



FINE SURGICAL INSTRUMENTS FOR RESEARCH™

# **ORDERING INFORMATION**



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k

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ORDER ONLINE finescience.com EMAIL-CUSTOMER SERVICE info@finescience.com

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For a complete explanation of our returns and exchange policies, please refer to the inside back cover.

# **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.





# LETTER FROM THE MANAGING PARTNER

# To our family of valued customers, associates, and business partners,

I am always reinvigorated by the release of our new catalog, as it allows us the opportunity to give appreciation to all who are integral parts of Fine Science Tools. This is also a great time for reflection and setting our sights on what is to come in 2024, an exciting year where we will be celebrating our 50th Anniversary! The journey has been outstanding and our dedication to service and support has propelled us from a very humble beginning to where we are now and where we will go in the future. It remains a pleasure to work closely with such inspiring and talented customers who are devoted to their contributions in science for all of these years and we look forward to serving you for many more years to come. FST has remained steadfast in our assurance to supplying quality instrumentation worldwide to an array of professionals and students in the Biomedical Science and Medical Device Technology industries. It is our unrelenting commitment to quality that is the hallmark of our company. Whether it is innovating new instruments to perfectly meet your exact needs or our teams finding new applications for existing FST instruments, our best information comes from you.

I introduce to you this year's catalog theme, Bubbles illustrating the delicate and precise by nature forms – characteristics which also describe our surgical instruments. A bubble is a microcosm where each individual element bends toward fulfilling its purpose with the whole, similar to our FST teams across the globe.

Markus Gawenda Managing Partner

Resembling the designs of our instruments, bubbles appear simple but are complex encapsulation of elements that are fascinating to both children and adults with their beautiful shapes and colors. The lustrous appearance of bubbles and FST instruments alike catches the attention and curiosity of many.

In an effort to better serve our customers at the highest level and continue to offer our unwavering support, we are optimizing our sales structure and one of our first steps will be shifting operations from Canada to our devoted teams in the US and European offices. While change is inevitable there will always be a constant with our 100% satisfaction guarantee. We have formulated a smooth transition plan, which we can ensure will be seamless and considerate to our customers worldwide.

On behalf of all of Fine Science Tools I would like to thank you for your incredible support and your belief and trust in us to provide high quality surgical instruments to aid in your advancements and breakthroughs in science. Our achievements and longevity would not have been possible without your continued patronage. Fine Science Tools remains committed to being your partner in all aspects of your scientific developments and look forward to continuing our relationship with you for another 50+ years.

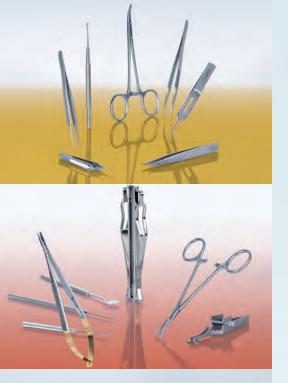
Thank you again for your continued support and loyalty.

Markus Gawenda

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# **Catalog Features**

# **CATALOG FEATURES**

Most Items in the catalog

To provide you with our support regarding your decision in finding the right instruments for your purpose, the product feature details are explained below.

are shown in actual Size. Some Items in the catalog have a magnified view of the tip. 300% Most Items in the catalog have a illustrated view of the tip. Straight Sharp/Sharp Detailed length: 8 cm Item specifications Cutting edge: 2 mm Tip Ø: 0.05 mm No. 15000-03 \$408.00

# **ICONS:**



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



The tips have micro serrations to ensure a better grip on tissue or other materials.



These items are not suitable for an autoclave but can be sterilized by a different method. For example: hot bead sterilization, gas sterilization, plasma sterilization or hot air sterilization. Please contact us to receive more information regarding the best preferred method for your instruments.



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

Scissors: pages 33, 45 / Hemostatic Forceps: page 113 Needle Holders: pages 145 - 146 / Ligation Aid: page 125



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 35, 44 and 47



Our yearly selection of new instruments is based on a careful study and knowledge of our customer needs, as well as listening to their requests.

# $\frac{\textbf{F}\cdot\textbf{S}\cdot\textbf{T}}{\text{by DUMONT}}$

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. Below you will find detailed descriptions to help guide you in choosing the right Dumont forceps best suited for your needs.

# FINDING THE DUMONT FORCEPS BEST SUITED FOR YOUR NEEDS:

Alloys	Hardness	Magnetic	Temperature resistance	Autoclavable	Advantages
Titanium	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.
Dumoxel	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.
lnox	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.
Dumostar	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 lnox. Most cost effective alloy for laboratory use.
Carbon	Hardest	Yes	N/A	No	Extremely hard; ensuring strong tips. Easily stains and rusts without proper care. Carbon cannot be immersed in a water bath or sterilized.

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

Standard	Made for high precision and consistently precise work under a microscope.
Biology	Twice as fine as "Standard Tips." Especially produced for high precision laboratory work under the microscope.
Super Fine Tips	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	

#2	Straight forceps with wide yet fine tips, referred to as Mouse	#5XL
	Laminectomy Forceps because of their popularity in breaking off delicate bone from mouse skulls.	#5/45
#2AP	Epoxy coated with flat wide blunt tips.	#5/45C
#3	Long straight forceps with coarse tips. Popular in low magnification	#5/90
	procedures.	#5AC
#3C	Shorter version of #3.	#6
#4	Similar to the #5 but with broader shanks and stronger tips.	#7
#5	Most popular style of Dumont straight forceps with fine tips which	
	come in several styles.	#7B
#55	Similar to the #5 but with lighter shanks, giving the forceps a lighter	AA
	spring action.	М
#5CO	Similar to the #55 but with even finer shanks producing the lightest spring action and longest meeting surface of any Dumont style.	Medica
#5L	Medical #5 forceps with slide sleeve for a secure hold and retention.	SS
#5SF	The finest tips ever produced by Dumont.	WA

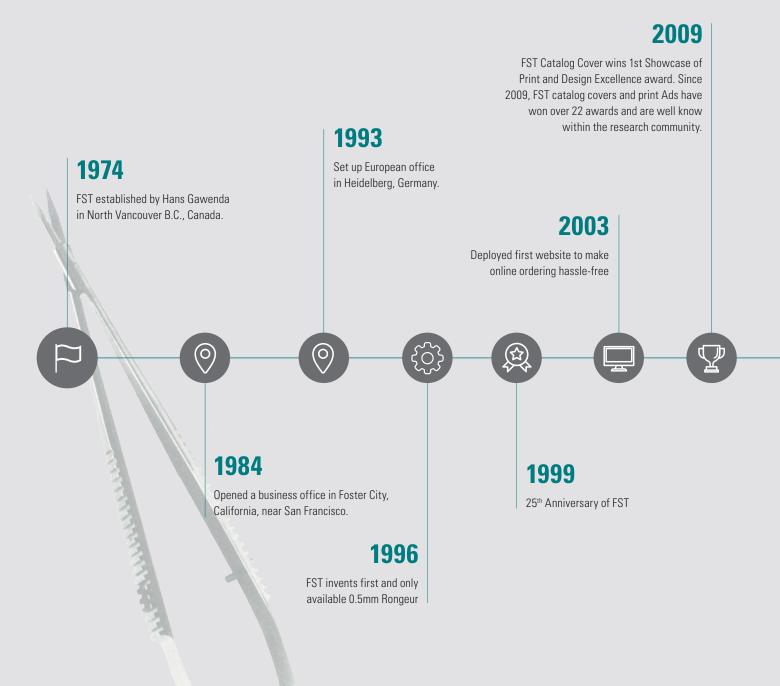
#5XL	Extra Long #5 forceps.
#5/45	Tips angled at 45°.
#5/45C	Designed to pick up cover slips from multi-well plates.
#5/90	Tips angled at 90°.
#5AC	Self-closing Anti-Capillary forceps.
#6	Sharply angled, broad tips.
#7	Most popular style of Dumont curved forceps with fine tips which come in several styles.
#7B	Curved serrated tips.
AA	Strong broad tips.
М	Mini forceps.
Medical	Denotes distinctive ribbed handle to maximize grip.
SS	Long and narrow shanks with thin tips.
WA	One piece design with no soldering grooves allows the forceps to be thoroughly and easily cleaned preventing biofilm residue.

