16 cm  
With lock

No. 12004-16



18 cm  
With lock

No. 12004-18

**Slim Elongated Needle Holder  
with Tungsten Carbide Jaws**

**TUNGSTEN  
CARBIDE**

For more information  
see page 211.



15 cm  
With tungsten  
carbide jaws  
With lock

No. 12005-15

**Ryder Mini-Select Needle Holder**

This needle holder has been uniquely fashioned with tungsten carbide dust tips, giving the clamping platform an extra secure grip.

**TUNGSTEN  
CARBIDE**

For more information  
see page 211.



15 cm  
With tungsten  
carbide dust tips  
With lock

No. 12505-15

WOUND CLOSURE

Microsurgical Needles with Suture Thread Attached

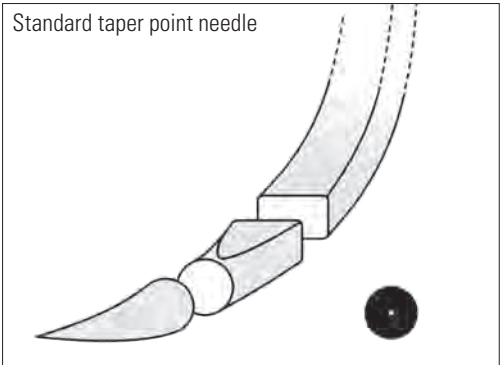
The combination of proprietary needle design technology and state-of-the-art manufacturing techniques has enabled S&T to provide a microsurgical needle that is unmatched in the industry. S&T microsurgical needles provide frictionless tissue penetration. They are inspected under the microscope at critical stages during the manufacturing process, and a multi-point final inspection of each suture and needle combination ensures a high quality product. The suture-to-needle attachment is tested to higher standards than the USP specifications.

Features:

- Needle and thread combination comprising of non-absorbable black nylon polyamide monofilament thread and stainless steel 3/8 circle needle. Nylon is suitable for closing ophthalmic, neurological and microvascular wounds.
- 3/8 circle precision taper point. Stainless steel needle honed under microscope by hand. Superfine round tip with flattened body to improve stability in needle holder. Easy penetration. Precise stitch placement.
- Grinding geometry and suture needle attachment are directed toward frictionless tissue penetration.
- Each needle suture combination is individually packed and sealed in a peel-open blister pack.

Sterile

Pkg. of 12 disposable units



400% of actual size

No. 12051-11



No. 12051-10



No. 12051-08



| Suture size | Suture length (cm) | Needle diameter (micron) | Needle diameter (mm) | Needle chord length (mm) | Circle | Arch (mm) | Item         | Price |
|-------------|--------------------|--------------------------|----------------------|--------------------------|--------|-----------|--------------|-------|
| 11/0        | 10                 | 50                       | 0.05                 | 3                        | 3/8    | 3.8       | No. 12051-11 |       |
| 10/0        | 10                 | 70                       | 0.07                 | 3                        | 3/8    | 3.8       | No. 12051-10 |       |
| 8/0         | 15                 | 140                      | 0.14                 | 5                        | 3/8    | 6.4       | No. 12051-08 |       |



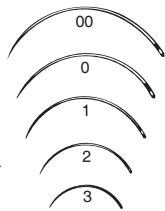
| Suture size | Suture length (cm) | Needle diameter (micron) | Needle diameter (mm) | Needle chord length (mm) | Circle | Arch (mm) | Item         | Price |
|-------------|--------------------|--------------------------|----------------------|--------------------------|--------|-----------|--------------|-------|
| 11/0        | 10                 | 50                       | 0.05                 | 3.8                      | 3/8    | 3.8       | No. 12052-11 |       |
| 10/0        | 10                 | 70                       | 0.07                 | 3.8                      | 3/8    | 3.8       | No. 12052-10 |       |
| 9/0         | 15                 | 100                      | 0.1                  | 5                        | 3/8    | 5.1       | No. 12052-09 |       |
| 8/0         | 15                 | 140                      | 0.14                 | 5                        | 3/8    | 6.4       | No. 12052-08 |       |

Suture Needles

Polished stainless steel  
3/8 curved  
Round with standard eye  
Diameter 0.35 mm  
Suitable for sutures up to 0.32 mm diameter

Non-sterile

Pkg. of 12 needles



| Size | Item         | Price |
|------|--------------|-------|
| 00   | No. 12050-20 |       |
| 0    | No. 12050-10 |       |
| 1    | No. 12050-01 |       |
| 2    | No. 12050-02 |       |
| 3    | No. 12050-03 |       |

Silk Suture

Silk suture has a smooth flow through tissue while maintaining knot security.

Braided silk

Non-sterile

Can be ETO sterilized



| Size | Diameter (mm) | Spool length (m) | Item         | Price |
|------|---------------|------------------|--------------|-------|
| 7/0  | 0.05          | 91               | No. 18020-70 |       |
| 6/0  | 0.08          | 23               | No. 18020-60 |       |
| 5/0  | 0.12          | 23               | No. 18020-50 |       |
| 4/0  | 0.17          | 23               | No. 18020-40 |       |
| 3/0  | 0.22          | 23               | No. 18020-30 |       |
| 2/0  | 0.32          | 23               | No. 18020-20 |       |
| 0    | 0.37          | 23               | No. 18020-00 |       |
| 1    | 0.45          | 23               | No. 18020-01 |       |
| 2    | 0.55          | 23               | No. 18020-02 |       |
| 3    | 0.65          | 23               | No. 18020-03 |       |

For Suture Tying Forceps, see pages 81, 82 and 83.

Nylon Monofilament Suture

Nylon is known for its uniform diameter flexibility and outstanding consistent knot security.

Nylon monofilament

Non-sterile

Can be ETO sterilized



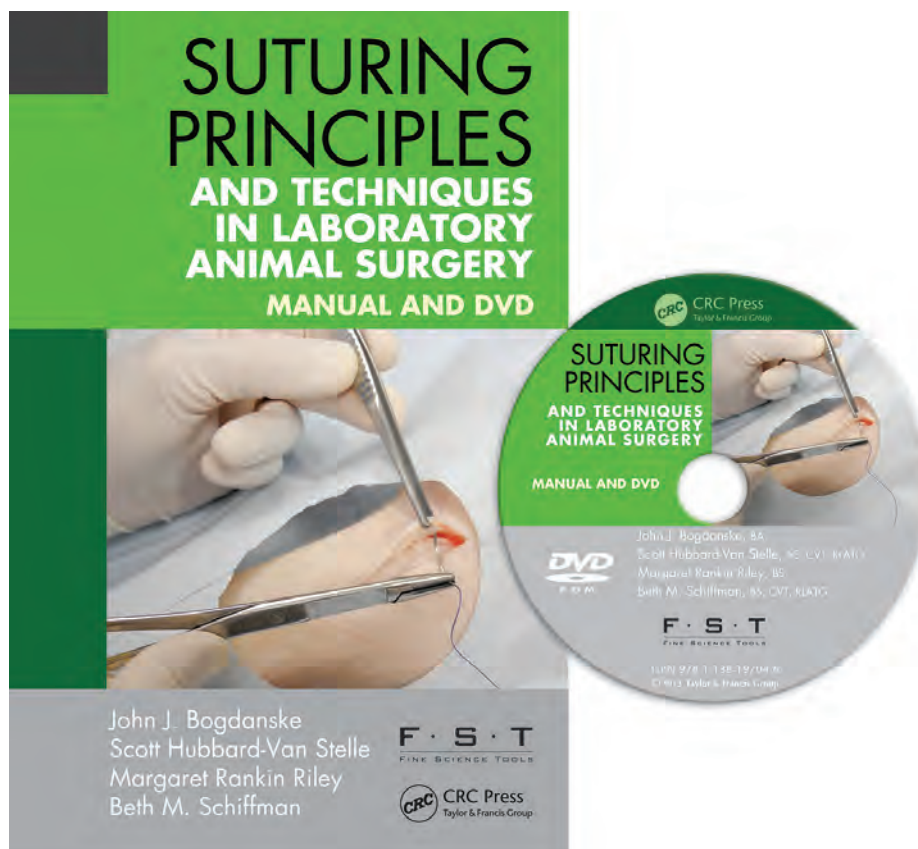
| Size | Diameter (mm) | Spool length (m) | Item         | Price |
|------|---------------|------------------|--------------|-------|
| 8/0  | 0.04          | 91               | No. 18030-80 |       |
| 7/0  | 0.05          | 91               | No. 18030-70 |       |
| 6/0  | 0.07          | 91               | No. 18030-60 |       |
| 5/0  | 0.10          | 91               | No. 18030-50 |       |
| 4/0  | 0.15          | 91               | No. 18030-40 |       |
| 3/0  | 0.20          | 91               | No. 18030-30 |       |

### Suturing Principles and Techniques in Laboratory Animals

Introduces the basic principles, materials and surgical instruments required for suturing and wound closure used on animals. The manual provides descriptions and pictures portraying proper tissue handling and aseptic technique, correct hand placement and use of surgical instruments, proper needle placement on needle holders, and provides an in-depth explanation of various suture patterns and associated principles for proper knot tying during wound closure.

The DVD provides descriptive narrative and step-by-step video demonstrations for each of the suturing techniques.

#### Manual and DVD



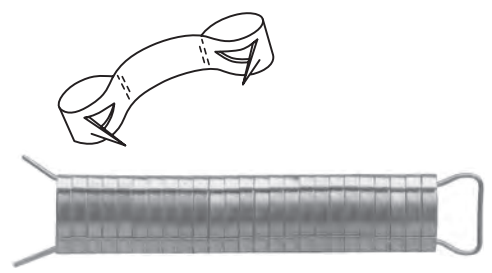
Includes: Fine Science Tools Item Number  
Reference Page for all surgical instruments  
used in the manual.

No. 23005-10

Michel Suture Clips

Anti-magnetic, acid-resistant  
stainless steel  
Pkg. of 1.000 clips

| Size (mm)  | Item         | Price |
|------------|--------------|-------|
| 7.5 x 1.75 | No. 12040-01 |       |
| 11 x 2     | No. 12040-02 |       |
| 12 x 2.5   | No. 12040-03 |       |



Applying Forceps



12.5 cm  
For clip sizes 12040-02 and 12040-03  
  
No. 12018-12

Applying and Removing Instruments



Curved  
  
13 cm  
For clip sizes 12040-02 and 12040-03  
  
No. 12028-12



Angled  
  
13 cm  
For clip size 12040-01  
  
No. 12029-12

WOUND CLOSURE

### Reloadable Skin Stapler with Rotating Head

The 360° degree swivel nose and unique design offers maximum visibility at the delivery point. The stainless steel staples are non-sterile and feature a patented staple design which make for quick and easy removal. The disposable staple cartridge includes a printed staple counter. **The handle is reusable and autoclavable. Staples are non-sterile. Components sold separately or as a kit.**

Disposable staple cartridge contains 35 316L stainless steel staples with printed staple counter

Reusable autoclavable handle

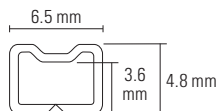
360° rotation

Trigger with full-stroke ratchet facilitates accurate staple placement

75% of actual size

Lightweight, ergonomic pistol grip handle

Staple Dimensions:



Staple, actual size:



Surgical staple kit

- 1 Handle
- 1 Remover
- 12 Disposable staple cartridges

No. 12030-20

Single disposable cartridge

35 staples per cartridge  
No. 12030-22

12 disposable cartridges  
35 staples per cartridge  
No. 12030-23

Handle  
No. 12030-01

### Surgical Staple Remover

Compatible with Reloadable Skin Stapler with Rotating Head and Manipler® Skin Stapler.



75% of actual size

10 cm  
No. 12030-04

### Manipler® Skin Stapler

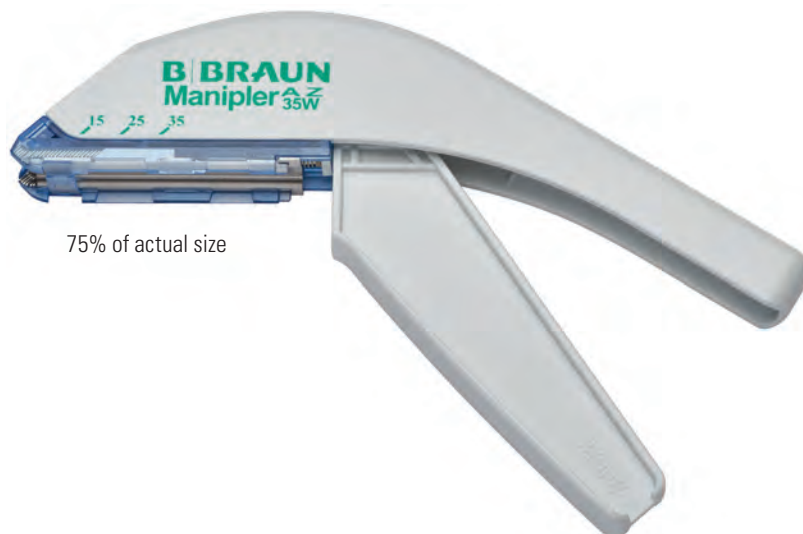
Quality, slim, lightweight design with consistent actuation and staple count indicator. **Disposable, sterile, and not autoclavable.**

15 cm

35 staples per cartridge

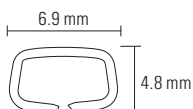
No. 12035-00

**NOT AUTOCLAVABLE**



75% of actual size

Staple Dimensions:



Staple, actual size:



AutoClip® System

The AutoClip® System is a safe, secure method of wound closure. Faster and easier than suture, this system is perfect when staples may be too thin to provide adequate closure. **Non-sterile. Components sold separately or as a kit.** We recommend using wet steam sterilization at 120 – 125°C for at least 30 minutes in an autoclave to sterilize the device.

MOST  
POPULAR



Applier



Clips



Remover

WOUND CLOSURE

- AutoClip® Kit
- 1 Applier
  - 9 mm clips (100)
  - 1 Remover
  - Storage case

No. 12020-00

AutoClip® applier  
11.5 cm

No. 12020-09

AutoClip® clips  
9 mm  
Pkg. of 100 clips

No. 12022-09

AutoClip® clips  
9 mm  
Pkg. of 1000 clips

No. 12022-19

AutoClip® remover  
12.5 cm

No. 12023-00



## Guthrie

Extra delicate pattern.



2.5 mm



13 cm  
2 Pronged  
Blunt

No. 17021-13

## Fine Retractor



6 mm



13.5 cm  
2 Pronged  
Blunt

No. 17023-13

## Blair



6 mm



13.5 cm  
4 Pronged  
Blunt

No. 17022-13

## Fomon



80% of  
actual size

13 mm



17 cm  
2 Pronged  
2 mm Ball at each tip

No. 17020-17

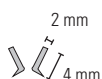
## Slide Retractor with Blades



2 cm  
Maximum spread: 1 cm  
Atraumatic blades

No. 17004-03

## Mini-Goldstein



2 cm  
Maximum spread: 0.5 cm  
3x3 Sharp teeth

No. 17002-02

## Mini-Colibri



2 cm  
Maximum spread: 1 cm

No. 17000-01

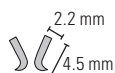
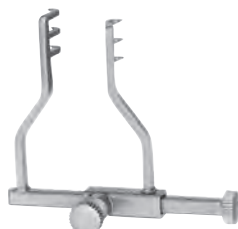
## Slide Retractor with Teeth



2 cm  
Maximum spread: 1 cm  
2x2 Blunt teeth

No. 17005-03

## Goldstein



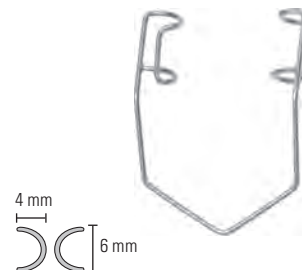
3 cm  
Maximum spread: 1.8 cm  
3x3 Sharp teeth

No. 17003-03

## Colibri

**MOST  
POPULAR**

17000-03



3 cm  
Maximum spread: 1.5 cm

No. 17000-03

4 cm  
Maximum spread: 1.5 cm

No. 17000-04

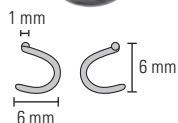


3 cm  
Maximum spread: 1.2 cm

No. 17000-02

## Speculum

Moria



Moria 7699

4.5 cm

Maximum spread: 3.5 cm

Thin, curved blades and grooved finger grips

No. 17370-53

## Fine Adjustable Wire Retractor



5 cm

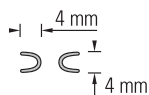
Maximum spread: 3.5 cm

Thin, curved blades

No. 17004-05

## Colibri

Moria

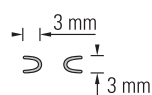


Moria 6346D

3.4 cm

Maximum spread: 1.5 cm

No. 17300-02

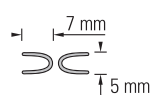


Moria 6346C

3.3 cm

Maximum spread: 1.5 cm

No. 17300-03



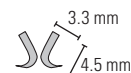
Moria 6346B

3.5 cm

Maximum spread: 2 cm

No. 17300-04

## Agricola



4 cm

Maximum spread: 3.5 cm

3x3 Sharp teeth

No. 17005-04

### Alm Retractor with Wire Teeth



7 cm  
Maximum spread: 4 cm  
Arms gently curved down

No. 17010-07

### Alm Retractor with Blunt Teeth



7 cm  
Maximum spread: 4 cm  
Arms gently curved down

Blunt teeth  
No. 17008-07



7 cm  
Maximum spread: 4 cm  
Arms gently curved down

Long blunt teeth  
No. 17009-07

### Alm Retractor with Blades

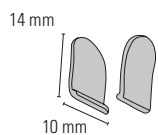


7.5 cm  
Maximum spread: 4.5 cm  
Arms gently curved down  
Thin, curved blades

No. 17009-08

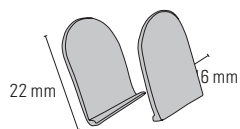
## Spring-Loaded Retractor

Curved atraumatic blades



5.5 cm  
Maximum spread: 3 cm  
Blade dimensions: 14 x 10 mm

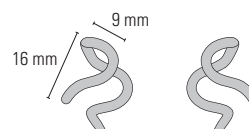
No. 17006-05



8 cm  
Maximum spread: 4 cm  
Blade dimensions: 22 x 16 mm

No. 17007-08

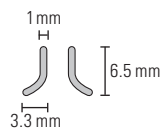
## Bowman



8 cm  
Maximum spread: 2.5 cm

No. 17001-07

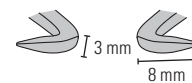
# Heiss



Maximum spread: 2.3 cm  
4x4 Blunt teeth  
10 cm

No. 17011-10

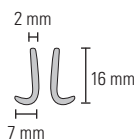
# Gelpi



Maximum spread: 3 cm  
Angled down  
1x1 Sharp teeth  
10 cm

No. 17017-10

## Weitlaner-Locktite



2x3 Blunt teeth

11 cm

Maximum spread: 4.5 cm

No. 17012-11

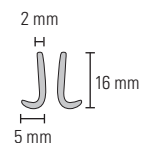
3x4 Blunt teeth

13 cm

Maximum spread: 6.5 cm

No. 17012-13

## Wullstein

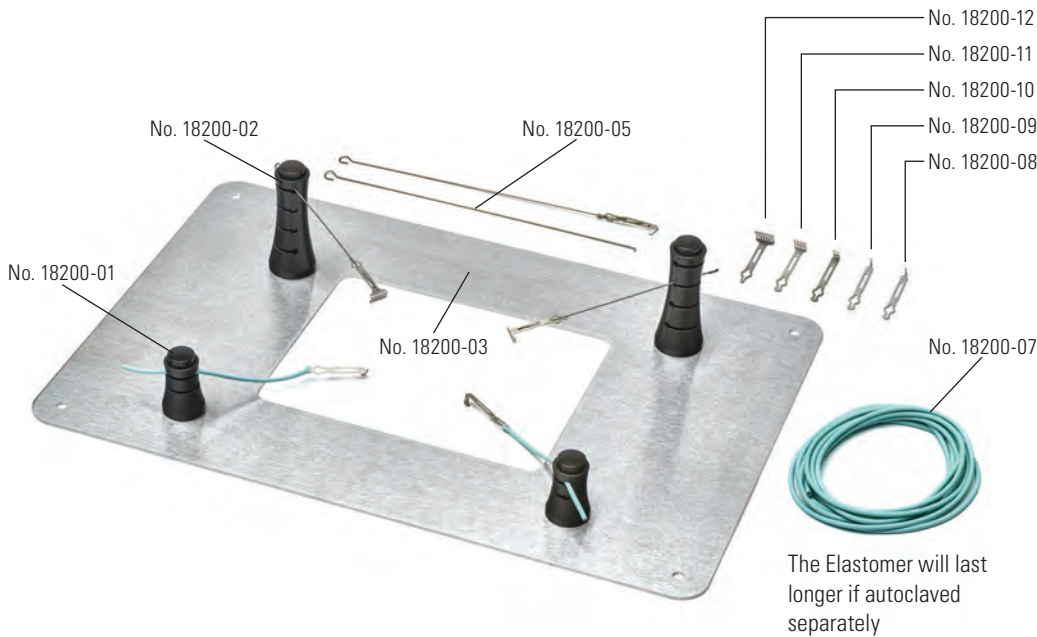


Angled down  
3x3 Blunt teeth

11 cm

Maximum spread: 4.5 cm

No. 17018-11



## Magnetic Fixator Retraction System

This Small Animal Retraction System simplifies set-up procedure and provides the examiner with an excellent overview of the operative site. It consists of three components: **Base Plate** (Nos. 18200-03 & 18200-04); **Fixators** (Nos. 18200-01 & 18200-02); and **Retractors** (Nos. 18200-05 through 18200-12).