# Timeline

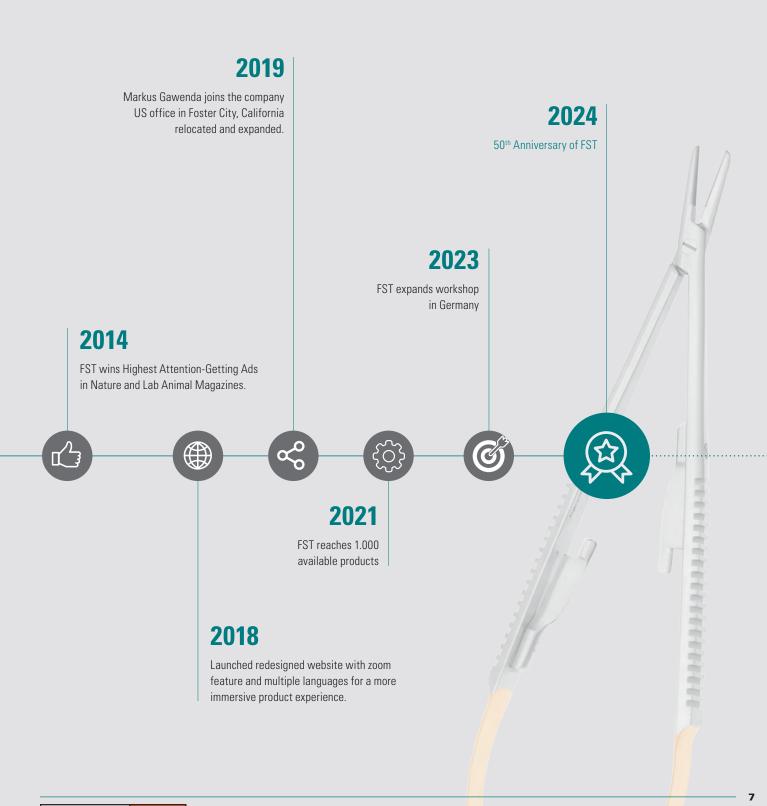


# **FST SINCE 1974**

For nearly 50 years, Fine Science Tools has been the leading distributor of precision surgical and microsurgical instruments, as well as laboratory accessories with offices in Foster City (USA) and Heidelberg (Germany) supporting and serving customers across the globe.







#### RESEARCH ONLY

# **Handcrafted**



# **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

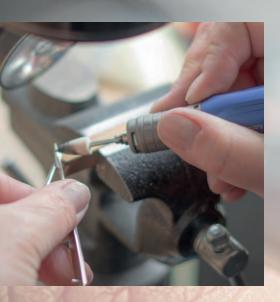


**CUSTOM DESIGN** 

If you have ever thought about how nice it would be to use a personalized, unique instrument, you should contact our custom design service as soon as possible.

We have the capabilities to manufacture any product to your specific requirements or to customize existing products to make them perfect for your application. 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.



# **FINE SCIENCE TOOLS SERVICE**

We at FST are constantly trying to improve ourselves and our service. This service includes the preparation and repair of instruments, custom-made products and individual pieces of various instruments according to customer requirements, customer-specific advice based on their application and more. Over the years we have built up a network of partners and collaborations with well-known institutions and companies. As a result, we also offer application-specific instrument kits including complementary items from our partners.

If you are interested or have any questions, please give us a call at one of our offices.

# **REPAIR SERVICE**

In our very own workshop in Heidelberg, Germany we not only manufacture and customize specific instruments according to customer requirements, but also offer a repair service for all of our products.

Which includes:

- General repairs
- Sharpening of scissors/spring scissors
- Adjustments of forceps
- Replacement of tungsten carbide jaws
- Cleaning & reconditioning
- Replacement, if an instrument is beyond repair



Additionally, our team is also available for repairs of your instruments which have not been purchased from FST.

# Satisfaction Guarantee

# **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.

# **100% SATISFACTION GUARANTEE**

*"If, for any reason, you are not completely satisfied with your purchase you may return it for a full refund."* 

Hans Gawenda, Founder, Fine Science Tools Inc.

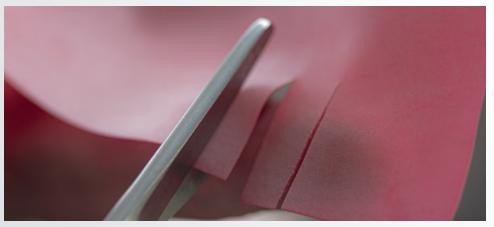
# **SCISSORS TEST**

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

The picture below shows our cutting test for ring scissors based on the standards and specifications of surgical instruments in our office in Heidelberg. Each pair of scissors must perform a smooth cut without tearing or fraying the material, specifically at the fine tips. In addition, a specialized long-term test is done to identify the longevity of other featured alloys and cutting edges, tungsten carbide and ToughCut<sup>®</sup>. In this test the scissors will 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 showcase the addition of added features dramatically increases the cutting life of the scissors. Most notably, the cutting life is more than doubled with the addition of ToughCut<sup>®</sup> blades and over six times longer with our CeramaCut<sup>®</sup> feature.

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.



# **Alloys & Materials**

There are various alloys and materials which are used to produce micro surgical instruments for research with each having certain properties that would be advantageous in particular environments or applications. We will introduce theses alloys, describe their benefits and highlight unique tools for particular procedures that may be ergonomic and overall helpful for your studies and/or protocols.



## ToughCut<sup>®</sup> 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)



#### **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

## Stainless Steel Instruments

Stainless steel is an alloy, which does exactly what its name implies: stains less than ordinary steel (iron).

• Autoclavable





## 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



## 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)



## **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

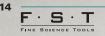


## **Titanium Instruments**

- 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

# 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.
- $\geq$  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.

/ Nee 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:

- A 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 172 - 173 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 171, 174 and 176 - 178.



# **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 180. Instrument cases are available, see pages 178 – 180



# **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.

# SCISSORS, BONE INSTRUMENTS, KNIVES & SCALPELS

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Fine Scissors	31 – 44
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#### **SPRING SCISSORS**

#### **Micro Vannas**

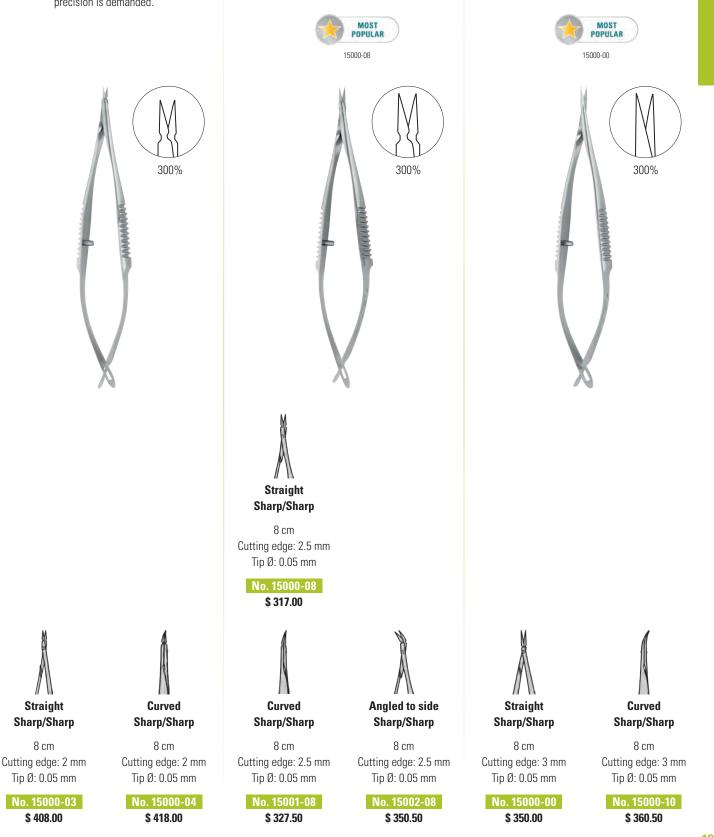
These Vannas-style spring scissors have the smallest blades ever produced. They are ideal where space is restricted and where absolute precision is demanded.

#### **Micro Vannas**

The short taper is ideal for small, precise cuts.

#### **Micro Vannas**

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



RESEARCH ONLY

\$ 408.00

Straight

8 cm

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

#### Vannas-Tübingen



#### Vannas Spring Scissors High Polished

The highly polished surface makes the scissors more resistant to corrosion and easier to clean. It also prevents tissue from sticking on it while operating, it's also called non-sticky surface.



#### **Vannas Spring Scissors Round Handle**

The round handle allows an easy finger adjustment during the application. The hollow grind in the handle reduces the weight. The fine blades are tapered to give a better overview.







No. 15403-08 \$ 288.50



No. 15404-08 \$ 298.50

PRICES VALID NOV 1, 2023 TO OCT 31, 2024 · PRICES IN US CURRENCY · FOR ORDERING INFORMATION SEE INSIDE FRONT COVER

Curved

Sharp/Sharp

8.5 cm

Cutting edge: 5 mm

Tip Ø: 0.075 mm

No. 15904-08

\$ 287.50

Straight

Sharp/Sharp

8.5 cm

Tip Ø: 0.075 mm

No. 15903-08

\$ 252.00

#### **SPRING SCISSORS**

#### Vannas Scissors with Microserrations

Microserrated to minimize slippage.

# SERRATED 300% Sharp/Sharp Cutting edge: 7 mm Tip Ø: 0.1 mm No. 15007-08

Vannas

#### **Miniature Vannas**

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







Straight

Sharp/Sharp

8 cm

Cutting edge: 5 mm

Tip Ø: 0.1 mm

No. 15396-00

\$ 602.50

Moria 9601



# Sharp/Sharp

8 cm Cutting edge: 5 mm Tip Ø: 0.1 mm

> No. 15396-01 \$ 611.50

RESEARCH ONLY

Straight

8.5 cm

\$ 377.50

Straight

Sharp/Sharp

8.5 cm

Cutting edge: 5 mm

Tip Ø: 0.1 mm

No. 15070-08

\$ 382.50

Curved

Sharp/Sharp

8.5 cm

Cutting edge: 5 mm

Tip Ø: 0.1 mm

No. 15071-08

\$ 387.50

Straight

Sharp/Sharp

10.5 cm

Cutting edge: 4 mm

Tip Ø: 0.15 mm

No. 15018-10

\$ 316.50

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

Curved

Sharp/Sharp

10.5 cm

Cutting edge: 4 mm

Tip Ø: 0.15 mm

No. 15019-10

\$ 329.00

**Titanium Vannas** 

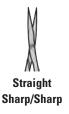
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**Cohan-Vannas** 

Long cutting blades for a more controlled cut.





6 cm Cutting edge: 6 mm Tip Ø: 0.1 mm

No. 15000-02

\$ 426.00

Tip Ø: 0.1 mm **No. 15000-01** 

Curved

Sharp/Sharp

6.0 cm

Cutting edge: 6 mm

\$ 439.00

Straight Blunt/Blunt

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

No. 15000-12 \$ 403.00 Curved Blunt/Blunt

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

> No. 15000-11 \$ 416.50



**ToughCut® Spring Scissors** 



Sharp/Sharp

12.5 cm Cutting edge: 6 mm Tip Ø: 0.3 mm

No. 15124-12 \$ 490.00



Curved Sharp/Sharp

12.5 cm Cutting edge: 6 mm Tip Ø: 0.3 mm

> No. 15123-12 \$ 505.00

22 F·S·T

PRICES VALID NOV 1, 2023 TO OCT 31, 2024 · PRICES IN US CURRENCY · FOR ORDERING INFORMATION SEE INSIDE FRONT COVER

#### **Round Handled Vannas**

Round handles allow easy fingertip adjustments.

#### **Spring Scissors**







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

No. 15401-12 \$ 379.50





Straight Sharp/Sharp 14 cm

Cutting edge: 6 mm Tip Ø: 0.15 mm

No. 15020-15 \$ 415.00



М	
4	

Straight Sharp/Sharp



No. 15750-11 \$ 339.50



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

23

RESEARCH ONLY

Cutting edge: 6 mm

Tip Ø: 0.075 mm

No. 15400-12

\$ 367.50

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

Vannas-Wolff

# Moria



Moria MC50

Curved

Sharp/Sharp

10 cm

Cutting edge: 7 mm

Tip Ø: 0.15 mm

No. 15370-50

\$ 621.00

Moria MC52

M

Straight Sharp/Sharp

10 cm Cutting edge: 7 mm Tip Ø: 0.15 mm

No. 15370-52 \$ 611.00



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#### Vannas

Ultra long cutting edge without sacrificing tip width.



Straight

Sharp/Sharp

8.5 cm

Cutting edge: 8 mm

Tip Ø: 0.1 mm

No. 15009-08

\$ 411.50



Angled to side Sharp/Sharp 10 cm Cutting edge: 10 mm

Tip Ø: 0.125 mm No. 15006-09

\$ 341.00

Castroviejo

#### **Castroviejo with Ball Tip**

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



Angled to side Sharp/Ball tip

9 cm Cutting edge: 8 mm Tip Ø: 1.3 mm Ball

No. 15033-09 \$ 368.50



Straight Sharp/Sharp 10 cm Cutting edge: 8 mm Tip Ø: 0.15 mm No. 15024-10 \$ 327.50

Straight

**Blunt/Blunt** 

10 cm

Cutting edge: 8 mm

Tip Ø: 0.3 mm

No. 15025-10

\$ 317.00



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

> No. 15042-11 \$ 306.00

> > 25

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

Tip Ø: 0.1 mm

No. 15040-11

\$ 280.50

Curved

Sharp/Sharp

10 cm

Cutting edge: 8 mm

Tip Ø: 0.15 mm

No. 15023-10

\$ 339.50

#### **Tungsten Carbide Noyes**

Tungsten carbide cutting edges provide long lasting sharpness.









Straight Sharp/Sharp

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

No. 15012-12 \$ 316.00



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Curved Sharp/Sharp

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

> No. 15011-12 \$ 329.00



Sharp/Sharp

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

> No. 15013-12 \$ 336.50



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

No. 15514-12 \$ 430.00



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









Westcott





No. 15015-11 \$ 306.50 Fine Angled Spring Scissors

These spring scissors aid in cutting tissues from various angles.





No. 15010-10 \$ 308.00

27

Straight

Sharp/Sharp

11 cm

Cutting edge: 5 mm

Tip Ø: 0.2 mm

No. 15650-11

\$ 398.00

Curved

Sharp/Sharp

11 cm

Cutting edge: 5 mm

Tip Ø: 0.2 mm

No. 15651-11

\$ 420.00

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

9.5 cm

Cutting edge: 2 mm

Tip Ø: 0.1 mm

No. 15010-09

\$ 318.50

### **SPRING SCISSORS**



Trident II

Special design with short handle and inner spring.





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

No. 15110-08 \$ 333.00



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8 cm Cutting edge: 8 mm

No. 15111-08 \$ 341.00

Tip Ø: 0.2 mm



Pascheff-Wolff

Very delicate blades.

Moria

Angled up Sharp/Sharp

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

No. 15371-92 \$ 601.00 Long Handle Spring Scissors

Straight Sharp/Sharp 18.5 cm Cutting edge: 5 mm Tip Ø: 0.2 mm No. 15028-18

\$ 304.00

Curved

Sharp/Sharp

18.5 cm

Cutting edge: 5 mm

Tip Ø: 0.2 mm

No. 15027-18

\$ 318.00

#### **Micro Scissors**

With microserrations to minimize slippage.

#### **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.** 





PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

#### **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.

#### **Biemer Scissors**

These scissors are designed to securely cut vessels without slipping.



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.



No. 15300-00 \$ 291.00





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#### **FINE SCISSORS**

#### **Extre Fine Bonn**

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





Bonn

Highly polished.