The **Base Plates** are made from magnetic stainless steel and are available in two sizes. The surface is nonreflective and both plates have a window in the center which allows the animal contact with body temperature control systems. The window sizes are 10 x 13 cm for the small base plate and 15 x 25 cm for the large.

The **Fixators** are movable anchors made from anodized aluminum with a surgical grade rare earth magnet in the base for attachment anywhere on the Base Plate. The magnets do not interfere with lab electronics and can be used in close proximity (3 cm) to ferro-magnetic items. They incorporate pushbutton-activated spring locks that grip either the Wire or Elastomer Retractors.

The **Retractors** are interchangeable Retractor Tips (Nos. 18200-08 through 18200-12) which attach to either Retractor Wire (Nos. 18200-05 & 18200-06) for static retraction or to Elastomer (No. 18200-07) for dynamic retraction. The Retractor Tips are light and atraumatic to delicate tissue or membrane.

**All system components are autoclavable.**

### Kit for animals up to 200 g

Includes:

- 1 Small base plate (No. 18200-03)
- 2 Short fixators (No. 18200-01)
- 1 Tall fixator (No. 18200-02)
- 1 Elastomer, 2 m roll (No. 18200-07)
- 1 Package of retractors, blunt, 1 mm wide (No. 18200-09)
- 1 Package of retractors, blunt, 2.5 mm wide (No. 18200-10)

No substitutions

No. 18200-20

### Kit for animals from 200 g up to 5 kg

Includes:

- 1 Large base plate (No. 18200-04)
- 2 Short fixators (No. 18200-01)
- 2 Tall fixators (No. 18200-02)
- 1 Elastomer, 2 m roll (No. 18200-07)
- 1 Package of retractors, blunt, 2.5 mm wide (No. 18200-10)
- 1 Package of retractors, blunt, 5 mm wide (No. 18200-11)

No substitutions

No. 18200-50

### Individual parts:

Short fixator, 3 cm high  
Each

No. 18200-01

Tall fixator, 6 cm high  
Each

No. 18200-02

Small base plate, (20 x 30 cm)  
Each

No. 18200-03

Large base plate, (25 x 35 cm)  
Each

No. 18200-04

Wire handles, 10 cm long  
Pkg. of 10

No. 18200-05

Wire handles, 14 cm long  
Pkg. of 10

No. 18200-06

Elastomer, 2 m roll  
No. 18200-07

Sharp retractors, 1 mm wide  
Pkg. of 10

No. 18200-08

Blunt retractors, 1 mm wide  
Pkg. of 10

No. 18200-09

Blunt retractors, 2.5 mm wide  
Pkg. of 10

No. 18200-10

Blunt retractors, 5 mm wide  
Pkg. of 10

No. 18200-11

Blunt retractors, 7.5 mm wide  
Pkg. of 10

No. 18200-12

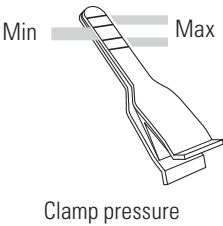
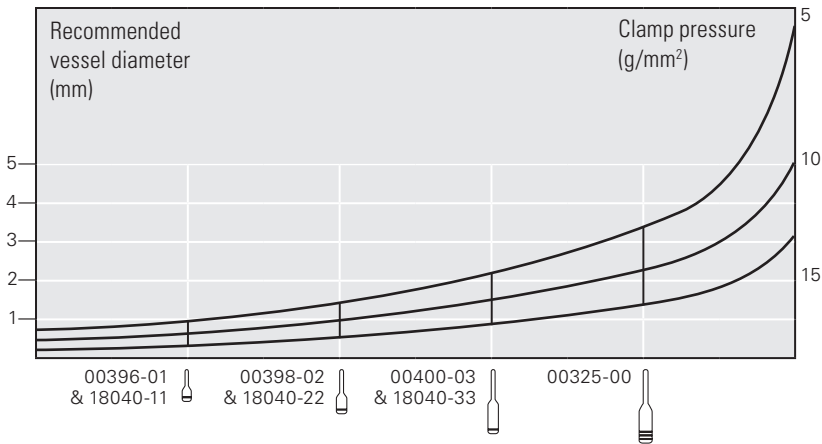


Clamp Size and Clamp Pressure

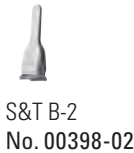
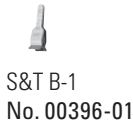
Clamp pressure is determined by the closing force of the clamp (in grams), divided by the area of the vessel wall that is compressed between the jaws (in square millimeters). Thus, the smaller the vessel, the higher the pressure exerted.

Despite the wide range of closing forces, the pressure exerted by each clamp, big or small, remains consistent throughout the series. Each size of clamp exerts a pressure of 5g/mm<sup>2</sup> when used on the largest vessel in its range, and 15g/mm<sup>2</sup> when used on the smallest vessel. Even at the higher range, S&T's micro clamps have the gentlest working pressure of any small vessel clamp available.

| Clamp (ea)          | L x W (mm) | Vessel Diameter Range (mm) |
|---------------------|------------|----------------------------|
| 00396-01 & 18040-11 | 3.5 x 1.0  | 0.4 - 1.0    ◦    ◦        |
| 00398-02 & 18040-22 | 5.5 x 1.5  | 0.6 - 1.5    ◦    ◦        |
| 00400-03 & 18040-33 | 7.5 x 1.75 | 1.0 - 2.25    ◦    ◦       |
| 00325-00            | 10 x 2.15  | 2.0 - 5.0    ◦    ◦        |



Micro Clamps  
S&T®



Double Micro Clamps

For vascular approximation at anastomosis. These clamps are mounted on a 10 mm sliding bar and can easily be moved by applying gentle force. The distance between the jaws of the clamps is adjustable from 3 to 16 mm.

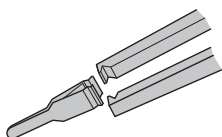


## Micro Clamp Applying Forceps

S&T®



14 cm  
Only compatible with  
S&T Micro Clamps



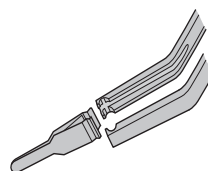
With lock  
No. 00071-14

Without lock  
No. 00072-14

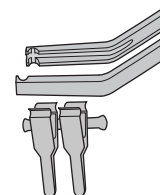
## Micro Clamp Applying Forceps



14.5 cm  
Compatible with S&T  
Micro Clamps and  
Double Micro Clamps



Without lock  
No. 18040-14



CLAMPS

Micro Clip Applicator  
with Lock

MOST  
POPULAR



14 cm  
For use with  
our 18055 and  
18555 series  
micro serrefines

With lock  
No. 18056-14

Forceps Style Clip Applicator

This applicator features special  
U-shaped side supports for  
improved seating of the clips.



14 cm  
For use with  
our 18055 and  
18555 series  
micro serrefines

Without lock  
No. 18057-14

Stainless Steel Micro Serrefines

Used to obtain a clear surgical field for extended arterial  
cross-clamping.

MOST  
POPULAR

Delicate atraumatic  
serrations  
Spring width: 2 mm



|                   | No. 18055-01 | -02 | -03 | -04  |
|-------------------|--------------|-----|-----|------|
| Jaw length (mm)   | 10           | 8   | 6   | 4    |
| Jaw width (mm)    | 2            | 2   | 1   | 0.75 |
| Total length (mm) | 19           | 16  | 15  | 13   |
| Jaw pressure (g)  | 60           | 85  | 100 | 125  |



|                   | No. 18055-05 | -06  |
|-------------------|--------------|------|
| Jaw length (mm)   | 6            | 4    |
| Jaw width (mm)    | 1            | 0.75 |
| Total length (mm) | 17           | 16   |
| Jaw pressure (g)  | 100          | 125  |

Titanium Micro Serrefines

·TITANIUM·

Lightweight with strong  
clamping pressure.

For more information  
see page 211.

Delicate atraumatic serrations  
Spring width: 2 mm



|                   | No. 18555-01 | -02 | -03 | -04  |
|-------------------|--------------|-----|-----|------|
| Jaw length (mm)   | 10           | 8   | 6   | 4    |
| Jaw width (mm)    | 2            | 2   | 1   | 0.75 |
| Total length (mm) | 19           | 16  | 15  | 13   |
| Jaw pressure (g)  | 60           | 85  | 100 | 125  |

**Cautionary note:** Micro Serrefines should never be  
compressed with fingers; use only the appropriate  
applicator No. 18056-14 or No. 18057-14.

### Moria Vessel Clamp

Straight  
33 mm  
Finely serrated (atraumatic)  
Light pressure  
For vessels up to 2 mm in diameter  
Calibrated to 15g/mm<sup>2</sup>  
Jaw dimensions 13 x 1.6 mm



Moria 201/A

No. 18320-11

### Moria Bulldog Type Clamps

53 mm  
Non-serrated  
Strong pressure  
Jaw dimensions 16 x 2.5 mm



Straight  
Moria MC43

No. 18374-43



Curved  
Moria MC44

No. 18374-44

### Bulldog Artery Spring Clamp

Can be used with a minimum of distortion for MRI investigations.

**TITANIUM**

For more information  
see page 211.

Straight  
30 mm  
Serrated  
Light pressure



No. 18144-30

### Dietrich Bulldog Clamps

Serrated  
Good access to deep seated vessels  
Closing pressure: 50 g (light)  
Weight: 3 g



Straight  
52.5 mm

No. 18038-45



Angled  
50 mm

No. 18039-45

### Bulldog Type Serrefines

Serrated

Straight  
28 mm  
Medium pressure



No. 18050-28

Curved  
28 mm  
Medium pressure



No. 18051-28



Straight  
35 mm  
Strong pressure

No. 18050-35

Straight  
50 mm  
Strong pressure

No. 18050-50

**MOST  
POPULAR**

Curved  
35 mm  
Strong pressure

No. 18051-35



Curved  
50 mm  
Strong pressure

No. 18051-50

### Schwartz Micro Serrefines

Non-serrated  
Strong pressure  
26 mm

**MOST  
POPULAR**

Straight



No. 18052-01

Light bend



No. 18052-02

Sharp bend



No. 18052-03

### Biemer Clip

Serrated  
Straight  
Closing Pressure: 30 g - 40 g (light)

15 mm  
Clamping Length: 6 mm

**NEW  
ITEM**

No. 18058-15



18 mm  
Clamping Length: 9 mm

No. 18058-18



### Mini Serrefines

28 mm  
Smallest bulldog-type hemostatic clamps  
Medium pressure  
Gentle serrations  
2 mm wide

Straight



No. 18054-28

Curved



No. 18053-28

## Horizon™ Metal Ligation System

The Horizon™ System provides surgeons with a strong, secure clip coupled with an efficient, convenient easy-load cartridge system. The preformed chevron shape of the Horizon™ Clip engulfs tissue with precise tip-to-tip closure. Heart-shaped wire is designed to give each clip a firm grip on vessels, while the triangulated cross-section of the clip leg maximizes surface-to-surface contact between clip and jaw, practically eliminating clip fallout.



Clips

Horizon™  
Ligation Clips

1.98 x 2.87 mm  
Pkg. of 6 Clips  
**Sterile**

No. 18070-10

Remover

Horizon™  
Clip Remover

Straight  
16.5 cm

No. 18073-00



Applicator

Horizon™  
Ligation Applicator

Curved  
20 cm

No. 18070-00

Silver Neuro Clips

These single-use, silver neuro clips are meant for permanent vessel occlusion.

Pkg. of 100 clips  
No. 18040-00



Vascular Occluders

Applications

- Fast, dependable zero-flow baseline determination in blood flow studies.
- Partial to full occlusion of vessels for circulation research studies.
- Prolonged implantations, such as chronic blood flow studies.
- Constriction of soft organs in acute or chronic applications.

Operation

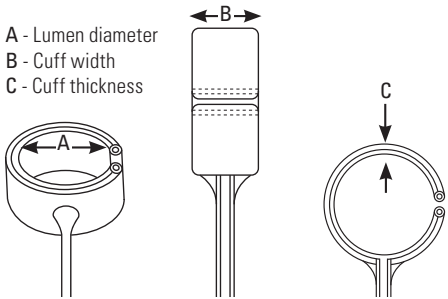
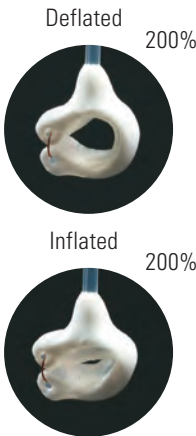
- Step 1** Apply the occluder cuff around the exposed blood vessel. Secure it in place with suture material through the eyelets.
- Step 2** Occlude the vessel to the desired degree by inflating the diaphragm with air or liquid injected into the actuating tube using a syringe and blunt needle. Clamp the tubing to maintain occlusion of the vessel over time.
- Step 3** To deflate, simply withdraw the air or liquid.

Benefits

- Occlusion is accomplished without traction on vessels or surrounding tissues.
- The actuating tube may be exteriorized from the occlusion site for remote actuation.
- Performance during implantations is reliable and consistent.
- Autoclavable or cold sterilized, and easily maintained.
- Made from soft, flexible 100% silicone rubber.
- Fully operational with instant response using air, liquids, or inert gases.

Selection

The lumen diameter when deflated is usually the determining factor in the selection of the proper device. Select the occluder size that provides a slightly loose fit around the subject vessel. The cuff width and thickness will vary, depending on models and sizes.



The actuating tube length is 90 cm and measures 0.76 mm ID x 1.6 mm OD. Detailed instructions are included.

VO-1.5 N

Lumen diameter: 1.5 mm  
Cuff width: <3.5 mm  
Cuff thickness: 1.5 mm

No. 18080-01

VO-2

Lumen diameter: 2 mm  
Cuff width: 5 mm  
Cuff thickness: 1.5 mm

No. 18080-02

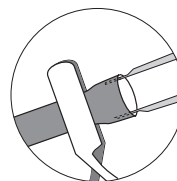
VO-3

Lumen diameter: 3 mm  
Cuff width: 5 mm  
Cuff thickness: 1.5 mm

No. 18080-03

## Vessel Dilators

Highly modified forceps with elongated, parallel tips which are highly polished. Designed for controlled intraluminal vessel dilation.



S&T®

S&T®



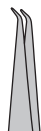
Angled 10°

11 cm  
Tip diameter: 0.1 mm

No. 00126-11

Tip diameter: 0.2 mm

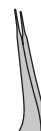
No. 00125-11



Angled 45°

13.5 cm  
Tip diameter: 0.2 mm

No. 00276-13



Angled 10°

12 cm  
Tip diameter: 0.1 mm

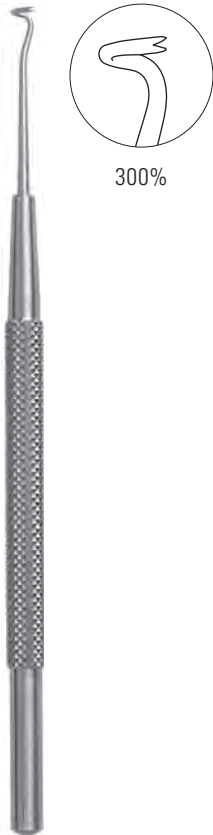
No. 18131-12

Tip diameter: 0.2 mm

No. 18132-12

V-Hook

Aids in feeding fine suture around blood vessels, works very similar to ligation aids.



300%



11 cm  
Tip diameter: 0.4 x 0.2 mm

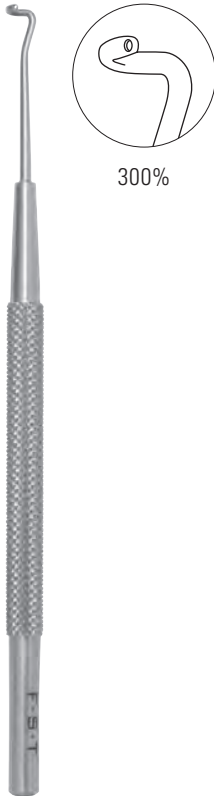
No. 18052-12

Ligation Aids

A handy instrument for leading a fine suture under and around a blood vessel for tying-off purposes. Also useful for ligating peripheral nerves. Grooves toward hole help threading.