#### ToughCut® Bonn-Strabismus

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







Straight Sharp/Sharp 8.5 cm Cutting edge: 10 mm No. 14084-08 \$ 98.00

Curved

Sharp/Sharp

8.5 cm

Cutting edge: 10 mm

No. 14085-08

\$103.50

Straight

Sharp/Blunt

8.5 cm

Cutting edge: 10 mm

No. 14083-08

\$ 89.50

No. 14184-09

\$ 91.00

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

No. 14084-09

\$ 164.50

No. 14185-09

\$ 99.00

No. 14085-09

\$ 168.50

#### **Hardened Fine Iris Scissors**

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

#### MOST POPULAR 14090-09



#### **Fine Iris Scissors**

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





No. 14091-11

\$ 121.00

No. 14090-11 \$ 117.50



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#### **FINE SCISSORS**





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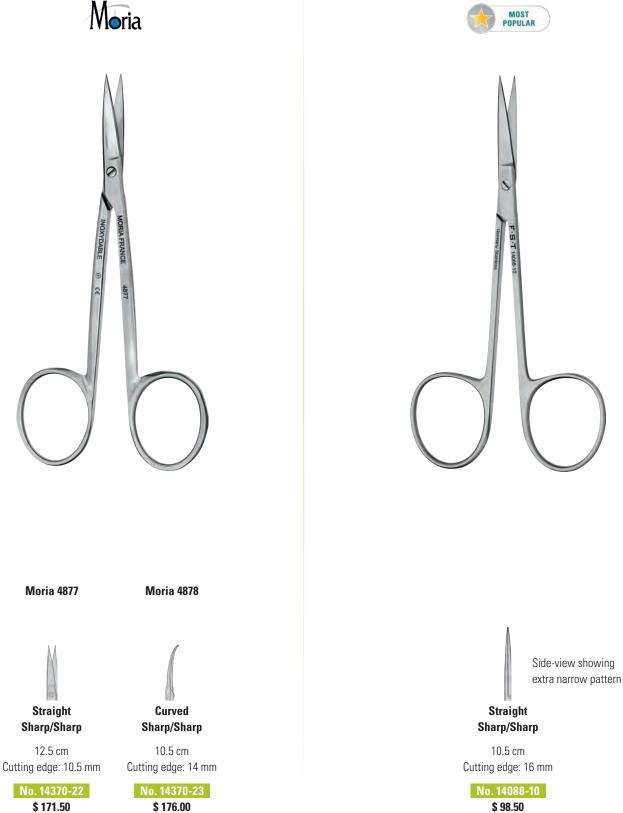
PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

**Moria Iris Scissors** 

#### **Extra Narrow Iris Scissors**

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







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RESEARCH ONLY

**FINE SCISSORS** 

SCISSORS

ToughCut® **Tungsten Carbide** TOUGH MOST MOST TUNGSTEN POPULAR CUT POPULAR CARBIDE 14058-09 14568-09 14568-12 14058-11 Straight Straight Curved Curved Sharp/Sharp Sharp/Sharp Sharp/Sharp Sharp/Sharp 9 cm 9 cm 9 cm 9 cm Cutting edge: 16 mm Cutting edge: 16 mm Cutting edge: 16 mm Cutting edge: 16 mm No. 14058-09 No. 14059-09 No. 14568-09 No. 14569-09 \$ 94.50 \$102.00 \$149.50 \$157.00 11.5 cm 11.5 cm 11.5 cm 11.5 cm Cutting edge: 16 mm Cutting edge: 16 mm Cutting edge: 16 mm Cutting edge: 16 mm No. 14058-11 No. 14568-12 No. 14569-12 No. 14059-11 \$ 96.00 \$ 105.50 \$ 155.50 \$ 164.00



# SCISSORS

37

RESEARCH ONLY



Curved

Sharp/Blunt

10 cm

Cutting edge: 17 mm

No. 14029-10

\$ 94.50





No. 14078-10 \$ 81.00 No. 14079-10 \$ 88.00

Cutting edge: 16 mm

38 F·S·T

Straight

Sharp/Blunt

10 cm

Cutting edge: 17 mm

No. 14028-10

\$ 90.00



\$154.00

RESEARCH DNLY

\$ 86.00

\$ 88.50

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\$ 147.50

39

Walton

**Stevens Tenotomy** 



40 F · S · T

# LaGrange

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

## Shea

Transplant scissors with light and delicate pattern.







12 cm Cutting edge: 16 mm

# No. 14105-12 \$ 121.00

41

Side-view

Curved Sharp/Sharp 11.5 cm

Cutting edge: 12 mm

No. 14173-12 \$ 118.00

RESEARCH ONLY

# **Dissector Scissors**

Slim blades for cutting tissue.

## **Dissector Scissors**

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

# **Spencer Ligature**

Used for cutting stitches or suture.



## **Tissue Separating Scissors**

## **Bonn Artery**

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





Straight Blunt/Blunt

11.5 cm

Cutting edge: 16 mm

No. 14072-10

\$102.00



Straight

Sharp/Ball tip

11.5 cm

Cutting edge: 16 mm

1.5 mm Ball Diameter

No. 14080-11

\$ 110.00

9 cm Cutting edge: 10 mm 1.5 mm Ball Diameter

No. 14086-09 \$ 123.00







# **Standard Pattern**

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.





14008-14

14001-12 - 14001-18

1

stainless gern

F.S.T 14001-14

				M		Ø	
Length (cm)	Cutting edge	Straight Sharp / Sharp	Price	Straight Sharp / Blunt	Price	Straight Blunt / Blunt	Price
12	26	No. 14002-12	\$ 56.00	No. 14001-12	\$ 53.00	No. 14000-12	\$ 49.50
13	28	No. 14002-13	\$ 59.00	No. 14001-13	\$ 55.50	No. 14000-13	\$ 52.50
14.5	30	No. 14002-14	\$ 62.00	No. 14001-14	\$ 58.50	No. 14000-14	\$ 55.50
16.5	36	No. 14002-16	\$ 64.50	No. 14001-16	\$ 61.50	No. 14000-16	\$ 58.50
18.5	40			No. 14001-18	\$ 64.50	No. 14000-18	\$ 61.50
20	44					No. 14000-20	\$ 64.00

Length (cm)	Cutting edge	Straight Sharp / Blunt	Price	
14.5	30	No. 14008-14	\$ 171.00	

_								
	Length (cm)	Cutting edge	Curved Sharp / Sharp	Price	Curved Sharp / Blunt	Price	Curved Blunt / Blunt	Price
	12	26	No. 14005-12	\$ 62.50	No. 14004-12	\$ 59.50	No. 14003-12	\$ 56.00
	13	28	No. 14005-13	\$ 65.00	No. 14004-13	\$ 62.00	No. 14003-13	\$ 59.00
	14.5	30	No. 14005-14	\$ 68.50	No. 14004-14	\$ 65.00	No. 14003-14	\$ 62.00
	16.5	36	No. 14005-16	\$ 71.00	No. 14004-16	\$ 68.00	No. 14003-16	\$ 64.50
	18.5	40			No. 14004-18	\$ 71.00	No. 14003-18	\$ 67.00
	20	44					No. 14003-20	\$ 70.00

**SURGICAL SCISSORS** 

SCISSORS



46 F · S · T

## **SURGICAL SCISSORS**



**SCISSORS** 

47

Metzenbaum Baby

**Tungsten Carbide Metzenbaum Fino** 





18 cm Cutting edge: 24 mm

> No. 14519-18 \$ 152.50

48 S·T SCIENCE TOOLS

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18 cm

No. 14518-18

\$140.50

#### Metzenbaum

## ToughCut® Metzenbaum



49

**SURGICAL SCISSORS** 



## **SURGICAL SCISSORS**

#### **Mayo-Stille**

Mayo-Noble

80% of

actual size

## **Decapitation Scissors**

Stop guard at tips to prevent slippage.