18063-13



300%

Ultrafine



10.5 cm  
Hole diameter: 0.4 mm

No. 18062-12



200%

200%



13.5 cm  
Hole diameter: 1 mm

No. 18062-13



13.5 cm  
Hole diameter: 1 mm

No. 18063-13



### Micro Cannulation System

This micro cannula is most helpful for quick and easy insertion in arteries and veins. It can be used as an “indwelling” catheter during long term experiments. With care, thorough rinsing and sterilization, it can be reused several times. Detailed instructions are included.



#### Features

- Biocompatible Teflon® tubing.
- Cannula size 0.33 mm OD – 0.16 mm ID
- A pointed stainless steel stylus (trocar), to aid in vascular penetration and allow a maximum range of cannula manipulation during insertion.
- Contoured tip for easy insertion, fitted with shoulder for “tie-in” to prevent accidental removal.
- Female luer connection for linkage to infusion lines.

MOST  
POPULAR

#### 1 Approach

Cannulation Forceps (Item No. 18403-11) and Spinal Cord Hook (Item No. 10162-12) aid in the insertion process.



#### 2 Insertion

Remove trocar and advance cannula.



#### 3 Secure

Use shoulder hub and suture to “tie in” cannula to prevent accidental removal.



Instruments sold separately.

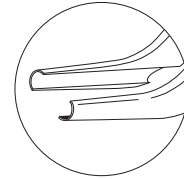
8 cm

Cannula size 0.33 mm OD - 0.16 mm ID

No. 18000-10

## Vessel Cannulation Forceps

These vessel cannulation forceps are useful whenever a fine plastic tube has to be introduced into a small blood vessel of almost equal size. The hollowed jaws hold the tubing securely without deforming it. The tip of the tubing is directed exactly into the vessel opening without damage to the vessel from unwanted movement.



S&T®

DUMONT+  
S W I S S M A D E



11 cm  
For tubing of 0.35 mm OD

No. 00608-11

11 cm  
For tubing between  
0.5 and 1 mm OD

No. 00574-11



11 cm  
For tubing of 0.35 mm OD

No. 11280-11

11 cm  
For tubing of 0.5 mm OD

No. 11281-11

11 cm  
For tubing of 1 mm OD

No. 11282-11



11.5 cm  
For tubing of 0.35 mm OD

No. 18403-11

11.5 cm  
For tubing of 0.6 mm OD

No. 18406-11

13.5 cm  
For tubing of 0.6 mm OD

No. 18406-13

## Accessories & Instrument Care

|                               |       |           |
|-------------------------------|-------|-----------|
| Animal Accessories            | Pages | 147 – 152 |
| Instrument Care & Accessories | Pages | 153 – 166 |
| Surgical Accessories          | Pages | 167 – 170 |
| Laboratory Accessories        | Pages | 171 – 183 |



Reusable Gavage Feeding Needles

Stainless steel feeding needles with luer lock hub. Also ideal for transcardiac perfusions with a fixative.



| Gauge | Length (mm) | Tip diameter (mm) | Shape    | Mice    | Rats      | Guinea pigs | Item         | Price |
|-------|-------------|-------------------|----------|---------|-----------|-------------|--------------|-------|
| 24    | 25          | 1.25              | Straight | >14 g   |           |             | No. 18061-24 |       |
| 22    | 25          | 1.25              | Straight | 15-20 g |           |             | No. 18061-22 |       |
| 20    | 30          | Barrel            | Straight | 20-25 g | 50-75 g   |             | No. 18060-20 |       |
| 20    | 38          | 2.25              | Straight | 20-25 g | 50-75 g   |             | No. 18064-20 |       |
| 20    | 38          | 2.25              | Curved   | 20-25 g | 50-75 g   |             | No. 18065-20 |       |
| 18    | 38          | 2.25              | Straight | 20-30 g | 100-200 g | 250-300 g   | No. 18061-38 |       |
| 18    | 50          | 2.25              | Curved   | 25-30 g | 100-200 g | 250-300 g   | No. 18061-50 |       |
| 16    | 75          | 3.00              | Curved   |         | 150-300 g | 350-450 g   | No. 18061-75 |       |
| 16    | 100         | 3.00              | Curved   |         | 150-300 g | 350-450 g   | No. 18061-10 |       |

Single Use Gavage Feeding Needles

These economical feeding needles feature plastic luer hubs with silicone tips. They are nontoxic and nonpyrogenic. Needles can be easily formed to any desired shape. **Sterile.**



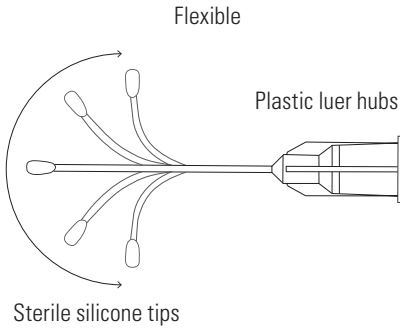
Pkg. of 5 needles

| Gauge | Length (mm) | Tip diameter (mm) | Shape    | Mice    | Rats      | Guinea pigs | Item         | Price |
|-------|-------------|-------------------|----------|---------|-----------|-------------|--------------|-------|
| 20    | 38          | 1.75              | Flexible | 20-25 g | 50-75 g   |             | No. 18061-20 |       |
| 18    | 50          | 2.50              | Flexible | 25-30 g | 100-200 g |             | No. 18061-18 |       |
| 15    | 75          | 3.00              | Flexible |         | 200-350 g | 400-600 g   | No. 18061-15 |       |

Disposable Flexible PTFE Feeding Needles

These affordable needles feature flexible PTFE tube with silicon tip and plastic luer hub, delivered in sterile pouches. They are very flexible, and translucent for easy confirmation of reagent delivery. The soft silicone tips are non-toxic and non-pyrogenic and ensure that no damage occurs during the insertion. **Sterile.**

Pkg. of 5 needles



| Gauge | Length (mm) | Tip diameter (mm) | Shape    | Mice    | Rats      | Guinea pigs | Item         | Price |
|-------|-------------|-------------------|----------|---------|-----------|-------------|--------------|-------|
| 20    | 38          | Barrel 1.8        | Flexible | 20-25 g | 50-75 g   |             | No. 18961-20 |       |
| 18    | 38          | Barrel 2          | Flexible | 20-30 g | 100-200 g | 250-300 g   | No. 18961-18 |       |
| 17    | 52          | Barrel 2.4        | Flexible | 25-30 g | 100-200 g | 250-300 g   | No. 18961-17 |       |
| 15    | 78          | Barrel 2.6        | Flexible |         | 200-350 g | 400-600 g   | No. 18961-15 |       |
| 18    | 75          | Barrel 2          | Flexible | 25-30 g | 150-250 g | 250-300 g   | No. 18961-75 |       |
| 17    | 85          | Barrel 2.4        | Flexible | 25-30 g | 150-250 g | 250-300 g   | No. 18961-85 |       |

## GenoPunch

The interchangeable GenoPunch aids in the fast and simple collection of the 2 mm tissue sample for DNA analysis and/or genotyping. FST Exclusive Item. **Autoclavable.**

**MOST  
POPULAR**



70% of  
actual size



Microtubes not included.

GenoPunch includes:

- 1 GenoPunch
- 1 0.5 ml tube holder
- 1 1.6 ml tube holder
- 1 Screwdriver
- 4 Screws



FST does not supply microtubes.

11.5 cm  
Stainless steel and anodized aluminum  
Punch diameter: 2 mm

No. 24215-02

## Blue Ear Punch

The Ear Puncher relieves stress on the wrist during ID marking as it requires only a very gentle pressure to cut a hole. The stainless steel puncher has a sloped edge that provides a cut rather than a punch, which minimizes animal discomfort. **Autoclavable.**

**NEW  
ITEM**



14 cm  
Punch diameter: 2 mm

No. 24916-02

## Ear Punch with Replaceable Tip

Designed to ensure a fast and clean punch, this ear punch is lightweight and fits comfortably in the palm of your hand. The tip is replaceable. **Autoclavable.**



Handle and Tip

11.5 cm  
Anodized aluminum handle  
and stainless steel tip  
Punch diameter: 2 mm

No. 24213-02

Replacement Tip

Punch diameter: 2 mm

No. 24213-12

## Ear Punch

Designed to ensure a fast and clean punch, this ear punch is lightweight and fits comfortably in the palm of your hand. FST Exclusive Item. **Autoclavable.**



11.5 cm  
Stainless steel and  
anodized aluminum  
Punch diameter: 2 mm

No. 24214-02

## Finger Loop Ear Punch

This ear punch provides stability and control for researchers using the numbering system. The 1 mm ear punch offers greater numbering variations and/or patterns.



10.5 cm  
Punch diameter: 1 mm

No. 24212-01

Punch diameter: 2 mm

No. 24212-02

## Marking Pen

The Marking Pen was developed for easy, long lasting identification of laboratory animals. The markers contain no harmful chemicals and instead nontoxic pigment approved by the Japanese Ministry of Health for use in food, drugs and cosmetics. It is intended for use on the fur and not the skin and will last for 6-12 weeks.

NEW  
ITEM



Fine Tip  
4.5 x 7.5 mm  
Black  
10ml

No. 24202-06



Fine Tip  
4.5 x 7.5 mm  
Blue  
10ml

No. 24202-02



Fine Tip  
4.5 x 7.5 mm  
Green  
10ml

No. 24202-01



Fine Tip  
4.5 x 7.5 mm  
Red  
10ml

No. 24202-04



Fine Tip  
4.5 x 7.5 mm  
Yellow  
10ml

No. 24202-03



Fine Tip  
4.5 x 7.5 mm  
Orange  
10ml

No. 24202-05

NEW  
ITEM



Standard Tip  
15 x 10 x 10 mm  
Black  
15ml

No. 24202-16



Standard Tip  
15 x 10 x 10 mm  
Blue  
15ml

No. 24202-12



Standard Tip  
15 x 10 x 10 mm  
Green  
15ml

No. 24202-11



Standard Tip  
15 x 10 x 10 mm  
Red  
15ml

No. 24202-14



Standard Tip  
15 x 10 x 10 mm  
Yellow  
15ml

No. 24202-13



Standard Tip  
15 x 10 x 10 mm  
Orange  
15ml

No. 24202-15

ANIMAL  
ACCESSORIES

## Surgical Skin Marker

This marker features a versatile tip for precise fine (0.2 mm) line marking, or when held at an angle, a broad (2 mm) line marking.

The marker's violet ink is nontoxic, non-tattooing and surgical prep-resistant. Markings can be removed from the skin with isopropyl alcohol. A six-inch ruler calibrated in both centimeters and inches is included.

14 cm

No. 18000-30



50% of actual size



## Self Piercing Ear Tags

Ideal for use in small animals such as mice and rats, these ear tags come numbered from 1-100 or 1-500. Silver colored tags with black numbers provide high visibility making them easy to read. Once applied, tags seal and cannot be removed, providing an easy to use, permanent identification method. These ear tags are safe for use in salt water.



Ear tags  
Alloy: Monel  
7.8 x 2.8 mm

|                     |                     |                        |
|---------------------|---------------------|------------------------|
| Black numbers 1-100 | Black numbers 1-500 | Black numbers 501-1000 |
| No. 24220-10        | No. 24220-50        | No. 24220-90           |

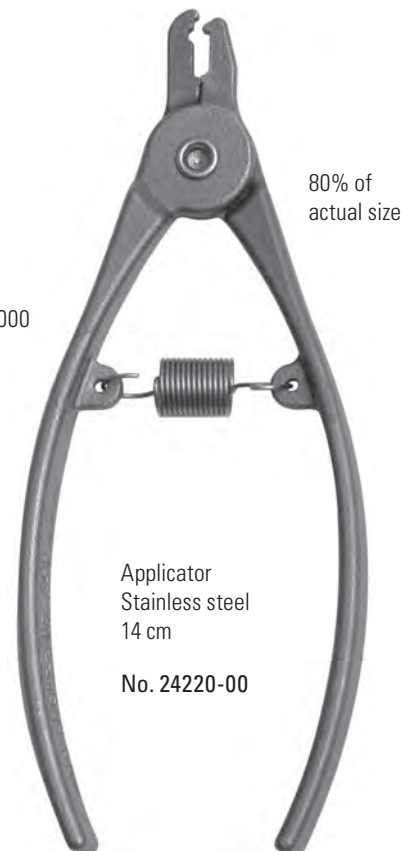


Ear Tags (enlarged view)

**Custom alphanumeric sequences and numbers above 1000 are available by special order.**

|                           |                             |
|---------------------------|-----------------------------|
| 1 to 6 numbers only:      | 1 to 6 letters and numbers: |
| \$50.00 per 100 ear tags  | \$62.00 per 100 ear tags    |
| \$145.00 per 500 ear tags | \$160.00 per 500 ear tags   |

For special order, use item No. 70000-10 and indicate sequence. Please allow 4 to 5 weeks for delivery.



Applicator  
Stainless steel  
14 cm

No. 24220-00

80% of  
actual size

## Animal Microtattoo System

A quick, efficient and affordable method of permanently identifying laboratory animals (mice as early as 1 day old). Designed and tested by laboratory animal technicians, the system utilizes a hypodermic needle at one end of a stainless steel forceps and a small metal cup containing green tattoo paste at the other side of the forceps.

By squeezing the forceps together, the needle penetrates the toe, footpad or ear of the animal and injects a deposit of green tattoo paste into the animal. A grid location pattern provided enables a numbering system that extends over 1 million.

Use of the microtattoo system is humane and in compliance with regulatory agencies for the care and use of laboratory animals. Detailed instructions are included. **Both the microtattoo forceps and green tattoo paste are autoclavable.**

Animal microtattoo system includes:

- 1 Pair plated steel microtattoo forceps
- 1 Tube (1 oz.) of green tattoo paste
- 1 Aluminum planchette
- 2 Hypodermic needles
- 1 Plastic holding case



13 cm  
Animal microtattoo system

No. 24201-00  
Green tattoo paste



1 oz / 29.6 ml

No. 24201-01

Silicone Seal and Lubricant



This stiff non-melting silicone base maintains its consistency from -40°C to 200°C (40°F to 392°F) with less than 2% evaporation after 24 hours of exposure to 150°C (302°F). Typical applications include lubrication of stopcock rotating parts and other lab items. Seals vacuum and low pressure systems. Compatible with glass, plastics, metals, synthetic rubber gaskets and seals. **Autoclavable.**

15 ml container

No. 29051-45

Demagnetizer

This safe and easy to operate tabletop demagnetizer has a large coil opening of 8 x 4 cm in a rigid, molded housing. Can be used to demagnetize or magnetize instruments.

12 x 5.5 x 9 cm

No. 18000-15



Instrument Sharpening Stones

Natural Arkansas oil stones feature unequaled fineness, hardness and structural density. When used with mineral oil, they will produce a sharper cutting edge.

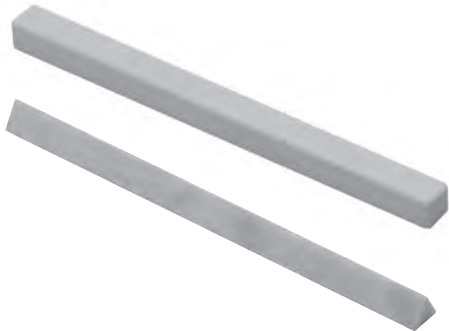
6 mm x 9 cm

Square stone

No. 29008-01

Triangular stone

No. 29008-12



Optical Cleaning Kit and Lens Paper

This convenient kit contains everything you need to clean lens surfaces safely. Perfect for microscopes, camera lenses, binoculars, telescopes, graphic art optics, and all other fragile lenses. Storage case included.

Kit includes:

- 1 Bottle of lens cleaner (30 ml)
- 1 Ultra soft duster brush
- 1 Cleaning cloth (20 x 20 cm)
- 3 Books of lens paper (25 sheets each)

Kit

No. 29000-10

Lens Paper  
15 x 10 cm  
Book of 50 sheets

No. 29015-50



## Sharpening Stone for Fine Forceps

This natural Arkansas stone assists in reshaping the tips of fine forceps. The stone has two grooves, 0.8 mm and 1.6 mm, and comes in a cedar box with ten O-rings.



4 x 1 x 10 cm

No. 29008-22

## Instrument Oil

Physiologically inert oil for lubricating surgical instruments, box locks, ratchets and any overlapping joints.



50 ml bottle

No. 29055-00

## O-Rings for Forceps

These rubber O-rings fit our forceps and keep them closed with variable degrees of pressure on the tips.



Pkg. of 10

No. 11200-00

## Fine Forceps Repair Kit

Realign and repair fine forceps with this convenient kit. Bent forceps tips can be restraigthened with the chain nose pliers. The sharpening stone has two grooves, 1.6 mm and 0.8 mm, to assist in reshaping the forceps tips. O-rings clamp the forceps shut to ensure that both shanks are equally aligned and sharpened. Instrument oil assists in producing a smooth sharp edge. Detailed instructions are included.

**MOST  
POPULAR**



Kit includes:

- 1 Sharpening stone for fine forceps with ten O-rings (No. 29008-22)
- 1 Instrument oil, 50 ml bottle (No. 29055-00)
- 1 Chain nose pliers

No. 29000-00

Instrument Marking Tape

Organize instruments quickly and easily with this economical, non-toxic, pressure sensitive tape. Color is unaffected by boiling, cold sterilization or autoclaving. 8 colors available. **Autoclavable.**

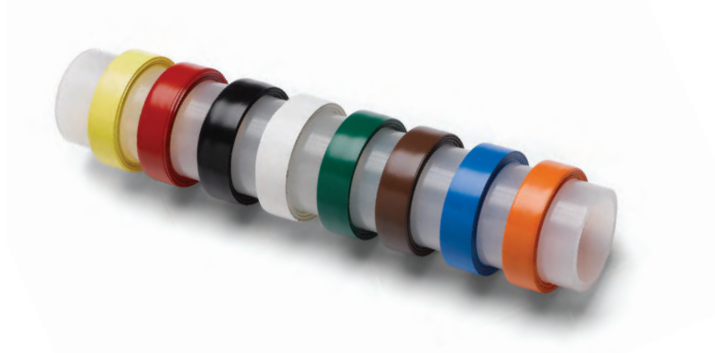


| Color  | Roll size (cm) | Material | Item         | Price |
|--------|----------------|----------|--------------|-------|
| Green  | 290 x 0.6 cm   | Vinyl    | No. 29071-01 |       |
| Blue   | 290 x 0.6 cm   | Vinyl    | No. 29071-02 |       |
| Yellow | 290 x 0.6 cm   | Vinyl    | No. 29071-03 |       |
| Red    | 290 x 0.6 cm   | Vinyl    | No. 29071-04 |       |
| White  | 290 x 0.6 cm   | Vinyl    | No. 29071-05 |       |
| Black  | 290 x 0.6 cm   | Vinyl    | No. 29071-06 |       |
| Brown  | 290 x 0.6 cm   | Vinyl    | No. 29071-07 |       |
| Orange | 290 x 0.6 cm   | Vinyl    | No. 29071-08 |       |

Instrument Marking Tape  
8 Assorted Colors

Organize instruments quickly and easily with this economical, non-toxic, pressure sensitive tape. Color is unaffected by boiling, cold sterilization or autoclaving. Includes 8 assorted color rolls: Yellow, Red, Black, White, Green, Brown, Blue and Orange. **Autoclavable.**

1 each of 8 colors above      107 x 0.6 cm (each roll)      Vinyl      No. 29080-00



9 colors available

Organize instruments quickly and easily with this economical, non-toxic, pressure sensitive tape. Color is unaffected by boiling, cold sterilization or autoclaving. 8 colors available. **Autoclavable.**



| Color  | Roll size (cm) | Material | Item         | Price |
|--------|----------------|----------|--------------|-------|
| Green  | 510 x 0.6 cm   | Vinyl    | No. 29070-01 |       |
| Blue   | 510 x 0.6 cm   | Vinyl    | No. 29070-02 |       |
| Yellow | 510 x 0.6 cm   | Vinyl    | No. 29070-03 |       |
| Red    | 510 x 0.6 cm   | Vinyl    | No. 29070-04 |       |
| White  | 510 x 0.6 cm   | Vinyl    | No. 29070-05 |       |
| Black  | 510 x 0.6 cm   | Vinyl    | No. 29070-06 |       |
| Brown  | 510 x 0.6 cm   | Vinyl    | No. 29070-07 |       |
| Orange | 510 x 0.6 cm   | Vinyl    | No. 29070-08 |       |
| Purple | 510 x 0.6 cm   | Vinyl    | No. 29070-09 |       |

## Instrument Tip Protectors

These tip protectors are a convenient, color-coded way to protect surgical instrument tips and edges. They provide exceptional protection and are vented to prevent rusting from condensation. Instrument tip protectors are recommended during handling, storage, and sterilization. **Autoclavable.**

**MOST  
POPULAR**

29060-00



1.6 x 19.1 mm  
Pkg. of 25  
Material: Platisol

No. 29060-01



2 x 19 mm  
Pkg. of 25  
Material: Platisol

No. 29060-02



2.8 x 19.1 mm  
Pkg. of 25  
Material: Platisol

No. 29060-03



3.2 x 25.4 mm  
Pkg. of 25  
Material: Platisol

No. 29060-04



4.8 x 25.4 mm  
Pkg. of 25  
Material: Platisol

No. 29060-05



2 x 9.5 x 25.4 mm  
Pkg. of 25  
Material: Platisol

No. 29060-06



Assorted pack, five of each size  
Pkg. of 30  
Material: Platisol

No. 29060-00

## Double Tip Protectors

These vented tip protectors are designed to hold hemostats and rongeurs firmly while allowing the jaws, box hinge and tips to stay open for thorough sterilization. **Autoclavable.**



12.7 x 20 mm  
Pkg. of 10  
Material: Platisol

No. 29066-01



9 x 25.5 mm  
Pkg. of 10  
Material: Platisol

No. 29066-02



15 x 25 mm  
Pkg. of 10  
Material: Platisol

No. 29066-03



25 x 26 mm  
Pkg. of 10  
Material: Platisol

No. 29066-04



Assorted pack, three of each size  
Pkg. of 12  
Material: Platisol

No. 29066-00



Self Sealing Sterilization Pouches

Preformed pouches with self adhering tape are blue tinted on one side for visualization of contents, and paper-backed on the other side. Pouches will work with either steam autoclave or ethylene oxide sterilization.

Material properties:

- Protects instruments during sterilization.
- Provides sterile storage until use.
- Write on pouches for easier identification during sterilization.



INSTRUMENT CARE  
& ACCESSORIES

10 x 18 cm  
For instruments up to 13 cm long  
  
Pkg. of 100 pouches  
  
No. 28000-07

13 x 26 cm  
For instruments up to 23 cm long  
  
Pkg. of 100 pouches  
  
No. 28000-10

18 x 30 cm  
For instruments up to 26 cm long  
  
Pkg. of 100 pouches  
  
No. 28000-12

## Hot Bead Sterilizer

The sterilizer provides a safe, effective and convenient method for sterilizing your surgical instruments prior to and during surgery or tissue culture. Without using potentially dangerous gases, flames or chemicals, you can ensure that your instruments will be free of pathogens and microbial contaminants.

The beads take 15–20 minutes to reach 240°C to 270°C (464°F to 518°F), and then the sterilizer is ready for use. The temperature is thermostatically maintained, and the unit can be left on all day. Instruments require approximately 20 seconds of contact with the beads for complete sterilization. The sterilizer is safe to use even in laminar flow hoods.

Sterilization test results conducted by the Pasteur Institute in Lille, France, are available upon request. Available in 110V and 220V. CE Certified and UL Approved.

### Sterilizer includes:

- Sterilizer unit
- 1 Bag of glass beads
- 1 Dust cover for well
- 1 Small heat-tempered glass dish for small objects (only with FST 250)



FST 250 shown.  
Instruments not included.

### FST 250 Sterilizer

Well diameter: 4 cm  
Well depth: 8 cm  
Well volume: 100 ml  
Total unit size: 14.5 x 12.5 x 13.5 cm

No. 18000-45

### Replacement glass beads for FST 250

Weight: 150 gr

No. 18000-46

### FST 350 Sterilizer

Well diameter: 4 cm  
Well depth: 14 cm  
Well volume: 175 ml  
Total unit size: 20.5 x 12.5 x 13.5 cm

No. 18000-50

### Replacement glass beads for FST 350

Weight: 300 gr

No. 18000-51

### Micro Bead Sterilizer with Glass Beads

Micro Bead Sterilizer is ideal for the sterilization of small and large research tools (forceps, scissors, etc.). When the chamber is filled with the included glass beads, high temperatures (up to 300° C) can be used to eliminate the presence of bacteria, spores and other micro-organisms.



#### Small Sterilizer

110V

Well diameter: 4 cm

Well depth: 8 cm

Well volume: 100 ml

Total unit size: 13 x 14.5 x 15.5 cm

No. 18090-45

#### Small Sterilizer

220V

Well diameter: 4 cm

Well depth: 8 cm

Well volume: 100 ml

Total unit size: 13 x 14.5 x 15.5 cm

No. 18090-46

#### Replacement glass beads for small sterilizer

Weight: 150 gr

No. 18000-47



#### Tall Sterilizer

220V

Well diameter: 4 cm

Well depth: 14 cm

Well volume: 175 ml

Total unit size: 14 x 14.5 x 21.5 cm

No. 18090-51

#### Replacement glass beads for tall sterilizer

Weight: 300 gr

No. 18000-52



Small sterilizer shown.  
Instruments not included.

#### Tall Sterilizer

110V

Well diameter: 4 cm

Well depth: 14 cm

Well volume: 175 ml

Total unit size: 14 x 14.5 x 21.5 cm

No. 18090-50



## Autoclave Tape Dispenser

Easy loading core with heavy duty steel construction and a non-skid base. Serrated cutting blade cuts tape fast and cleanly.

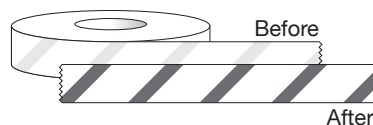


Tape sold separately.

23.5 cm  
Coated steel  
No. 28001-00

## Autoclave Tape

Tape will permanently indicate diagonal stripes after exposure to steam autoclave temperature between 121°C and 130° C during a 40-60 minute time period. Use with sterilization pouches, sterilization wraps and sterilization cases.



2 cm x 55 m  
No. 28001-02

## Disposable Sterilization Wraps

These biodegradable cellulose fiber wraps are resistant to tears and conform easily to maintain a breathable yet impervious barrier to airborne bacteria, saline, blood and water. Wrapping your instrument case securely will ensure the sterility of your instruments until ready for use. Available in two sizes.



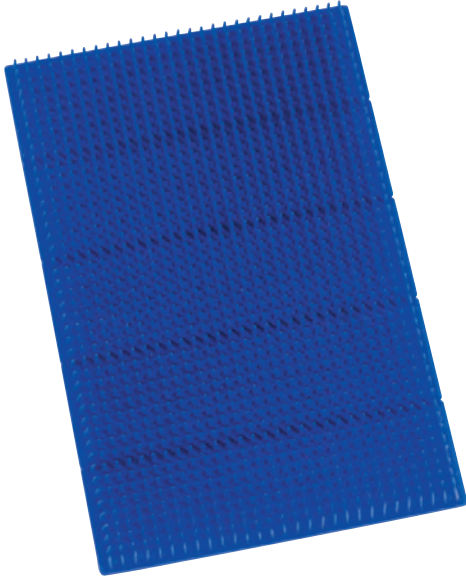
Cases not included.

38 x 38 cm  
Pkg. of 25 wraps  
No. 28015-15  
51 x 51 cm

Pkg. of 25 wraps  
No. 28020-20

**Silicone Mat**

High quality, extra soft mat for safe and secure placement of delicate instruments. This mat can easily be cut along the premarked grooves to fit in various sized instrument cases. **Autoclavable.**



30 x 20 cm

No. 20325-00

**Magnetic Sterilization Mat**

Used during sterilization and for safe anti-slip placement around surgical settings. **Autoclavable.**



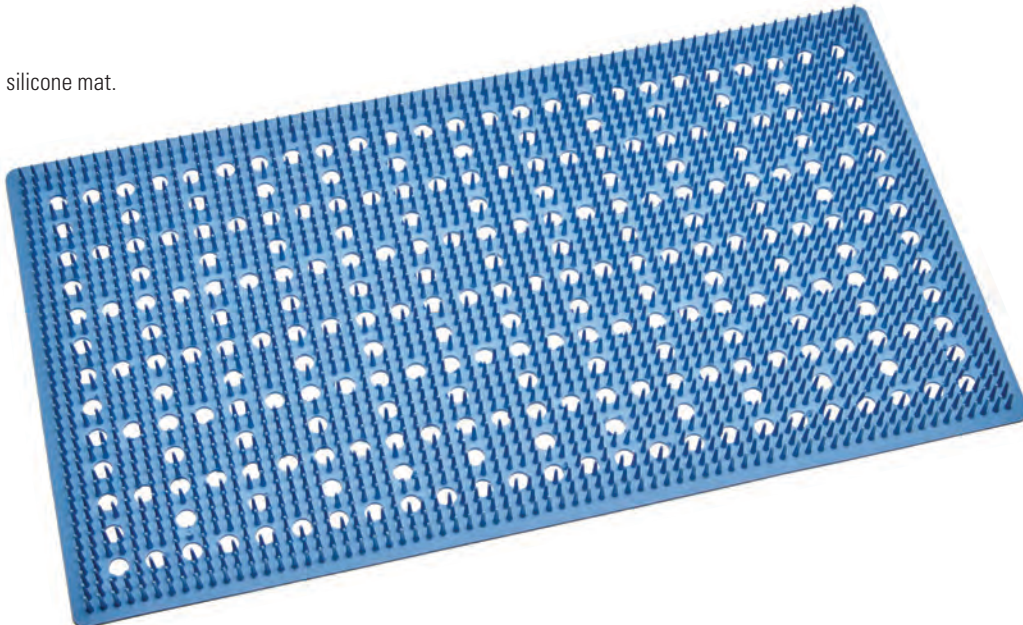
Instruments not included.

30 x 20 cm

No. 20350-00

**Silicone Mat**

Large, economical silicone mat.  
**Autoclavable.**



46 x 25 cm

No. 20325-10

## STERILIZATION CONTAINER

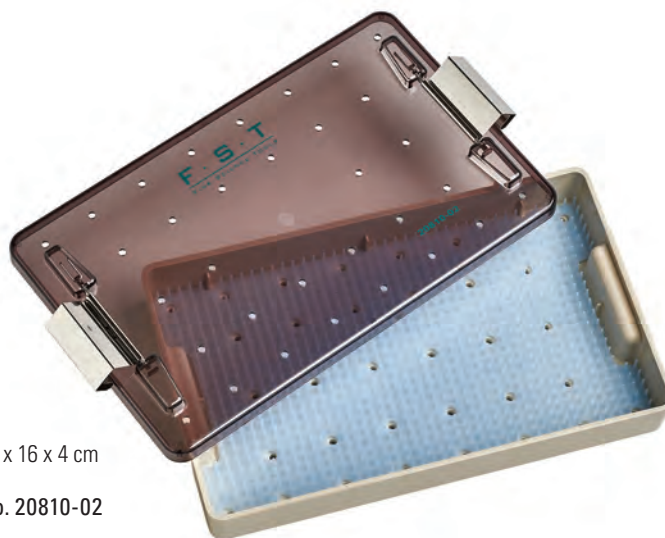
### Sterilization Container

This plastic sterilization container includes a silicone mat for safe placement of instruments. Perforated top is clear for visual identification of instruments. **Suitable for autoclave or ethylene oxide sterilization.**



19 x 10 x 2 cm

No. 20810-01



27 x 16 x 4 cm

No. 20810-02

### Two Tiered Sterilization Container

This plastic sterilization container has two tiers of silicone slots that will accommodate up to 12 different instruments. Hinged top and bottom lock tight. Container is perforated. **Suitable for autoclave or ethylene oxide sterilization.**



25 x 12 x 3 cm

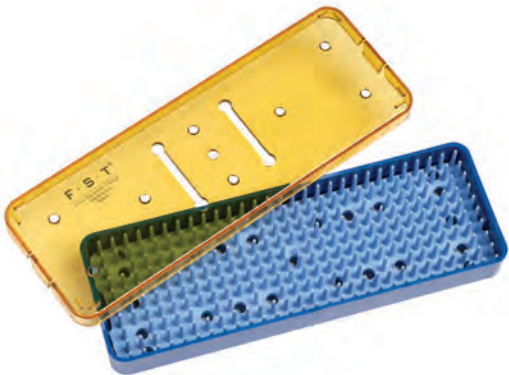
No. 20820-00



Sterilization Container

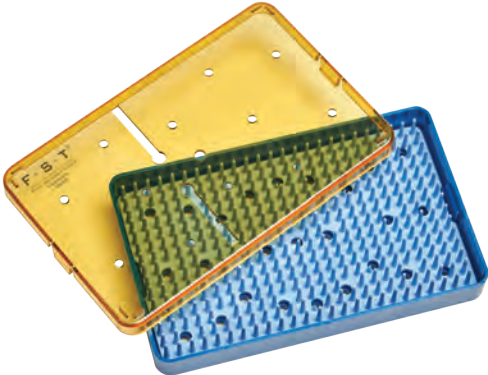
This sterilization container is made from Ultem® polymer to ensure strength and long lasting durability. The transparent perforated lid provides easy identification of your surgical instruments. Silicone mat is included for a safe and secure hold. Trays are also stackable for convenience. Suitable for autoclave or ethylene oxide sterilization.

MOST  
POPULAR  
20840-03



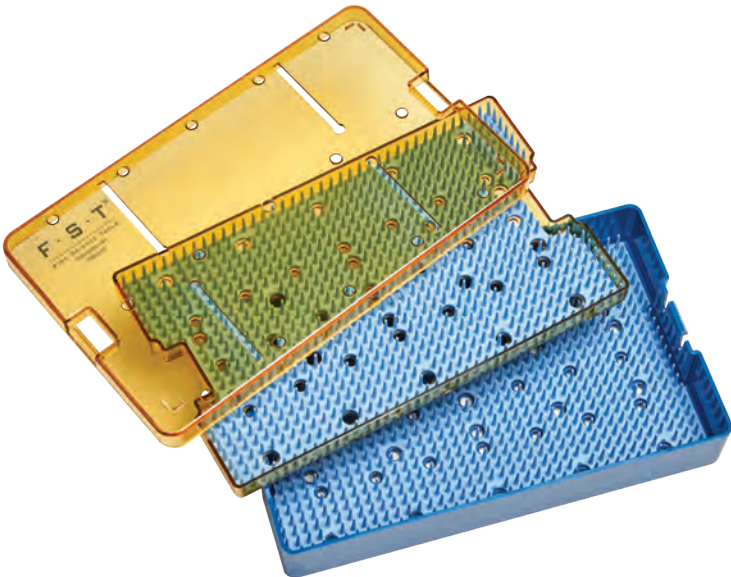
19 x 7 x 2 cm  
Single tier

No. 20840-01



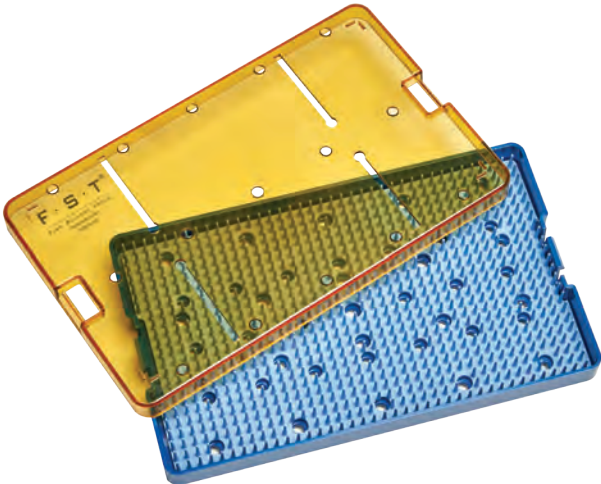
17 x 10 x 2 cm  
Single tier

No. 20840-02



25 x 15 x 4 cm  
Double tier

No. 20842-03



25 x 15 x 2 cm  
Single tier

No. 20840-03

## Dual Clamping Stainless Steel Sterilization Container

This container will assist in the sterilization and storage of your fine surgical instruments. It comes with a custom fit silicon mate to keep instruments in place while the sterilizing process and storage. The textile filters are necessary for keeping instruments sterile while they remain in the container.

**Suitable for autoclave or ethylene oxide sterilization.**



30 x 14 x 4 cm

No. 20850-00

5 Long-term textile filters  
No. 20850-10

One Long-term textile filter  
No. 20850-11

## Stainless Steel Sterilization Container

Removable perforated interior plates hold long-term textile filters which keep the instruments sterile while they remain in the container. Lid can be locked in place. Comes with two textile filters installed. **Suitable for autoclave or ethylene oxide sterilization.**



20 x 10 x 4 cm

No. 20890-51

10 Long-term textile filters  
No. 20890-72

One Long-term textile filter  
No. 20890-71



## Utility Instrument Case

Comes with a silicone mat for safe placement of instruments. **Case and silicone insert are autoclavable but should not be used for sterilizing surgical instruments.**



18 x 9 x 3 cm

No. 20311-21

### Colored Aluminum Cases

This instrument case comes with a spiked silicone mat for secure storage of surgical instruments.

Seven colors available but may vary due to lot to lot variations.

**The case and silicone insert are autoclavable but should not be used for sterilization of surgical instruments.**

NEW  
ITEM



18 x 9 x 3 cm  
Blue

No. 20330-00



18 x 9 x 3 cm  
Green

No. 20330-01



18 x 9 x 3 cm  
Red

No. 20330-02



18 x 9 x 3 cm  
Yellow

No. 20330-03

### Instrument Case

This plastic case is compact, safe, secure, and slotted for placement of individual surgical instruments, aiding in the prevention of tip damage. Seven colors available. **Case is autoclavable but should not be used for sterilizing surgical instruments.**

MOST  
POPULAR



Instruments  
not included.