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Curved

16.5 cm

\$102.00

#### Friedmann-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.

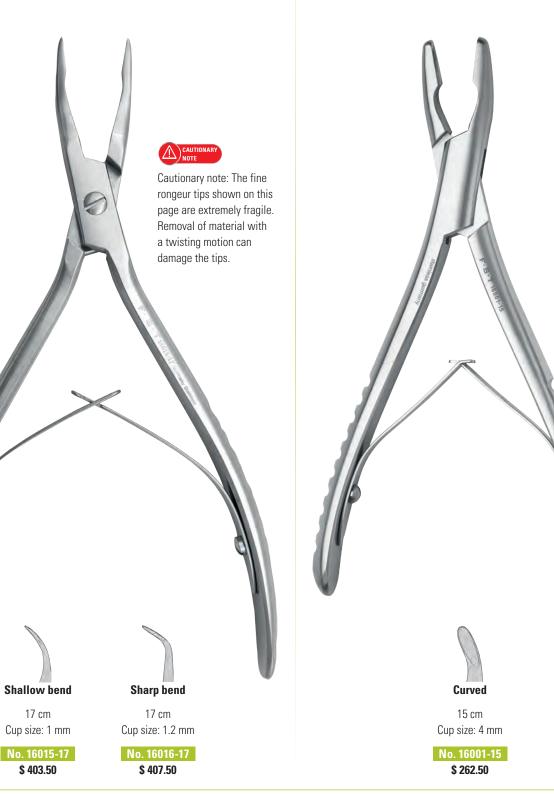


52 FINE SCIENCE TOOLS

Luer

## 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.



BONE INSTRUMENTS

53

RESEARCH ONLY

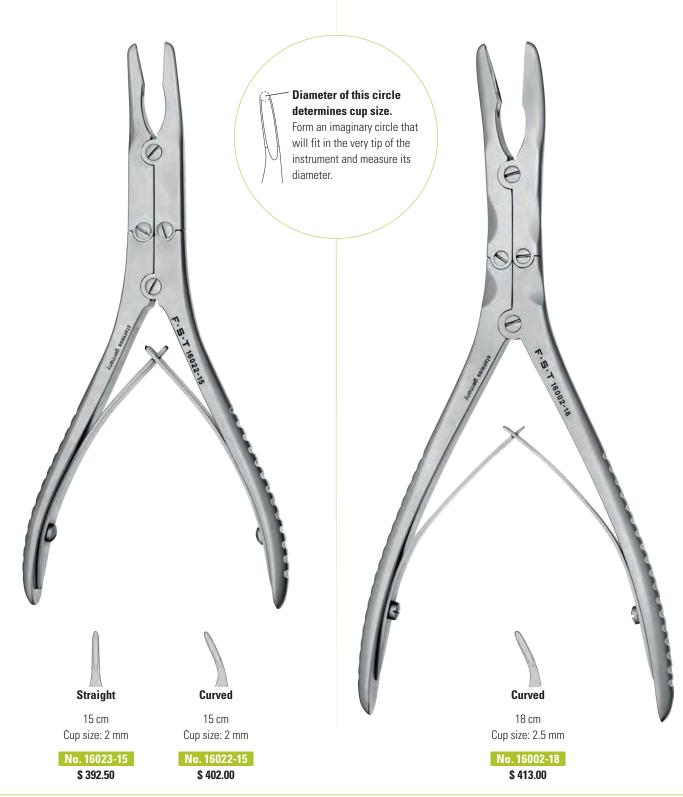
**BONE INSTRUMENTS** 

# **Baby-Beyer**

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

#### Beyer

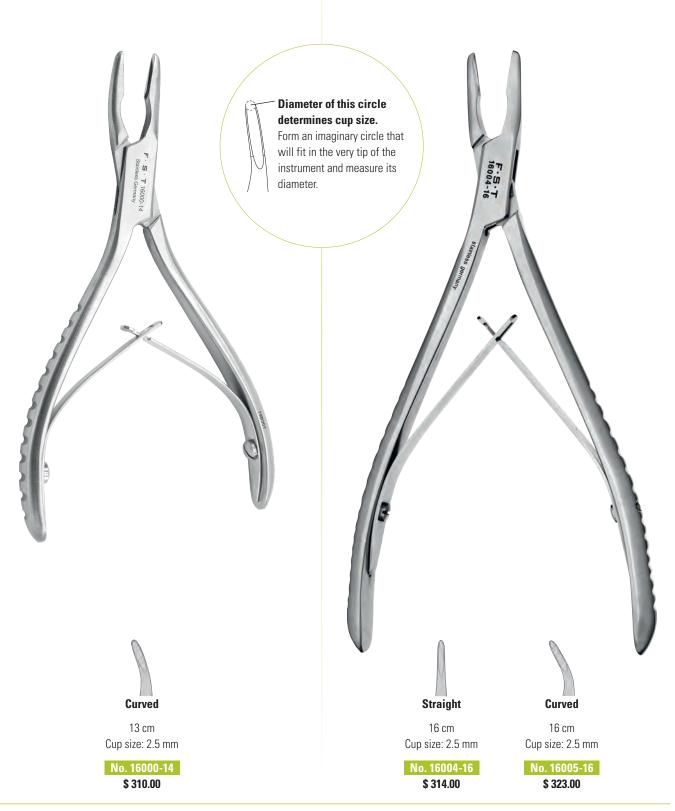
Double-action rongeur with strong jaws helps relieve hand strain.



## Friedmann

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. Extra fine jaws.

55



RESEARCH ONLY

# **Cartilage Cutter**

Round cutting blades for tissue, cartilage and soft bone.





56 FINE SCIENCE TOOLS

Tungsten Carbide #15AGHM Cutter

## 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.





## Dumont #15ARW Cutter

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

No. 11215-02

\$ 95.00

Epoxy coated carbon steel



Angled 11.5 cm Cutting edge: 10 mm Stainless Steel handle with Tungsten Carbide tips



57

RESEARCH ONLY

Angled

11.5 cm

Cutting edge: 10 mm

Jaw Opening: 2.5 mm

Hard carbon steel

No. 11215-01

\$ 82.00

# **Offset Bone Nipper**

Strong jaws for cutting tough cartilage.





Angled up

11 cm Cutting edge: 5 mm

No. 16102-11 \$ 176.50





# **Delicate Bone Cutting Spring Scissors**

Slim, strong blades for cutting fine bones and tissues.





Curved Blunt/Blunt

12 cm Cutting edge: 12 mm

\$ 203.50

Malleus	Nipper
---------	--------

SERRATED

**Bone Cutting Spring** Scissors





Straight

11 cm Cutting edge: 9 mm

No. 16140-11 \$ 164.00



11 cm



\$171.00

11 cm Cutting edge: 9 mm

Angled up

No. 16142-11 \$171.00

Straight **Blunt/Blunt** 

13 cm Cutting edge: 12 mm

No. 16144-13 \$157.00



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59

Littauer Bone Cutter

## **Beebee Bone Scissors**

Very strong jaws with sharp points.

## **Tungsten Carbide Bone Scissors**

Strong heavy blades for cutting bone.



60 F · S · T

# Boehler

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

# **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.





61

**Listen** Gross anatomy bone cutter.





20 cm Cutting edge: 30 mm

No. 16104-19 \$ 318.50



# **Bone Pliers**

To peel back skull flaps.





**Bone Shears** 

Curved

24 cm Cutting edge: 6.5 cm

No. 16150-24 \$ 101.50

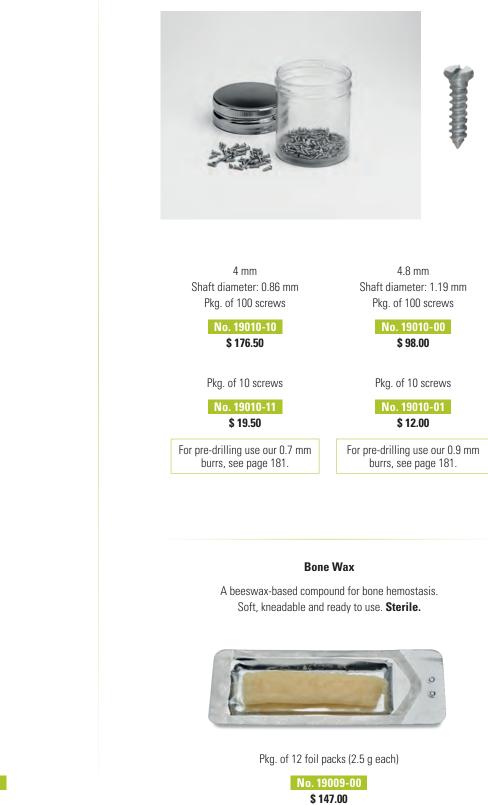
63

#### **Bone Forceps**

Strong cross-serrated tips for bone crushing and removal.

#### **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.





Angled 11.5 cm Tip Ø: 1 mm Cross serrated

No. 16060-11 \$ 96.00

## **CURETTES & CHISELS**



**BONE INSTRUMENTS** 

65

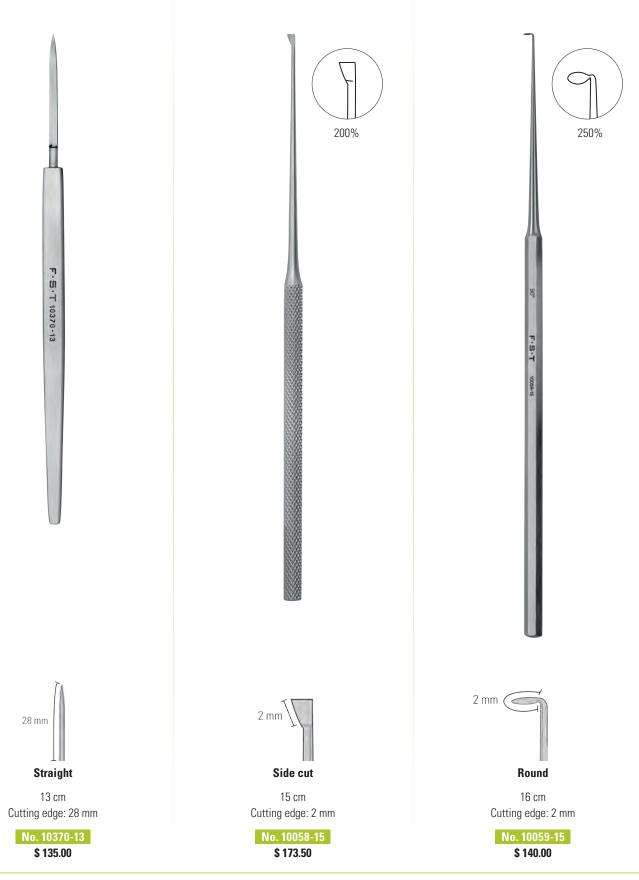
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**MICRO KNIVES** 

**Micro Knife** 

Sharp cutting edge around tip.



67

RESEARCH ONLY

**KNIVES & SCALPELS** 

## **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





28 cm Cutting edge: 15 cm

No. 10157-15

\$ 24.00

31 cm Cutting edge: 18 cm





\$ 48.00

Brain sectioning knife

No. 10157-13 \$ 20.00



<sup>68</sup> F

## **OBSIDIAN KNIVES**

#### **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.



# **CERAMIC & DIAMOND KNIVES**

#### **Ceramic Blades**

#### Advantages:

• Ceramic edge stays sharp 100 times longer than steel edge

**Ceramic Blades** 

Angled 45° 33 x 6 x 0.5 mm Cutting edge: 4.5 mm Pkg. of 5 blades No. 10025-44 \$ 170.00

Angled 45° 33 x 6 x 0.5 mm Cutting edge: 2.5 mm Pkg. of 5 blades No. 10025-43 \$ 170.00

Angled 23° 33 x 6 x 0.5 mm Cutting edge: 14 mm Pkg. of 5 blades

No. 10025-23

\$105.00

Angled 45°

33 x 6 x 0.5 mm

Cutting edge: 8 mm

Pkg. of 5 blades

No. 10025-45

\$ 119.50

- 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



Aluminum Alloyed Handle

12.5 cm

No. 10025-50 \$ 12.00



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#### **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.



**KNIVES & SCALPELS** 

#### **Blade Holders and Breakers**

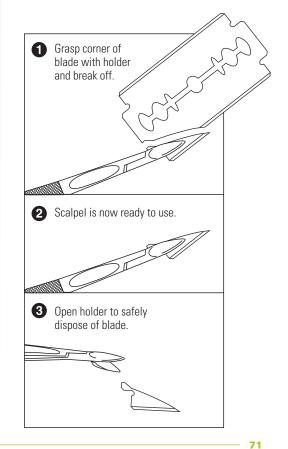
#### **Breakable Carbon Steel Blades**

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



#### **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.





\$ 398.50

\$ 255.00

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13 cm

Jaw width: 4 mm

No. 10053-13

\$ 404.00

#### **SCALPELS**

#### **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







4.5 mm

22.5° Cutting angle

13.5 cm

Cutting edge: 4.5 mm

Tip thickness: 0.15 mm

\$15.00

11 mm

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No. 10035-25

\$ 26.50

No. 10035-30

\$ 57.50

No. 10035-12

\$ 67.00

No. 10318-14

\$ 38.00

#### Scalpel Handle #4 with Silicone

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

#### Standard Scalpel Handle #4 Solid

Especially suitable for large dissections.