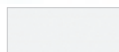
17 x 8 x 2 cm  
Blue

No. 20830-00



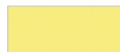
17 x 8 x 2 cm  
Green

No. 20830-01



17 x 8 x 2 cm  
Clear

No. 20830-02



17 x 8 x 2 cm  
Yellow

No. 20830-03



17 x 8 x 2 cm  
Pink

No. 20830-04



17 x 8 x 2 cm  
Orange

No. 20830-05



17 x 8 x 2 cm  
Purple

No. 20830-06

## Roll Up Travel Case

Vinyl dissection roll up case with Velcro strap to hold the case closed. Holds up to 10 tools, one ruler holder, and one Velcro sealed pouch. **Instruments not included.**

Dimensions: 36 x 23 cm  
Color: Black  
Alloy / Material: Vinyl

No. 20831-10



## Instrument Beaker with Silicone Bottom

Instruments are placed in the beaker with their tips immersed in distilled water when not in immediate use. This keeps the instruments clean and functional and ready to grasp. The instrument tips are protected from damage by the soft silicone rubber bottom. Segmented lid keeps instruments organized and secure.

**S&T®**



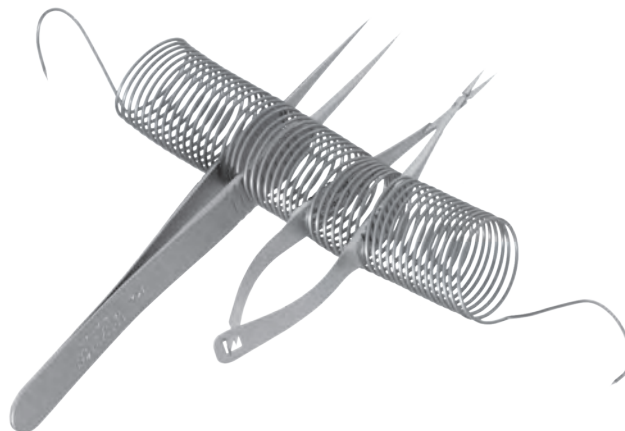
Instrument not included.

Diameter: 10 cm  
Height: 8 cm

No. 00081-00

## Instrument Holding Spring

For the safe placement of delicate surgical instruments during use. Pin the sharp ends into the drape to secure the mounting spring.



Instruments not included.

Length: 4 cm (closed)  
Diameter: 2 cm

No. 18090-00



### Stainless Steel Burrs

Length: 44 mm  
Shaft diameter: 2.3 mm  
Pkg. of 10 burrs



| Diameter (mm) | Item         | Price |
|---------------|--------------|-------|
| 0.7*          | No. 19008-07 |       |
| 0.9**         | No. 19008-09 |       |
| 1.4           | No. 19008-14 |       |

\* Use this size for screws No. 19010-10 (page 50).

\*\* Use this size for screws No. 19010-00 (page 50).

### Carbon Steel Burrs

Length: 44 mm  
Shaft diameter: 2.3 mm  
Pkg. of 10 burrs



**NOT**  
AUTOCLAVABLE

**MOST**  
POPULAR

19007-07

| Diameter (mm) | Item         | Price |
|---------------|--------------|-------|
| 0.5           | No. 19007-05 |       |
| 0.7*          | No. 19007-07 |       |
| 0.9**         | No. 19007-09 |       |
| 1.4           | No. 19007-14 |       |
| 2.1           | No. 19007-21 |       |
| 2.9           | No. 19007-29 |       |

\* Use this size for screws No. 19010-10 (page 50).

\*\* Use this size for screws No. 19010-00 (page 50).

### Tungsten Carbide Burrs

Length: 44 mm  
Shaft diameter: 2.3 mm  
Pkg. of 5 burrs



**TUNGSTEN**  
**CARBIDE**

For more information  
see page 211.

| Diameter (mm) | Item         | Price |
|---------------|--------------|-------|
| 0.5           | No. 19009-05 |       |
| 0.7*          | No. 19009-07 |       |
| 0.9**         | No. 19009-09 |       |

\* Use this size for screws No. 19010-10 (page 50).

\*\* Use this size for screws No. 19010-00 (page 50).

### Stainless Steel Trephines

Side opening for clearing of material.

Length: 44 mm  
Shaft diameter: 2.3 mm  
Sold individually



1.8 - 2.7 mm

5 mm

| Outer Diameter (mm) | Item         | Price |
|---------------------|--------------|-------|
| 1.8                 | No. 18004-18 |       |
| 2.3                 | No. 18004-23 |       |
| 2.7                 | No. 18004-27 |       |
| 5                   | No. 18004-50 |       |

### Stainless Steel Circular Saw

For cutting bone and other hard substances.  
Attaches to mandrel (No. 18000-18), right.

Diameter: 16 mm  
Thickness: 0.1 mm

Pkg. of 10 saws  
No. 18000-20



### Stainless Steel Mandrel

Screw allows attachment of discs  
and circular saws for use with high  
speed drills.

Length: 45 mm  
Shaft diameter: 2.3 mm

No. 18000-18





CAUTERIZERS

High Temperature Cautery Kit

This high temperature cauterizer is a great alternative to disposable cautery units. Temperature at tips is approximately 1000°C (1832°F). Replacement cautery tips are available.

**Not autoclavable.**



Plastic body  
Stainless steel tips: 0.2 mm diameter  
Operation temperature: 1000°C (1832°F)  
Total weight: 70 g  
Length: 16 cm (without tip)

- Cautery kit includes:
- 1 Cautery handle
  - 2 AA Batteries
  - 2 Standard tips
  - 1 Storage case
  - 2 Fine tips

65% of actual size

**MOST POPULAR**

Cautery kit

No. 18010-00

**MOST POPULAR**



Replacement tips  
Straight standard  
**Sterile**  
**Single use**

Box of 10 tips

No. 18010-01

**MOST POPULAR**



Replacement tips  
Straight fine  
**Sterile**  
**Single use**

Box of 10 tips

No. 18010-02

Low Temperature Cautery Kit

This low temperature cautery kit is a great alternative to disposable cautery units. Temperature at the tips is approximately 649°C. Replacement cautery tips are available.

**Not autoclavable.**



Plastic body  
Stainless steel tips: 0.2 mm diameter  
Operation temperature: 649°C (1200°F)  
Total weight: 60 g  
Length: 12 cm (without tip)

- Cautery kit includes:
- 1 Cautery Handle
  - 1 AA Batteries
  - 2 Fine Tips
  - 1 Storage Case
  - 2 Elongated Fine Tips



Replacement tips  
Straight Fine  
**Sterile**  
**Single use**

Box of 10 tips

No. 18019-01



Replacement tips  
Elongated Straight Fine  
**Sterile**  
**Single use**

Box of 10 tips

No. 18019-02

Small Vessel Cauterizer

This small hand-held unit keeps bleeding to a minimum and therefore provides a surgical field clear of clamps and hemostats. The cauterizer should be activated momentarily so the delicate tips do not burn out. Temperature at tips is approximately 1000°C (1832 °F). Replacement cautery tips are available. **Autoclavable.**



Heavy gauge stainless steel body  
Platinum-iridium tips: 0.3 mm diameter  
Total weight: 100 g  
Length: 13.5 cm (without tip)

- Cautery kit includes:
- 1 Cautery handle
  - 1 Straight fine tip
  - 1 Angled fine tip
  - 2 AA Batteries
  - 1 Storage Case

**Cautionary note:**  
Remove batteries before autoclaving.

80% of  
actual size



Replacement tip  
Straight fine

No. 18000-01



Replacement tip  
Angled fine

No. 18000-02



Replacement tip  
Straight knife

No. 18000-03



Replacement tip  
Straight knob

No. 18000-04

Cautery kit

No. 18000-00

Neuro Punches

N.I.H. style neuro punches for punch removal of frozen brain microregions.



| ID (mm) | OD (mm) | Gauge | Length (cm) | Item         | Price |
|---------|---------|-------|-------------|--------------|-------|
| 0.31    | 0.61    | 24    | 4.2         | No. 18036-24 |       |
| 0.41    | 0.70    | 22    | 4.5         | No. 18036-22 |       |
| 0.69    | 1.00    | 19    | 4.5         | No. 18036-19 |       |

Absorption Spears and Triangles

These synthetic surgical sponges absorb fluids twice as fast as the best cotton sponges and have three times their fluid-holding capacity. They are made from strong, soft, lint-free biocompatible-proven material that is non-irritating to delicate tissue and leaves no fibrous residue that might cause wound contamination. The Absorption Spears are sterilized by radiation.

MOST POPULAR



Absorption Spears  
7 cm  
**Sterile**

Box of 200 spears  
No. 18105-01



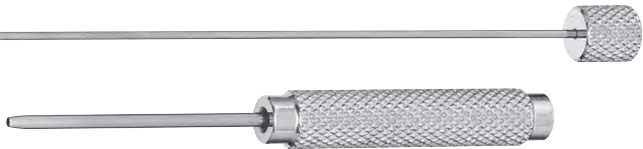
Absorption Triangles  
2 cm  
**Sterile**

Box of 500 triangles  
No. 18105-03

Sample Corers

For quantitative analysis. Comes with plunger.

8.5 cm



| ID (mm) | OD (mm) | Gauge | Item         | Price |
|---------|---------|-------|--------------|-------|
| 0.35    | 0.80    | 21    | No. 18035-35 |       |
| 0.50    | 1.00    | 19    | No. 18035-50 |       |
| 0.80    | 1.45    | 17    | No. 18035-80 |       |
| 1.00    | 1.80    | 15    | No. 18035-01 |       |
| 2.00    | 3.00    | 11    | No. 18035-02 |       |
| 3.00    | 4.00    | 8     | No. 18035-03 |       |
| 5.00    | 6.00    | 4     | No. 18035-05 |       |

Fiber Optic Swabs



Straight

15 cm  
Tip diameter: 2.5 mm  
Pack of 100

No. 18106-01

Micro Cleaning Brush



70 mm  
Nylon

Bag of 25

No. 18196-10

Miniature File Set

Comes with 8 different file profiles in a vinyl pouch.



10 cm  
Carbon Steel

No. 30076-14

4-in-1 Screwdriver

With 4 hardened, interchangeable blades stored in handle: 1.5, 2, 2.5, and 3 mm.



Handle 9.5 cm  
With attachment 11.5 cm  
Nickel handle

No. 30051-10

Ceramic Blade Cutter

Ceramic edge stays sharp 100 times longer than a steel edge. Rust and corrosion free. No trace metal contamination. **Autoclavable.**



Straight

13 cm  
Cutting Edge: 58 mm  
Ceramic blade  
with plastic handle

No. 10025-70

Replacement Blade

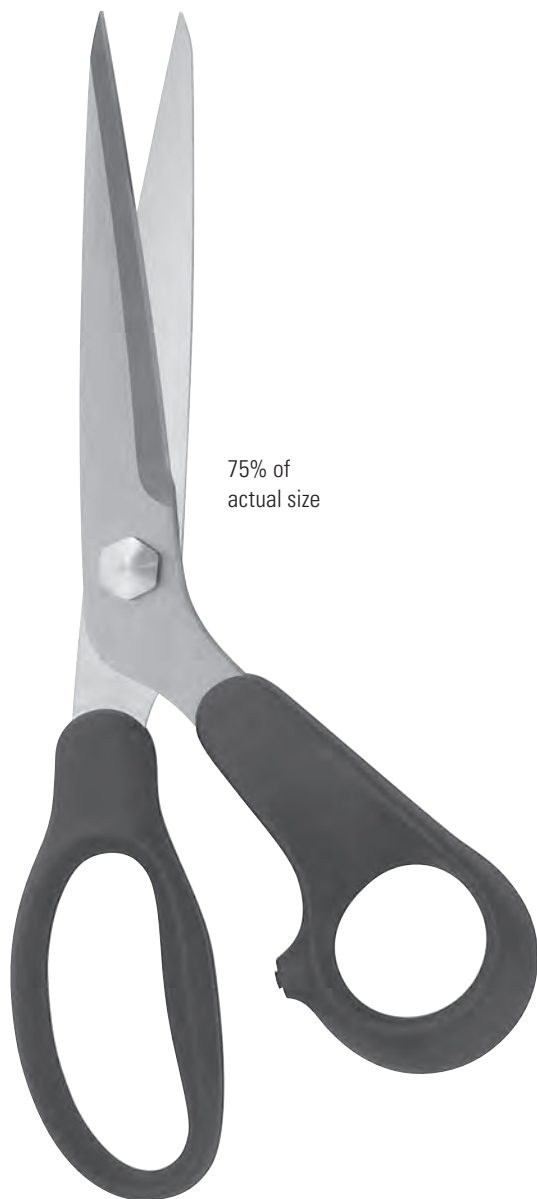
Straight  
Cutting Edge: 58 mm  
Ceramic Blade

No. 10025-71

## UTILITY SCISSORS

### Utility Scissors

These scissors are extremely hard (54 on the Rockwell scale). Useful for cutting tin or aluminum sheets, bone, plastics, etc. The strong, 3 mm thick blades are magnetic. The plastic handles are anatomically shaped.



75% of  
actual size

21 cm  
Stainless steel  
with plastic handle

No. 37500-00

### Universal Scissors

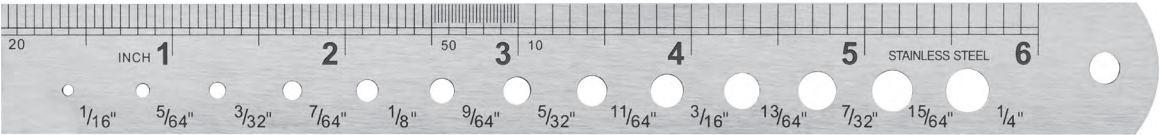
The scissor blades are made of high quality stainless-steel and guarantee a perfect cut. Handles are made of glass fiber reinforced polyamide.



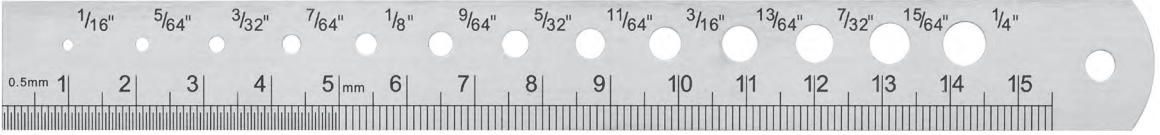
13 cm  
Stainless steel  
with plastic handle

No. 37500-05

Ruler with Gauge Measurements



Front



Back

90% of actual size

Stainless steel

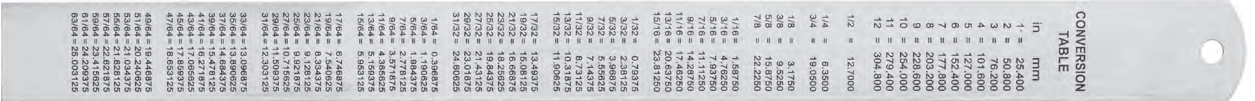
15 cm (6")

No. 30085-15

Ruler with Metric Conversion Table



Front



Back

50% of actual size

Stainless steel

30 cm (12")

No. 30085-30

Ruler Label

Used for stable measurements in all surgical platforms.

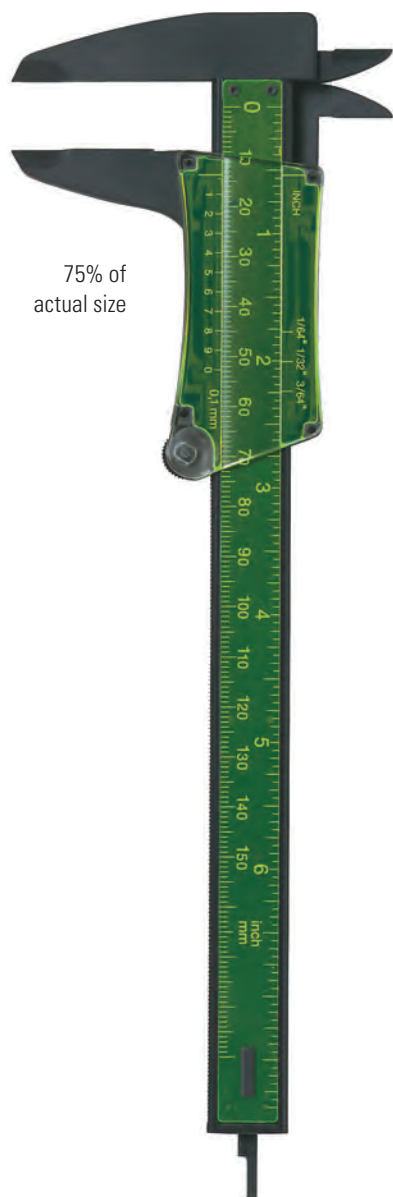
6 cm

Pkg. of 25 labels  
No. 29027-00



## Plastic Vernier Caliper

Tough polymer is unbreakable under normal conditions. Measures inside, outside, step and depth, metric and inch to 0.1 mm or 1/64". Maximum measurement: 153 mm.



75% of  
actual size

Plastic

21 cm

No. 30087-20

## Digital Electronic Caliper

Wide screen LED display with the ability to measure in millimeters, inches and fractions. Measures inside, outside, step and depth. Battery, spare battery and plastic storage case included.



70% of  
actual size

Stainless steel

23.5 cm

No. 30087-00

## Castroviejo Surgical Caliper

Used for precise measurement during surgery.



0-20 mm with 0.5 mm divisions  
Tip diameter: 0.5 mm

8.5 cm

No. 18000-35



### Magnifying Loupe with Micrometer and LED

High quality loupe features a removable micrometer and ultra-bright LED lights surrounding the circumference for a defined image and clear contrast.

Magnification: 10x  
Field of view: 30 mm  
Working distance: 10 mm  
(without scale)  
Illumination: Ultra-bright LED  
38 x 38 x 40 mm

No. 29026-10



### Stage Micrometers

These are highly accurate stage micrometers for use with transmitted light in both compound and stereo microscopes. Comes with a plastic case.

76 x 26 mm

10 mm with 100 divisions (0.1 mm)  
No. 29025-01

1 mm with 100 divisions (0.01 mm)  
No. 29025-02





## Electronic Clock / Triple Timer

Three activities can be timed up or down simultaneously or individually. Time can be displayed either in 12 or 24 hours and features a memory function. Maximum countdown time is 19 hours, 59 minutes, 59 seconds. Minimum time interval is 1 second. The timer housing includes a powerful magnet for mounting.