872/31111 4

13 cm

No. 10004-13

\$ 18.50

**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.** 









No. 10021-00

\$ 55.50

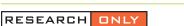


Box. of 100 blades





Box. of 100 blades No. 10023-00 \$ 55.50



13.5 cm

No. 10009-13

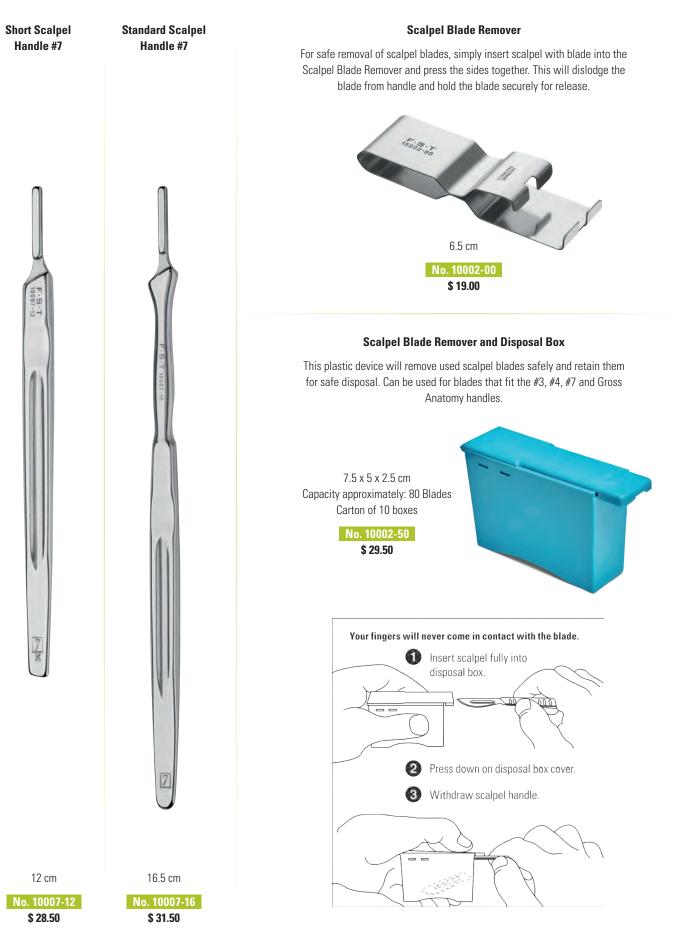
\$ 52.00

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**KNIVES & SCALPELS** 



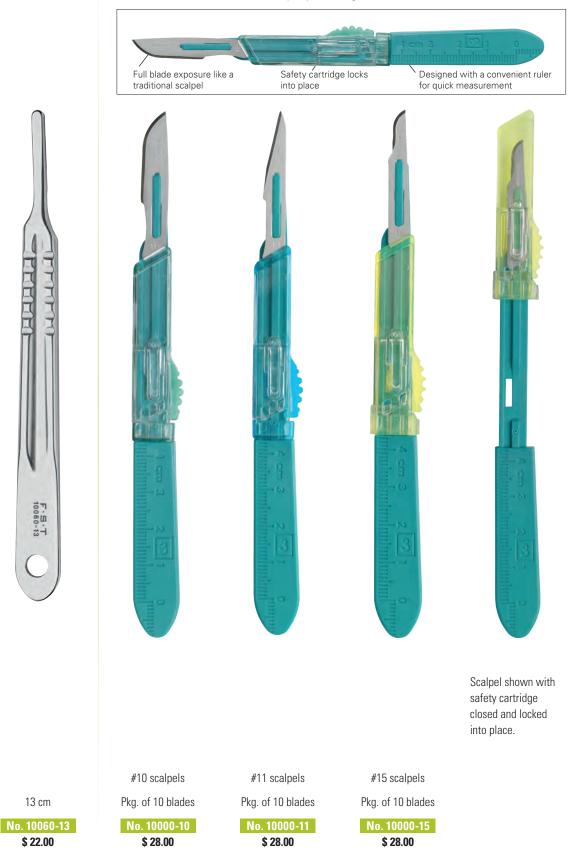
RESEARCH ONLY

75

#### Gross Anatomy Blade and Handle

#### **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.** 



80 M



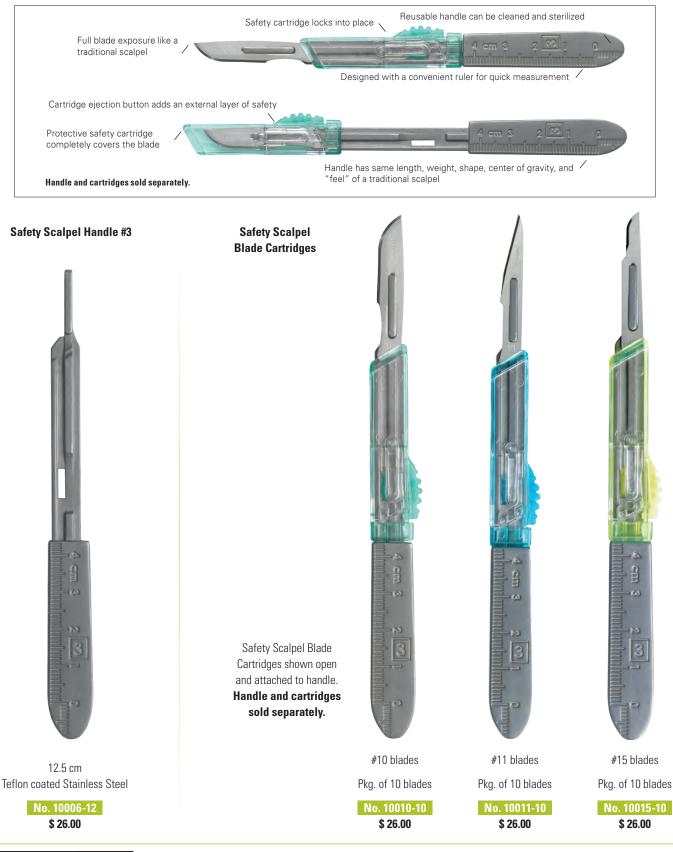
7.5 cm Box of 100 blades

No. 10060-00

\$ 74.50

#### **Safety Scalpel 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.** 



RESEARCH

ONLY

77

# FORCEPS, TWEEZERS, HEMOSTATS & VASCULAR INSTRUMENTS





Dumont #5CO

These forceps have been honed



#### Dumont #5SF

The finest tips ever produced by Dumont.

5SF

I 1252-00 Inox - Biology

CE

0,025 mm

Super fine

11 cm

Inox

0.025 x 0.005 mm

No. 11252-00

\$ 84.50

#### 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 11 cm Inox 0.05 x 0.01 mm No. 11254-20 \$ 55.00

#### Dumont #5 Ceramic Coated

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



I 1252-50 Inox - Biology

0,05 mm

**Biology** 

11 cm

Ceramic coated Inox

0.05 x 0.01 mm

No. 11252-50

\$ 75.00





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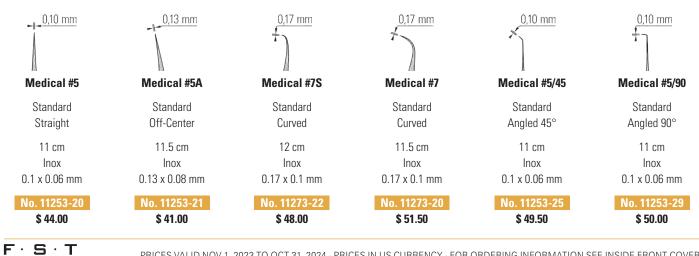
#### **Dumont Medical Micro-Blunted Atraumatic Tipped Forceps**

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.

80

SCIENCE TOOLS







#### Dumont #55

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

55

11255-20 Inox - Biology

0,05 mm

Biology

11 cm

Inox

0.05 x 0.02 mm

No. 11255-20

\$ 44.50

11 cm

Dumostar

0.05 x 0.02 mm

No. 11295-51

\$ 60.50

#### 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.

**STMF** 

| | 25 |-23 Inox

CE

0.05 mm

**Biology** 

11 cm

Inox

0.05 x 0.02 mm

No. 11252-23

\$ 79.50

0,10 mm

Standard

11 cm

Inox

0.1 x 0.06 mm

No. 11251-23

\$74.50

#### Dumont #5

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



11252-20

0,10 mm

Standard

11 cm

Inox

0.1 x 0.06 mm

No. 11251-20

\$ 33.00

Dumoxel

No. 11251-30

\$ 36.50

Dumostar

No. 11295-00

\$ 55.50



11252-40

5

I I 25 I - 30 Dumoxel®

CE

0,08 mm

Standard

11 cm

Carbon steel

0.08 x 0.04 mm

No. 11251-10

\$ 34.00



0,05 mm **Biology** 11 cm Inox 0.05 x 0.02 mm No. 11252-20 \$40.00 Dumoxel No. 11252-30

\$ 41.50

Dumostar

No. 11295-10

\$ 63.00

Titanium

No. 11252-40

\$46.00

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

81

F·S·T by DUMONT 9

Dumont #5XL

#### 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.







#### 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.

#### Dumont #5 Teflon® Coated

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



45° tips for improved visibility and control.





**FST BY DUMONT** 

### **Cover Slip Forceps**

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



0,10 mm Standard

11 cm

Teflon coated Inox

0.1 x 0.06 mm

No. 11626-11

\$ 49.00



300%



RESEARCH ONLY

No. 11253-27

\$ 72.00

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No. 11251-35

\$ 43.50



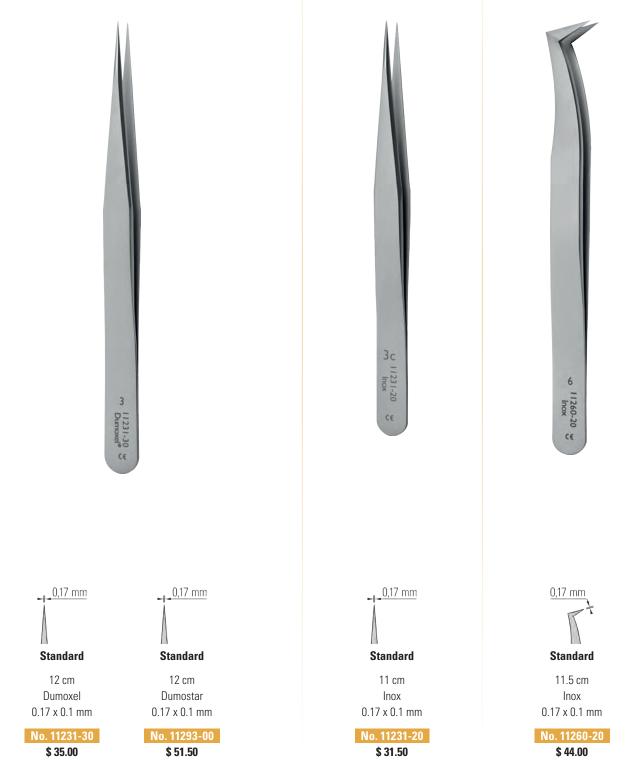
Dumont #3

Tapered and sturdy shanks.

Dumont #3c

#### Dumont #6

Sharply angled tips for access to difficult areas.





**FST BY DUMONT** 



85

RESEARCH ONLY

F·S·T

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#### Dumont #4

Similar to #5, but with broader shanks.