LCD display: 4.5 x 4.5 cm  
7 x 8.5 x 1.5 cm  
AAA battery included

No. 27000-01



## Gold Wire Contacts

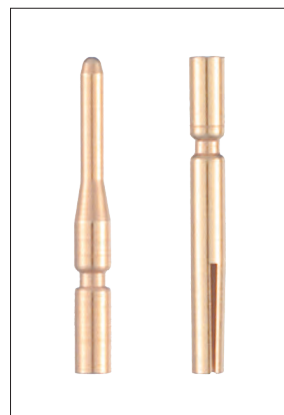
Matching pin and socket. Contacts are crimp terminated, but also can be used for solder connections.

Total length: 16 mm (when connected together)  
Diameter: 1.2 mm  
Opening for wire: 0.63 mm

Pkg. of 50 male contacts  
No. 19003-00

Pkg. of 50 female contacts  
No. 19003-01

Enlarged 225%



### Headband Magnifier

Precision ground and polished optical glass lenses. The padded headband is lightweight and fully adjustable. Can be worn with spectacles.



Headband magnifier shown with VisorLIGHT™ (sold separately).

Magnification: 2.5x  
Working distance: 200 mm (8")

No. 28030-02

Magnification: 2.75x  
Working distance: 150 mm (6")

No. 28030-03

Magnification: 3.5x  
Working distance: 100 mm (4")

No. 28030-04

### VisorLIGHT™

Small, portable light source with 26 cm cord for attachment to headband. It comes with a battery pack that holds two AA batteries. Completely adjustable. Replacement bulbs are available upon request.



No. 28030-10

## Interchangeable Magnifier Headset with LED

Economical and fully interchangeable headband magnifier with LED light.

Includes:

- Multiple Lens Magnifications (1.0x, 1.5x, 2.0x, 2.5x, 3.5x)
- LED Light Source
- Tilting Functionality
- Cushioned Nose Pads
- Adjustable Headband
- Interchangeable Lens Frames
- Requires 3 AAA Batteries (Batteries not included)

MOST  
POPULAR



Can be used with or without the adjustable head strap (included).



Magnification: 1x, 1.5x, 2x, 2.5x, and 3.5x

Field of view: Variable

Working distance: Variable

No. 28080-10

### Galilean Loupes

These loupes are lightweight and easy to use. Made from the finest optical coated lenses which deliver excellent clarity and high resolution. The loupes are mounted onto a strong yet flexible wraparound safety frame with a headband for stability and comfort. Ability to flip loupes up for use as safety glasses. Comes with mini screwdriver for fine adjustments, micro cloth, and storage case.



Magnification: 3x  
Working distance: 400 mm (16")  
Weight: 72 g

No. 28050-30

Magnification: 3.5x  
Working distance: 300 mm (12")  
Weight: 77 g

No. 28050-35

### Eschenbach Magnifier Spectacles

These magnifier spectacles allow full adjustments on almost all parts. Headband keeps spectacles steady and in place. Leather case and Headband included.



Magnification: 2.5x  
Working distance: 350 mm (14")  
Weight: 70 g  
Plastic frame reinforced  
with fiberglass

No. 28040-30

### Spectacles Headband

Compatible with the Eschenbach Max Detail Spectacles (Item No. 28030-20) and Eschenbach Magnifier Spectacles (Item No. 28040-30).



Material: Neoprene

No. 28080-90

## Eschenbach Max Detail Spectacles

These spectacles are portable, lightweight, and easily adjustable. Designed with frosted objective lens housing which eliminates distracting reflections. Bendable ear pieces for a secure, comfortable fit. Protective case is included.



Max Detail Spectacles shown with Eschenbach Clip-On LED Light (sold separately).

Magnification: 2x  
Field of view: 110 mm (4")  
Working distance: 400 mm (16")  
Weight: 49 g

No. 28030-20

## Eschenbach Clip-On LED Light

A compact and lightweight light source with two high-performance SMD LED's and a lens that concentrates the light producing a more powerful, bright and homogenous field of view. Light can be set high or low. Compatible with the Max Detail Spectacles and Headband Magnifiers. Comes with 3 AA batteries and storage case.



Gross Weight: 106 g (including batteries)

No. 28030-25



### Eschenbach Vario Flex with LED

The Vario LED Flex ensures ease and precision by its smooth flexible neck and tiltable magnifying lens. This magnifier's innovative features provide a spacious working platform suitable for any application. Mounting clamp provides uncompromised workspace due to its sturdy, slim design. The magnification lens is illuminated with shadow-free full or half ring optimum bright LEDs.

Magnification: 2.5x  
 Diopter: 6D  
 Lens size: 76 mm  
 Lens shape: Aspheric  
 Working distance: Variable  
 Lens material: PXM® lightweight lens with patented Ceratec® scratch-resistant coating  
 Illumination: Latest SMD LED technology  
 Power source: 120V & 220V

No. 28015-25



### Eschenbach Scribolux Magnifier

This magnifier provides an illuminated platform suitable for any working condition. The open design allows for a spacious working platform. Supplied in a microfiber pouch for protecting and cleaning the lens.

Magnification: 2.8x  
 Diopter: 7/11D  
 Lens size: 100 x 75 mm  
 Lens shape: Aspheric  
 Working distance: 75 mm (3")  
 Lens material: PXM® lightweight lens with patented Ceratec® scratch-resistant coating  
 Illumination: Latest SMD LED technology  
 Power source: 4 AA batteries (included)

No. 28020-28



### Optical Cleaning Kit

This convenient kit contains everything you need to clean lens surfaces safely. Perfect for microscopes, camera lenses, binoculars, telescopes, graphic art optics, and all other fragile lenses. Storage case included.

Kit includes:

- 1 Bottle of lens cleaner (30 ml)
- 1 Ultra soft duster brush
- 1 Cleaning cloth (20 x 20 cm)
- 3 Books of lens paper (25 sheets each)

No. 29000-10



### Lens Paper

This premium grade optical lens tissue is extremely soft and safe for any glass or plastic optical lens surface.

15 x 10 cm

Book of 50 sheets  
No. 29015-50



### Eschenbach mobilux® DIGITAL inspection

The reflection-free and high-contrast 4.3-inch display ensures relaxed work. The HD camera arranged centrally under the display enables easy orientation. A magnification of up to 15x can be selected continuously or in increments by touching the magnifying glass symbol. The integrated LED lighting offers great variability in lighting and exposure settings for a wide variety of applications. The mobilux® offers measurement and comparison functions via adjustable scales and templates as well as simultaneous comparison measurements of the target and actual status via a split screen on the PC.

With the photo function, the live image seen through the magnifying glass can be saved as a photo on an inserted SD card. The images can also be easily transferred to a computer via a USB connection. In addition, the USB connection to the computer enables the live image of the magnifying glass to be transferred to the PC monitor, so the mobilux® can also be used as a screen reader. The "mobilux® digital" program supplied must first be installed on the computer (Windows Vista, Windows 7, 8 or Windows 10).



Delivery incl. USB cable length 2m, SD memory card (incl. software), hand strap, manual, case for storage, calibration plate. Mains adapter for EU, GB, US, AUS included.

- Magnification: 4-15x
- Field of view: Variable
- Working distance: Variable
- Screen size: 11 cm (4.3")
- Screen resolution: 480 x 272 px
- User input: Touchscreen

No. 28070-50

### Eschenbach laboCOMFORT

With the laboCOMFORT, both hands remain free to work. The screen can be folded up when not in use. Various locking options for individual height adjustment of the magnifying screen. The headband magnifier can also be used by people who wear glasses.

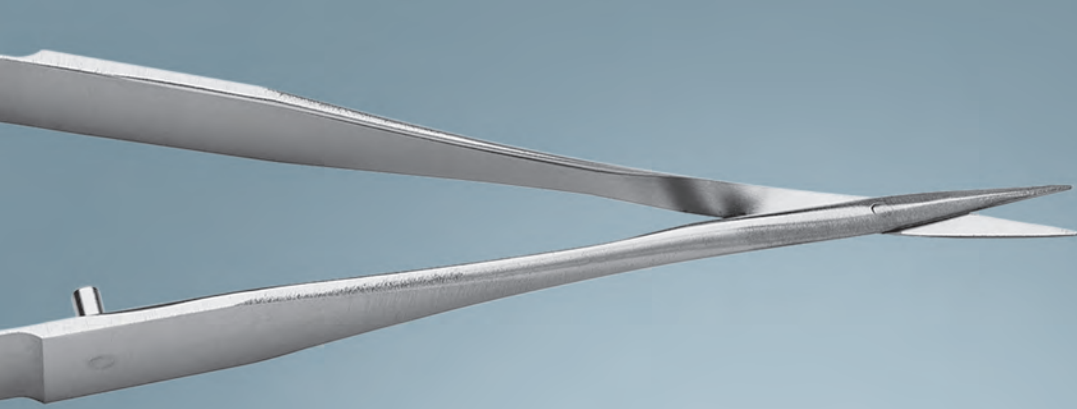


Can be used with the Eschenbach Clip-On LED light.

- Magnification: 3x
- Working distance: 130 mm (5")

No. 28030-13





## Student Instruments

|                                                                                     |       |           |
|-------------------------------------------------------------------------------------|-------|-----------|
| Scissors                                                                            | Pages | 186 – 191 |
| Cutter                                                                              | Page  | 191       |
| Scalpel Handles                                                                     | Page  | 192       |
| Forceps                                                                             | Pages | 193 – 198 |
| Hemostat, Artery Clamps, Pin & Needle Holders,<br>Retractor, Vessel Dilator & Clamp | Pages | 199 – 207 |





## FST Student Quality Instruments

One of the hallmarks of FST has always been to accurately assess the needs of our customers. We gather information not only from the lab, but from conferences, journals and researchers. Whether it is designing new tools or finding new applications for existing instruments, we believe our best information comes directly from you.

Our customers wanted reduced costs and quantity discounts without sacrificing the precision and quality inherent in German instruments. To meet their needs, we have developed a full line of "student" instruments. They were created for use in the classroom where students are learning proper instrument care.

Unlike our competitors, the quality of these instruments does not drop dramatically with the price. Our student line uses quality stainless steel and maintains the precision you expect from FST. In addition they carry our unconditional satisfaction guarantee while being offered at a significantly reduced price.

Not intended as a substitute for our highest quality instruments, the student line may require extra care as the alloys used are more susceptible to corrosion. All of our shipments come with an instruction pamphlet describing the use and care of surgical instruments. Visit our website at [finescience.com](http://finescience.com) for more information.

### Features:

- Economy
- Quantity discounts
- Quality
- Less hand finishing
- Less expensive alloys

## Vannas Spring Scissors

Ideal for introductory courses in microdissection. The manufacturer, material and general pattern are the same as our No. 15003-08 but with much of the costly hand finishing omitted.

**MOST  
POPULAR**

91500-09



**%  
DISCOUNT**

**Quantity discount  
for student  
instruments:**

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

STUDENT



Straight  
Sharp/Sharp

9 cm  
Cutting edge: 5 mm  
Tip Ø: 0.35 mm

No. 91500-09



Curved  
Sharp/Sharp

9 cm  
Cutting edge: 5 mm  
Tip Ø: 0.35 mm

No. 91501-09

## Fine Scissors

**MOST  
POPULAR**

91460-11



Straight  
Sharp/Sharp

11,5 cm  
Cutting edge: 20 mm

No. 91460-11



Curved  
Sharp/Sharp

11,5 cm  
Cutting edge: 20 mm

No. 91461-11

Straight  
Sharp/Sharp

12 cm  
Cutting edge: 20 mm

No. 91460-12

Curved  
Sharp/Sharp

12 cm  
Cutting edge: 20 mm

No. 91461-12

## Sanvenero



Straight  
Sharp/Sharp

14.5 cm  
Cutting edge: 30 mm

No. 91408-14

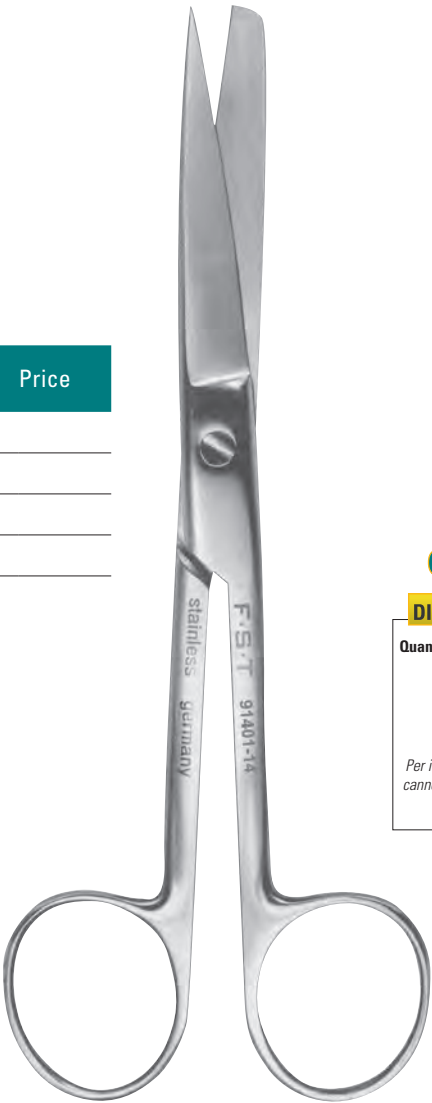
Surgical Scissors



| Length (cm) | Cutting edge (mm) | Straight Sharp/Sharp | Price | Straight Sharp/Blunt | Price | Straight Blunt/Blunt | Price |
|-------------|-------------------|----------------------|-------|----------------------|-------|----------------------|-------|
| 10.5        | 35                | No. 91402-10         |       | No. 91401-10         |       | No. 91400-10         |       |
| 12          | 40                | No. 91402-12         |       | No. 91401-12         |       | No. 91400-12         |       |
| 13          | 40                | No. 91402-13         |       | No. 91401-13         |       |                      |       |
| 14.5        | 45                | No. 91402-14         |       | No. 91401-14         |       | No. 91400-14         |       |



| Length (cm) | Cutting edge (mm) | Curved Sharp/Sharp | Price | Curved Sharp/Blunt | Price |
|-------------|-------------------|--------------------|-------|--------------------|-------|
| 11.5        | 40                | No. 91405-11       |       |                    |       |
| 12          | 40                |                    |       | No. 91404-12       |       |
| 13          | 40                | No. 91405-13       |       | No. 91404-13       |       |
| 14.5        | 45                | No. 91405-14       |       | No. 91404-14       |       |



**%  
DISCOUNT**

Quantity discount  
for student  
instruments:

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

STUDENT

## Wagner



Straight  
Sharp / Sharp

11.5 cm  
Cutting edge: 25 mm

No. 91468-12

## Spencer Ligature



Straight  
Sharp / Sharp

9 cm  
Cutting edge: 20 mm

No. 91476-09

**%**  
**DISCOUNT**

Quantity discount  
for student  
instruments:

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

STUDENT

Lister Scissors

Longer blunt blade prevents damaging tissue underneath skin without losing the cutting line.



Angled to side  
Blunt/Blunt

14 cm  
Cutting edge: 35 mm

No. 91413-14



Angled to side  
Blunt/Blunt

18 cm  
Cutting edge: 45 mm

No. 91413-18



Angled to side  
Blunt/Blunt

20 cm  
Cutting edge: 50 mm

No. 91413-20

Mayo



90% of  
actual size



Curved  
Sharp/Blunt

14.5 cm  
Cutting edge: 50 mm

No. 91409-15



Straight  
Blunt/Blunt

17 cm  
Cutting edge: 50 mm

No. 91410-17



Curved  
Blunt/Blunt

17 cm  
Cutting edge: 50 mm

No. 91411-17

%  
DISCOUNT

Quantity discount  
for student  
instruments:

5-9 = 5 %  
10+ = 10 %

Per item, selection  
cannot be assorted  
for discount.

STUDENT

## Metzenbaum Baby



Curved  
Blunt/Blunt

14.5 cm  
Cutting edge: 30 mm

No. 91419-14

## Metzenbaum



Straight  
Blunt/Blunt

14.5 cm  
Cutting edge: 35 mm

No. 91416-14



Curved  
Blunt/Blunt

18 cm  
Cutting edge: 35 mm

No. 91417-18

**%**  
**DISCOUNT**

**Quantity discount  
for student  
instruments:**

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

STUDENT

**Heavy Scissors**

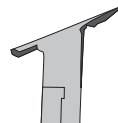
Curved  
Heavy Blades  
Sharp/Sharp  
10.5 cm  
Cutting edge: 30 mm  
No. 91405-10

**Bone Scissors**

For cutting fine bone.



Curved  
9 cm  
Cutting edge: 9 mm  
No. 91604-09

**Bone Cutter**

Angled 30°  
11 cm  
Cutting edge: 19.5 mm  
Blue Plastic Handle  
No. 91601-11



**%  
DISCOUNT**

Quantity discount  
for student  
instruments:

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

STUDENT



### Scalpel Handle #4



For scalpel blades,  
see page 59.

#4

13 cm

No. 91004-13

### Standard Scalpel Handle #3



For scalpel blades,  
see page 60.

#3

12 cm

No. 91003-12

%

DISCOUNT

Quantity discount  
for student  
instruments:

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

STUDENT

## Dumont #5

MOST  
POPULAR



Standard tip  
Straight

11 cm  
Inox  
0.1 x 0.06 mm

No. 91150-20

## Dumont #7

MOST  
POPULAR



Standard tip  
Curved

11 cm  
Inox  
0.17 x 0.1 mm

No. 91197-00

%  
DISCOUNT

Quantity discount  
for student  
instruments:

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

STUDENT

Fine Forceps Straight



Straight

11 cm  
0.2 x 0.1 mm

No. 91115-10

Fine Forceps Broad Shanks



Broad Shanks

12 cm  
0.2 x 0.2 mm

No. 91113-10

Fine Forceps Curved



Curved

12 cm  
0.2 x 0.2 mm

No. 91117-10

Fine Forceps Angled



Angled

11 cm  
0.2 x 0.2 mm

No. 91110-10

%

DISCOUNT

Quantity discount  
for student  
instruments:

5-9 = 5%  
10+ = 10%

Per item, selection  
cannot be assorted  
for discount.

STUDENT

## Feilchenfeld


  
SERRATED


Straight

9.5 cm

Tip Ø: 0.75 mm

No. 91139-09



Straight

11.5 cm

Tip Ø: 1 mm

No. 91139-12

## Splinter Forceps


  
SERRATED
Straight  
Sharp

10.5 cm

Tip Ø: 0.3 mm

No. 91156-11


  
DISCOUNT
Quantity discount  
for student  
instruments:5-9 = 5 %  
10+ = 10 %*Per item, selection  
cannot be assorted  
for discount.*

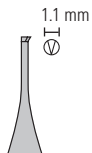
STUDENT

**Micro Adson**

80% of  
actual size



Serrated  
12 cm  
Tip width: 0.7 mm  
No. 91118-12



1x2 teeth  
12 cm  
Tip width: 1.1 mm  
No. 91119-12

**Adson**

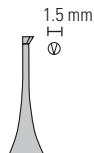
Wide, strong grip with narrow tips.



80% of  
actual size



Serrated  
12 cm  
Tip width: 1.5 mm  
No. 91106-12



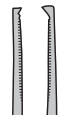
1x2 teeth  
12 cm  
Tip width: 1.5 mm  
No. 91127-12

**Adson-Brown**

Shark teeth  
12 cm  
Tip width: 2.5 mm  
No. 91162-12

**Adson  
with Cross Serrations**

1x2 teeth  
Cross-serrations  
12 cm  
Tip width: 1.3 mm  
No. 91427-12



**%  
DISCOUNT**

Quantity discount  
for student  
instruments:

5-9 = 5%  
10+ = 10%

Per item, selection  
cannot be assorted  
for discount.

STUDENT

**Standard Pattern**

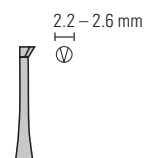
Broad pattern with strong spring action.

**MOST  
POPULAR**

91100-12

**Anatomical Standard Pattern**Straight  
Serrated

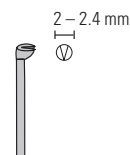
| Tip width<br>(mm) | Length<br>(cm) | Item         | Price |
|-------------------|----------------|--------------|-------|
| 2.5               | 11.5           | No. 91100-12 |       |
| 2.7               | 13             | No. 91100-13 |       |
| 3                 | 14.5           | No. 91100-14 |       |
| 3.5               | 16             | No. 91100-16 |       |
| 4                 | 17             | No. 91100-17 |       |

**Surgical Standard Pattern**Straight  
1x2 teeth

| Tip width<br>(mm) | Length<br>(cm) | Item         | Price |
|-------------------|----------------|--------------|-------|
| 2.2               | 12             | No. 91121-12 |       |
| 2.4               | 13             | No. 91121-13 |       |
| 2.6               | 14.5           | No. 91121-14 |       |
| 2.8               | 15.5           | No. 91121-15 |       |
| 3                 | 16             | No. 91121-16 |       |
| 3.5               | 18             | No. 91121-18 |       |
| 4                 | 20             | No. 91121-20 |       |
| 4.5               | 25             | No. 91121-25 |       |

**%  
DISCOUNT****Quantity discount  
for student  
instruments:**5-9 = 5 %  
10+ = 10 %*Per item, selection  
cannot be assorted  
for discount.***Anatomical Narrow Pattern**Straight  
Serrated

| Tip width<br>(mm) | Length<br>(cm) | Item         | Price |
|-------------------|----------------|--------------|-------|
| 1.5               | 11.5           | No. 91102-12 |       |
| 2.1               | 13             | No. 91102-13 |       |
| 2.2               | 14.5           | No. 91102-14 |       |
| 2.3               | 16             | No. 91102-16 |       |

**Surgical Narrow Pattern**Straight  
1x2 teeth

| Tip width<br>(mm) | Length<br>(cm) | Item         | Price |
|-------------------|----------------|--------------|-------|
| 2                 | 11.5           | No. 91123-12 |       |
| 2.2               | 14.5           | No. 91123-14 |       |
| 2.4               | 16             | No. 91123-16 |       |

STUDENT

## Semken


  
**SERRATED**


Straight

11.5 cm

Tip width: 1.2 mm

No. 91108-12

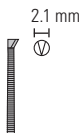
Straight

14.5 cm

Tip width: 2.2 mm

No. 91108-14

## Gillies

80% of  
actual size

1x2 teeth

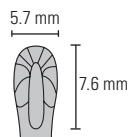
Cross-Serrated

15.5 cm

Tip width: 2.1 mm

No. 91128-15

## Russian



15 cm

Tip dimensions: 7.6 x 5.7 mm

No. 91126-15

## McIndoe


  
**SERRATED**


Serrated

15 cm

Tip width: 1.2 mm

No. 91138-15

**%**  
**DISCOUNT**

Quantity discount  
for student  
instruments:

5-9 = 5%  
10+ = 10%

Per item, selection  
cannot be assorted  
for discount.

STUDENT

Halsted-Mosquito

Hartmann



**%  
DISCOUNT**

Quantity discount  
for student  
instruments:

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

STUDENT



Straight  
Serrated

12.5 cm  
Tip width: 1.4 mm

No. 91308-12



Curved  
Serrated

12.5 cm  
Tip width: 1.4 mm

No. 91309-12



Curved  
1x2 teeth and  
Serrated

12 cm  
Tip width: 1.9 mm

No. 91331-12



Curved  
Serrated

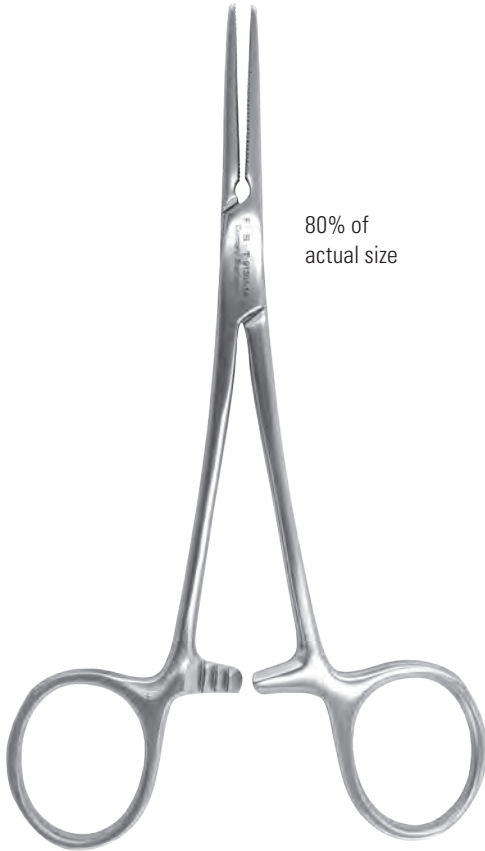
10 cm  
Tip width: 1.6 mm

No. 91303-10

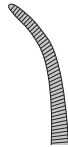


## Crile

## Kelly

80% of  
actual size**%****DISCOUNT****Quantity discount  
for student  
instruments:**5-9 = 5%  
10+ = 10%*Per item, selection  
cannot be assorted  
for discount.*Straight  
Serrated14 cm  
Tip width: 1.3 mm

No. 91304-14

Curved  
Serrated14 cm  
Tip width: 1.3 mm

No. 91305-14

Straight  
Serrated14.5 cm  
Tip width: 1.6 mm

No. 91318-14

Curved  
Serrated14.5 cm  
Tip width: 1.8 mm

No. 91319-14

Rochester-Pean

Pean



80% of  
actual size



Straight  
Serrated

14 cm  
Tip width: 2 mm

No. 91316-14



Curved  
Serrated

14 cm  
Tip width: 2 mm

No. 91317-14

Straight  
Serrated

16 cm  
Tip width: 2.5 mm

No. 91316-16

Curved  
Serrated

16 cm  
Tip width: 2.5 mm

No. 91317-16



Straight  
Serrated  
Narrow

14 cm  
Tip width: 2 mm

No. 91322-14



Curved  
Serrated  
Narrow

14 cm  
Tip width: 2 mm

No. 91323-14

%  
DISCOUNT

Quantity discount  
for student  
instruments:

5-9 = 5 %  
10+ = 10 %

Per item, selection  
cannot be assorted  
for discount.

STUDENT

## Ochsner-Kocher

## Kocher

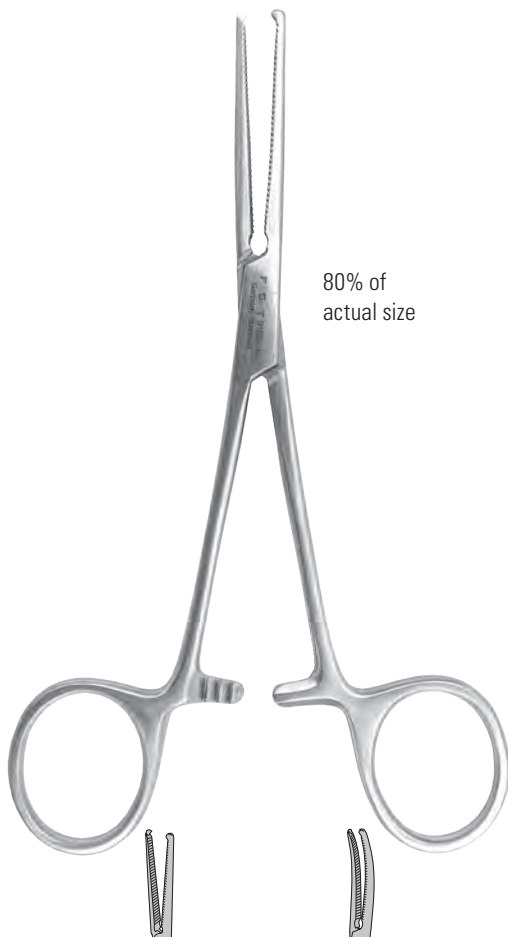
80% of  
actual size

**%  
DISCOUNT**

Quantity discount  
for student  
instruments:

5-9 = 5%  
10+ = 10%

Per item, selection  
cannot be assorted  
for discount.



Straight  
Serrated  
1x2 teeth

14 cm  
Tip width: 2.2 mm

No. 91328-14

Curved  
Serrated  
1x2 teeth

14 cm  
Tip width: 2.2 mm

No. 91329-14

Straight  
Serrated  
1x2 teeth

16 cm  
Tip width: 3 mm

No. 91328-16

Curved  
Serrated  
1x2 teeth

16 cm  
Tip width: 3 mm

No. 91329-16



Straight  
Serrated  
Narrow 1x2 teeth

14 cm  
Tip width: 2.2 mm

No. 91330-14

Curved  
Serrated  
Narrow 1x2 teeth

14 cm  
Tip width: 2.2 mm

No. 91331-14

## Backhaus Towel Clamp



9 cm

No. 91195-09



11 cm

No. 91195-11



13 cm

No. 91195-13

## Tohoku Towel Clamp



Serrated

10 cm

Tip width: 2.4 mm

No. 91194-10



Serrated

13 cm

Tip width: 2.8 mm

No. 91194-13

**%**  
**DISCOUNT**

Quantity discount  
for student  
instruments:

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

STUDENT

## Lorna Towel Clamp

## Babcock



Serrated  
13 cm  
Tip width: 7 mm  
No. 91196-13



Serrated  
16 cm  
Tip width: 6 mm  
No. 91393-16

**%  
DISCOUNT**

**Quantity discount  
for student  
instruments:**

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

STUDENT

## Allis Clamp



60% of  
actual size

5x6 Teeth  
15 cm  
Tip Width: 6 mm  
No. 91191-15

## Hose Clamp



60% of  
actual size

Cross-Serrated  
15 cm  
Tip Width: 4 mm  
No. 91198-15

## Lister Sine Clamp



60% of  
actual size

Serrated  
16 cm  
Tip Width: 3 mm  
No. 91199-16

**%  
DISCOUNT**

Quantity discount  
for student  
instruments:

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

STUDENT

## Pin Holder



## Halsey

**MOST  
POPULAR**



80% of  
actual size

## Mayo-Hegar



80% of  
actual size

**%**

**DISCOUNT**

**Quantity discount  
for student  
instruments:**

5-9 = 5 %  
10+ = 10 %

*Per item, selection  
cannot be assorted  
for discount.*

For pins, see  
page 115.

For suture needles,  
see page 122 & 123.

For suture needles,  
see page 122 & 123.



Straight

13 cm  
Tip width: 1.5 mm

clamping length: 18 mm  
with lock  
without scissors

No. 91201-13



Straight

16 cm  
Tip width: 2.6 mm

clamping length: 21 mm  
with lock  
without scissors

No. 91204-16

Nickel-plated

7.5 cm

Jaw opening: 0-1 mm

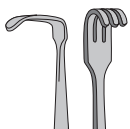
No. 91606-07

STUDENT

# Senn-Miller

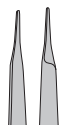


16 cm  
3 sharp teeth 7 x 8 mm  
1 blunt tooth 18 x 6 mm  
No. 91790-16



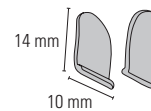
16 cm  
3 blunt teeth 7 x 8 mm  
1 blunt tooth 18 x 6 mm  
No. 91791-16

# Vessel Dilator



Angled 10°  
11 cm  
Tip diameter: 0.3 mm  
No. 91815-11

# Spring-Loaded Retractor



Curved atraumatic blades  
8.5 cm  
Maximum spread: 3 cm  
Blade dimensions: 14 x 10 mm  
No. 91706-05

# Barraquer



3 cm  
Maximum spread: 1.1 cm  
Tip dimensions: 5 x 7 mm  
No. 91700-03

# Dieffenbach



Straight  
35 mm  
Strong pressure  
No. 91850-35

**%**  
**DISCOUNT**

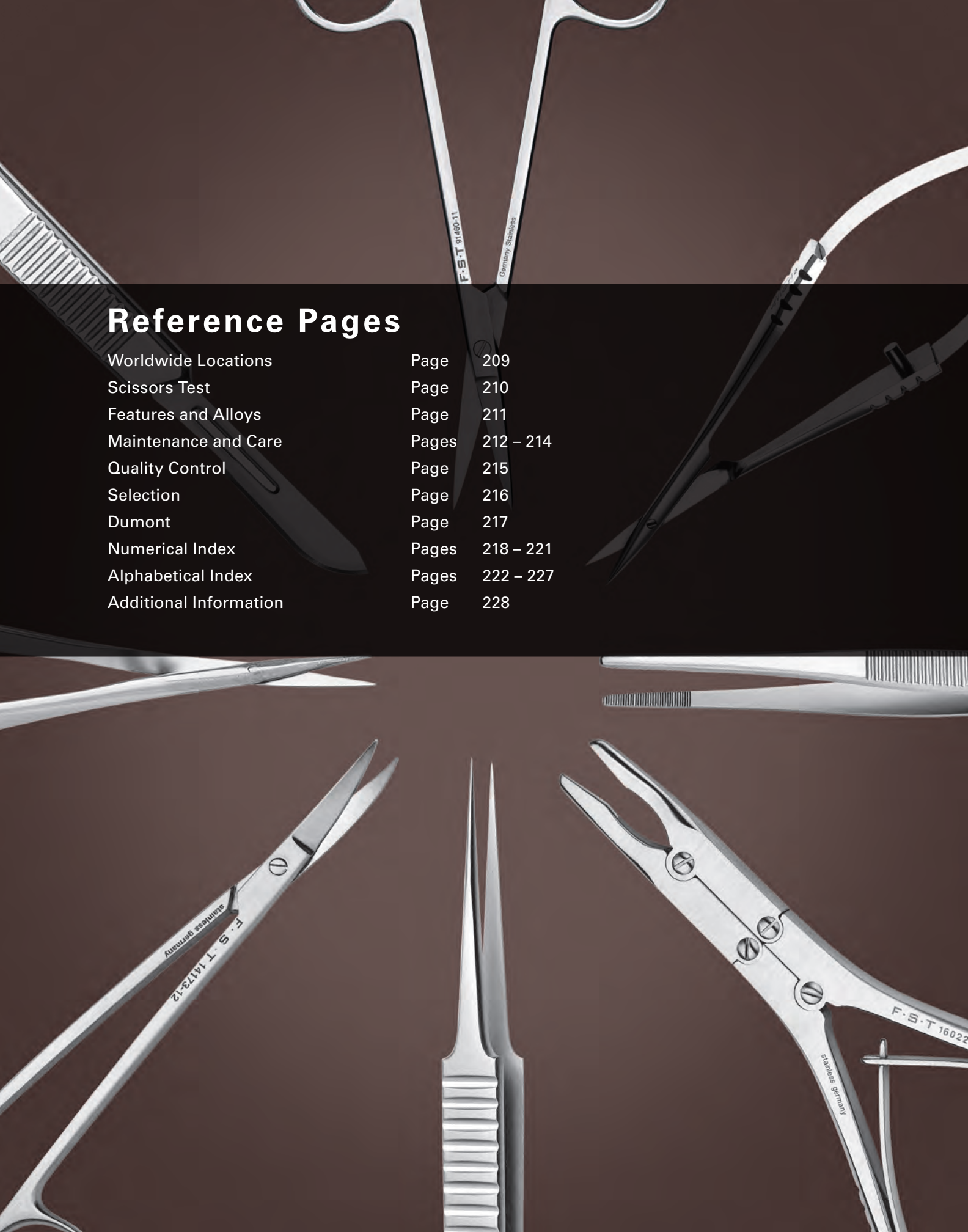
Quantity discount  
for student  
instruments:

5-9 = 5 %  
10+ = 10 %

Per item, selection  
cannot be assorted  
for discount.

STUDENT





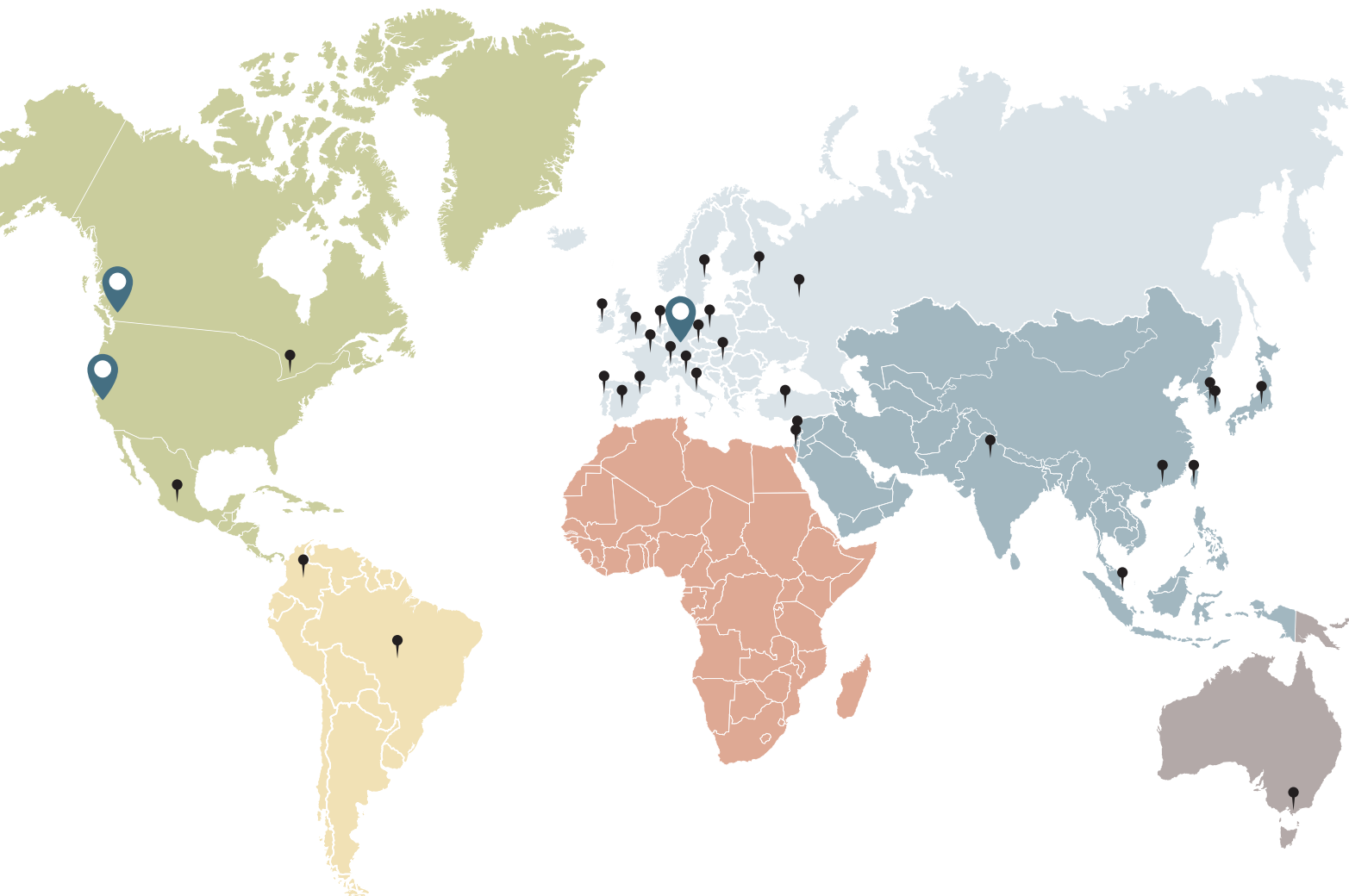
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# Fine Science Tools Around the World

## Commitment to excellence

For decades, we've demonstrated our commitment to excellence with genuine quality and a 100% satisfaction guarantee. As a result, our products continue to be the preferred instruments among scientists and biomedical researchers worldwide.



We have offices and dealers throughout the world  
and have been shipping globally since 1974.



### Offices

[finescience.com](http://finescience.com)  
[finescience.de](http://finescience.de)  
[finescience.ca](http://finescience.ca)

USA  
Europe  
Canada



### Dealers

To see a complete list of Fine Science Tools  
dealers, please visit us at  
[finescience.com/dealers](http://finescience.com/dealers)

Does paying more for a pair of scissors really buy more value and a longer cutting life?

Pictured below is a scissors testing device used to compare various alloys and cutting edge styles. The scissors repeatedly cut through a continuous feed of cotton cloth, and a counter keeps track of the number of cuts made to evaluate when the scissors begin to show a decrease in cutting quality.

The results verify that the addition of various features dramatically increases the cutting life of the scissors. Most notably, the cutting life is more than doubled with the addition of ToughCut blades to stainless steel, and over six times longer with CeramaCut blades.

See the chart below for a comparison of four different scissors sold by FST.



*The cutting life is more than doubled with the addition of ToughCut blades to stainless steel, and over six times longer with CeramaCut blades.*

| Alloy/Material                                            | Lasts longer than stainless steel by: |
|-----------------------------------------------------------|---------------------------------------|
| Tungsten Carbide                                          | 1.9x                                  |
| Stainless Steel with ToughCut                             | 2.3x                                  |
| Tungsten Carbide with ToughCut                            | 4.1x                                  |
| CeramaCut (Ceramic Coated Tungsten Carbide with ToughCut) | 6.6x                                  |

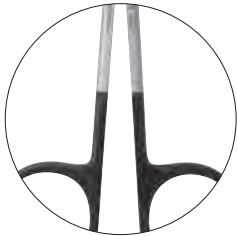
See page 211 for more information on ToughCut, Tungsten Carbide and CeramaCut.



**Tungsten Carbide Instruments**

- Golden handles (short gold plating)
- Last approx. 1.9x longer than stainless steel
- Is welded onto the cutting edges of scissors or tips of forceps and needles holders
- Available instruments: bone cutters, scissors, forceps, needles, needle holders, burrs

Look for this symbol



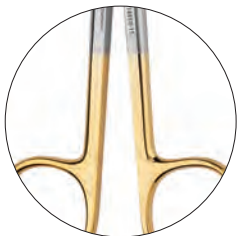
**ToughCut® Scissors**

- Black handles
- Last approx. 2.3x longer than stainless steel
- One cutting edge has micro serrations to minimize tissue slippage
- One cutting edge has increased sharpness (cutting edge with a 30° instead of 15° angle)

Look for this symbol



ToughCut is a registered trademark of Fine Science Tools (USA) Inc.



**Tungsten Carbide & ToughCut® Scissors**

- Golden handles (long gold plating)
- Last approx. 4.1x longer than stainless steel
- One cutting edge has micro serrations to minimize tissue slippage
- One cutting edge has increased sharpness (cutting edge with a 30° instead of 15° angle)

Look for this symbol



**CeramaCut® Scissors**

- Golden handles and black coating
- Last approx. 6.6x longer than stainless steel
- Cutting edges with Tungsten Carbide and Tough Cut plus ceramic coating
- Ceramic is one of the hardest materials on earth
- Reduced glare

Look for this symbol



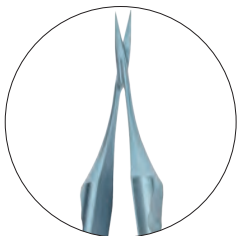
CeramaCut is a registered trademark of Fine Science Tools (USA) Inc.



**Ceramic Instruments**

- Ceramic coating
- Last approx. 2.3x longer than stainless steel
- Ceramic is one of the hardest materials on earth
- Reduced glare
- Available instruments: Dumont forceps and spring scissors

Look for this symbol



**Titanium Instruments**

- Approx. 40% lighter than stainless steel
- Softer alloy than stainless steel
- Corrosion resistance (cannot rust)
- Non-Magnetic
- High temperature resistance up to 440°C / 824°F
- Available instruments: scissors, forceps, probes, hooks, spatula, vascular clamps

Look for this symbol





# Maintenance and Care

Proper care of your surgical instruments will improve their longevity and function. Below are different cleaning, sterilization, and maintenance processes to guide you through your techniques.

## General

Guidelines to extend the life of your surgical instruments.

- Clean and thoroughly dry your instruments as soon as possible after each use, paying special attention to joints, hinges, and anywhere there is metal to metal contact.
- Handle your instruments delicately and with care.
- Use your instruments for their intended purpose.
- Store your instruments with tip protectors, and always place them so that they do not touch each other.



### Cleaning

Fine surgical instruments should be cleaned immediately after use. Blood or saline solutions left on instruments for any length of time can quickly start corrosive action. Time, temperature, and agitation play important roles in the cleaning process. Time affects the efficiency of cleaning solutions as most are effective after a certain time period. Higher temperature cleaning solutions result in better cleaning. During manual or ultrasonic cleaning it is helpful to loosen any surgical reminisce. Before any of the below procedures, rinse your instruments under warm running water to remove all blood and tissue. Instruments can be cleaned manually or ultrasonically, but always:

- ⚠ Use a neutral pH (pH 7) cleaning solution.
- ⚠ Clean instruments in the open position to ensure a thorough and effective cleaning process.
- ⚠ Use soft textile or paper cloths, soft plastic brushes made of nylon, or water spray guns.
- ⚠ Do NOT use steel wool, wire brushes, or scouring pads as these are abrasive to the instruments.



### Manual Cleaning

- ⚠ Make sure all instruments are visibly clean and free from stains, wiping them carefully to remove all blood and tissue matter.
- ⚠ Rinse instruments thoroughly with distilled water, paying close attention to joints and hinges as these areas can accumulate unwanted material.
- ⚠ Air dry your instruments completely and use a can of compressed air to blow out any water at the joints and hinges. Then store them only in clean and dry environments.

Ultrasonic Cleaning

Ultrasonic cleaning is the most effective cleaning method. The vibrating sound waves create micron-sized bubbles in the solution that grow with the alternating pressure. When the bubbles reach a particular size, they collapse creating a force that dislodges dirt and particles, even in the smallest of crevices.

-  NOT recommended for delicate and micro instruments.
-  Follow the manufacturer’s guidelines for specific instructions and cleaning cycle times. Instruments should be processed for the full recommended cycle time.
- Place instruments in the open position in the ultrasonic cleaner.
- 
  - Do NOT allow instruments with sharp blades to touch other instruments.
  - Do NOT place dissimilar metals (stainless, copper, chrome plated) in the same cleaning cycle.
  - Make sure all instruments are completely submerged.
-  After the ultrasonic cleaning cycle is complete, rinse instruments thoroughly to remove all ultrasonic cleaning solution.
-  Dry instruments thoroughly with a clean towel.
-  Use a spray lubricant in the hinges to minimize the risk of corrosion and maintain functionality.



Sterilization

It is important that instruments are free from all traces of organic or other matter prior to sterilization.

Steam Sterilization/Autoclaving

The autoclave process utilizes moist heat (or steam) under pressure for sterilization. The steam used must be from distilled water and free of all impurities.

-  Lubricate all instruments that have any metal to metal interaction such as; scissors, rongeurs, needle holders, hemostats, and retractors. Do NOT use WD-40 or other industrial lubricants.
- Instruments may be autoclaved individually or in sets.
- 
  - Individual instruments: Disposable wraps or sterilization pouches are ideal. Make sure the pouch size is sufficient for the instrument to be in an open (unlocked) position.
  - Instrument sets: Open and unlock all instruments. Place the heavier instruments on the bottom of the set when two layers are needed.
-  Do NOT lock instruments during autoclaving. This will prevent the steam from reaching and sterilizing the metal to metal surfaces, and heat expansion during autoclaving can cause cracks in the hinge areas.
-  Do NOT over load the autoclave chamber as this may hinder steam penetration.
-  Place a towel on the bottom of the pan to absorb excess moisture during autoclaving. Make sure the towel has no detergent residue and is pH neutral if immersed in water.
-  At the end of the autoclave cycle (before the drying cycle) unlock the autoclave door and open it slightly. Run the dry cycle for the recommended time period by the autoclave manufacturer.

Please note: If the autoclave door is fully opened before the drying cycle, cold air will rush into the chamber, which can cause condensation on the instruments. This will result in water stains on the instruments.





### Hot Bead Sterilization

Recommended for speed and convenience when instrument tips or blade sterilization is required. The Hot Bead Sterilizer does not use dangerous gases, flames, or chemicals. Highlights:

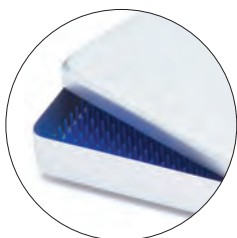
- ⚠ Bench top set up.
- ⚠ Only 20 seconds of contact required to ensure your instruments are free of pathogens and microbial contaminants.
- ⚠ Beads reach temperature of 240° - 270°C (464° - 518°F) within 15-20 minutes heating time.

Please see page 158 – 159 for more information on the FST Hot Bead Sterilizers.



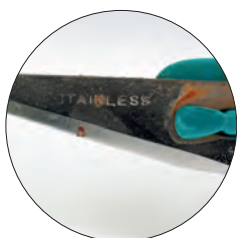
### Ethylene Oxide (ETO) Sterilization

This method is recommended for instruments that will not tolerate high temperatures or moisture (e.g., catheters, cannulae, etc.). This is a process consisting of 4 primary variables; gas concentration, humidity, temperature and time. Sterilization pouches and wraps available, see pages 157 and 160.



### Storage

Surgical instruments should be properly stored in a clean and dry environment. It is highly recommended to use tip protectors and instrument cases to avoid possible damage to your instruments. Instrument tip protectors are available, see page 156. Instrument cases are available, see pages 162 – 165.



### Oxidation (Rust)

All FST stainless steel surgical instruments are manufactured from medical grade stainless steel under strict European standards. It is very important to properly take care of your instruments to extend their lifespan.

Although stainless steel is corrosive resistant, it can still rust or stain if handled improperly. Under unfavorable conditions instruments may oxidize because stainless steel that is exposed to physical, thermal, or chemical manipulations may lose some of its stainless properties.

## Quality Control

The high quality of Fine Science Tools surgical and microsurgical instruments is the result of our relentless attention to detail.

Almost every instrument we sell is manufactured by skilled European craftsmen, designed to exacting specifications made from the finest German stainless steel alloys, and forged from the strongest, lightest materials available, and tested to ensure precision performance and ergonomics.

We are dedicated to quality control, with technicians in our German office inspecting most FST instruments. Aside from checking instrument dimensions and specifications, we thoroughly inspect tip sharpness, cutting edges, springs, joints, and other various components. Only after passing our detailed inspections, instruments are approved and sealed with our "FST Inspected" sticker.

We are proud to guarantee all of our products with your 100% satisfaction. If, for any reason, you are not completely satisfied with your purchase, you may return it for a full refund.





## We Proudly Stock



Fine Science Tools is proud to offer a large selection of left-handed surgical instruments to the research community. To find our left-handed instruments in this catalog, look for the “left-handed” icon on the pages below.

Scissors: pages 17, 29

Hemostatic Forceps: page 99

Needle Holders: pages 119 – 120

Ligation Aid: page 143



FST features a selection of scissors with larger than normal finger loops. Most of these loops are easily adjustable to fit larger fingers more comfortably. To find our large loop scissors please look for the “large loop” icon on the pages below.

Scissors: pages 19, 28 and 31



Fine Science Tools has noted which items are most frequently purchased for use in a variety of surgical procedures. To find our most popular items, look for the “most popular” icon throughout the catalog.



Fine Science Tools offers a wide selection of the latest and most popular Dumont forceps. Hand crafted in Switzerland for more than a century, these forceps are known for their consistent and uncompromised fineness. Dumont forceps come in a wide array of styles and alloys. On page 217, you will find detailed descriptions to help guide you in choosing the right Dumont forceps best suited for your needs.



Moria of France is one of the most respected and well known ophthalmic instrument manufacturers in the world, offering some of the finest surgical instruments in the industry for almost 200 years.

Only quality Swedish and German stainless alloys are selected; and many hours of highly skilled labor are put into the manufacturing process, which includes hand crafted sharpening, balancing, and polishing, often done under 40x magnification. Moria's product line includes scissors, spring scissors, forceps, spoons, vessel clamps, and more.



This Swiss manufacturer has established itself as one of the premier suppliers of superb microsurgical instruments worldwide. Unique designs, precise instrument balance, and optimum angles gives S&T instruments the “right feel” which is important for all procedures. S&T's product line includes forceps, needle holders, scissors, vessel clamps, sutures, vessel cannulation forceps, vessel dilators, and more.

## Finding the Dumont forceps best suited for your needs:



| Alloys          | Hardness   | Magnetic | Temperature resistance | Autoclavable | Advantages                                                                                                                                                                                                                                              |
|-----------------|------------|----------|------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Titanium</b> | Least Hard | No       | Up to 430° C           | Yes          | Resistant to corrosion from nitric acid, chloride, and salt water. Titanium is 40% lighter than stainless steel.                                                                                                                                        |
| <b>Dumoxel</b>  | Hard       | No       | 400° C                 | Yes          | The most popular alloy available for Dumont forceps offers the best resistance to corrosion, sulphuric environments, hydrochloric acids, and all other mineral and organic acids.                                                                       |
| <b>Inox</b>     | Harder     | Yes      | 400° C                 | Yes          | Available for most Dumont forceps. Contains chromium added to carbon steel, which results in some loss of hardness but offers good stainless qualities and resistance to corrosion.                                                                     |
| <b>Dumostar</b> | Harder     | No       | 500° C                 | Yes          | More durable and corrosion resistant than the best stainless steels. Highly resistant to mineral and organic acids, and salt water. Dumostar lasts an average of four times longer than Dumoxel and Inox. Most cost effective alloy for laboratory use. |
| <b>Carbon</b>   | Hardest    | Yes      | N/A                    | No           | Extremely hard; ensuring strong tips. Easily stains and rusts without proper care. <b>Carbon cannot be immersed in a water bath or sterilized.</b>                                                                                                      |

**Tip profiles:** Dimensions vary. See each style for specific dimensions (width x thickness).

|                        |                                                                                                                                                                                      |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Standard</b>        | Made for high precision and consistently precise work under a microscope.                                                                                                            |
| <b>Biology</b>         | Twice as fine as "Standard Tips." Especially produced for high precision laboratory work under the microscope.                                                                       |
| <b>Super Fine Tips</b> | Four times finer than the "Standard Tips." These tips are extremely delicate for the finest work under the microscope. Extra care is needed for these tips as they are very fragile. |

### Styles

|                |                                                                                                                                                                 |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>#2</b>      | Straight forceps with wide yet fine tips, referred to as Mouse Laminectomy Forceps because of their popularity in breaking off delicate bone from mouse skulls. |
| #2AP           | Epoxy coated with flat wide blunt tips.                                                                                                                         |
| <b>#3</b>      | Long straight forceps with coarse tips. Popular in low magnification procedures.                                                                                |
| #3C            | Shorter version of #3.                                                                                                                                          |
| <b>#4</b>      | Similar to the #5 but with broader shanks and stronger tips.                                                                                                    |
| <b>#5</b>      | Most popular style of Dumont straight forceps with fine tips which come in several styles.                                                                      |
| #55            | Similar to the #5 but with lighter shanks, giving the forceps a lighter spring action.                                                                          |
| #5CO           | Similar to the #55 but with even finer shanks producing the lightest spring action and longest meeting surface of any Dumont style.                             |
| #5L            | Medical #5 forceps with slide sleeve for a secure hold and retention.                                                                                           |
| #5SF           | The finest tips ever produced by Dumont.                                                                                                                        |
| #5XL           | Extra Long #5 forceps.                                                                                                                                          |
| #5/45          | Tips angled at 45°.                                                                                                                                             |
| #5/45C         | Designed to pick up cover slips from multi-well plates.                                                                                                         |
| #5/90          | Tips angled at 90°.                                                                                                                                             |
| #5AC           | Self-closing Anti-Capillary forceps.                                                                                                                            |
| <b>#6</b>      | Sharply angled, broad tips.                                                                                                                                     |
| <b>#7</b>      | Most popular style of Dumont curved forceps with fine tips which come in several styles.                                                                        |
| #7B            | Curved serrated tips.                                                                                                                                           |
| <b>AA</b>      | Strong broad tips.                                                                                                                                              |
| <b>M</b>       | Mini forceps.                                                                                                                                                   |
| <b>Medical</b> | Denotes distinctive ribbed handle to maximize grip.                                                                                                             |
| <b>SS</b>      | Long and narrow shanks with thin tips.                                                                                                                          |
| <b>WA</b>      | One piece design with no soldering grooves allows the forceps to be thoroughly and easily cleaned preventing biofilm residue.                                   |

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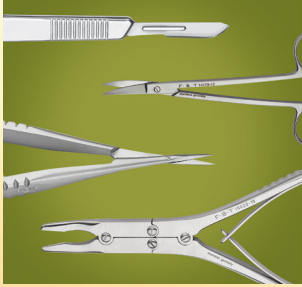
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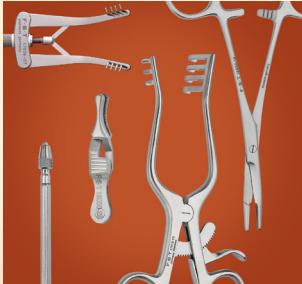




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