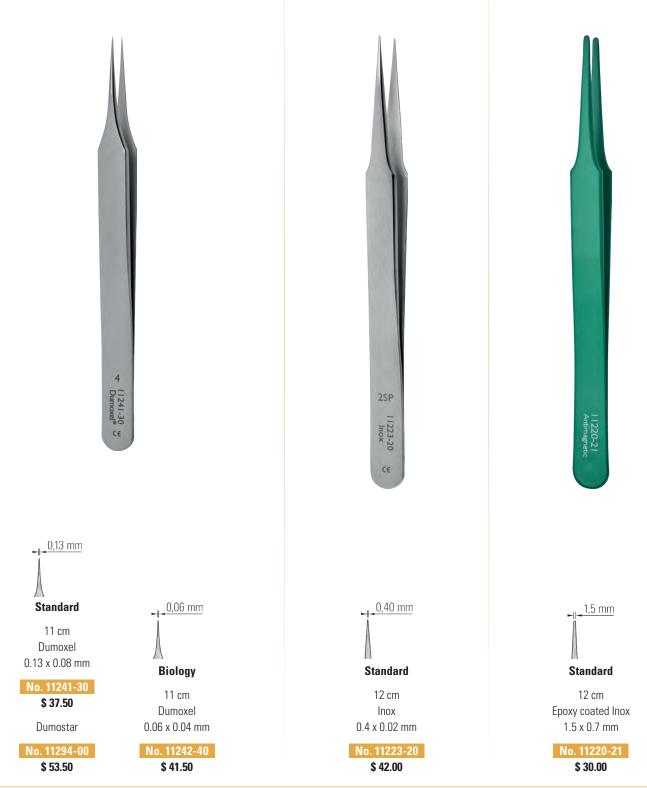
#### Dumont #2 Laminectomy Forceps

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

### F · S · T by DUMONT ♀

#### 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.





#### **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.



**Dumont Mini Forceps** 

Dumont #5AC



#### **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.

#### **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.



#### **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.



**#2A Forceps** 

**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

FINE SCIENCE TOOLS

#### Fine Forceps Broad Shanks

Straight forceps with sturdy coarse tips.

#### **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.

#### **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



91

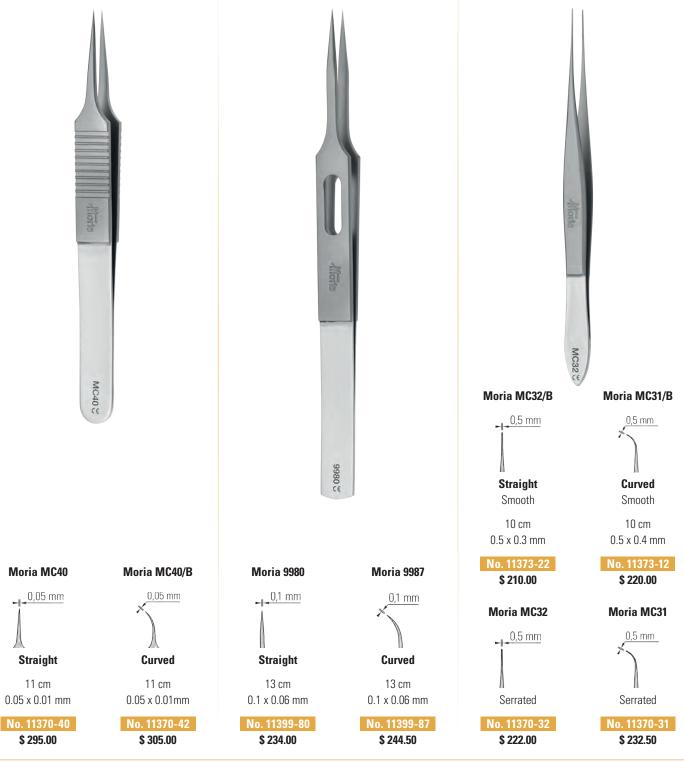


#### **Moria Ultra Fine Forceps**

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 Iris Forceps**

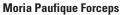
Balanced with gentle spring action and tips that are perfectly matched.



92 F·S·T

#### **Moria Bonn Forceps**

Moria







FORCEPS/TWEEZERS

93





Straight Tying platform with 1x2 teeth

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

No. 11383-50 \$ 350.00

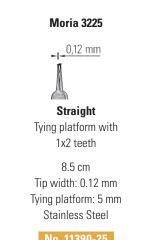
#### Moria TI7835



Tying platform with 1x2 teeth

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

No. 11383-56 \$ 360.00



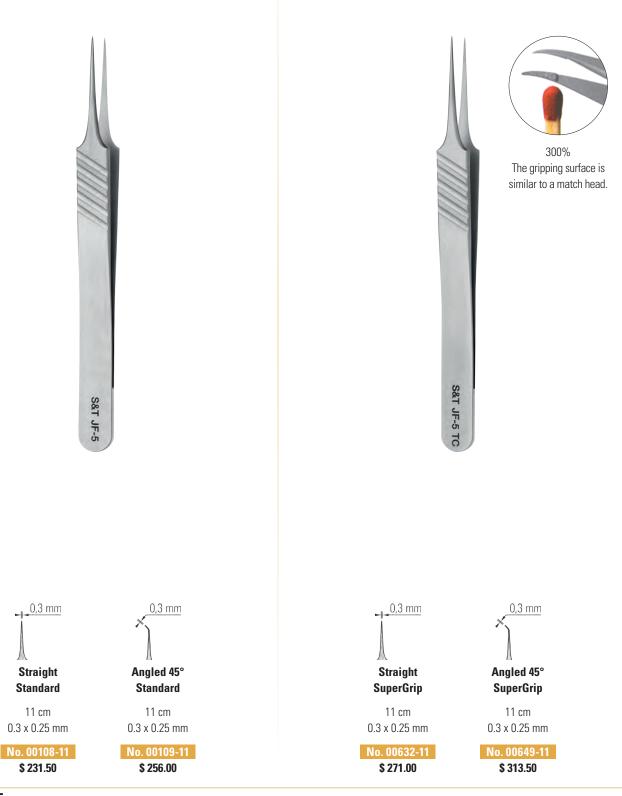
No. 11390-25 \$ 185.00

### S&T<sup>®</sup>

#### **Fine Forceps**

#### SuperGrip Forceps

The tips are processed with MicroCrystals<sup>®</sup>, a method developed by S&T<sup>®</sup> 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.



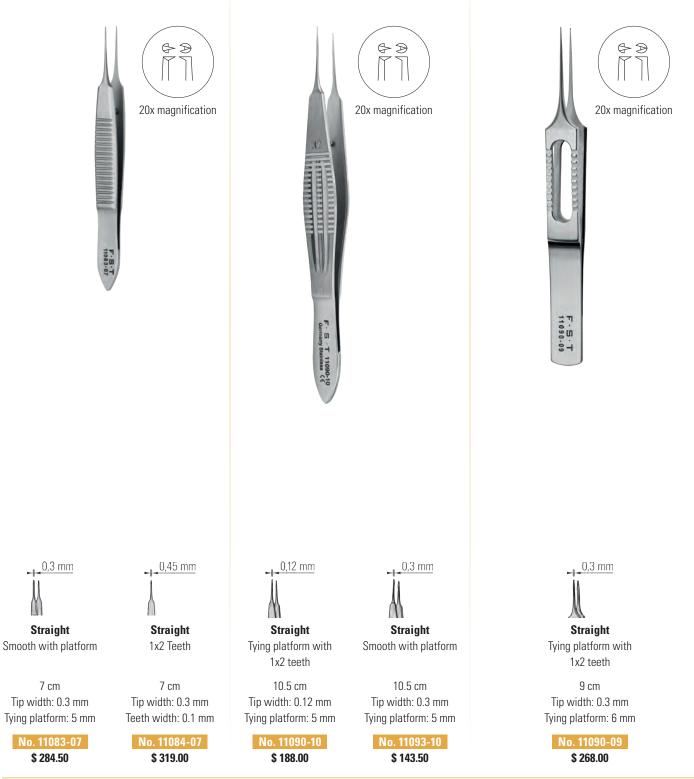
94 F·S·T

#### **Mirror Finish Bonn Forceps**

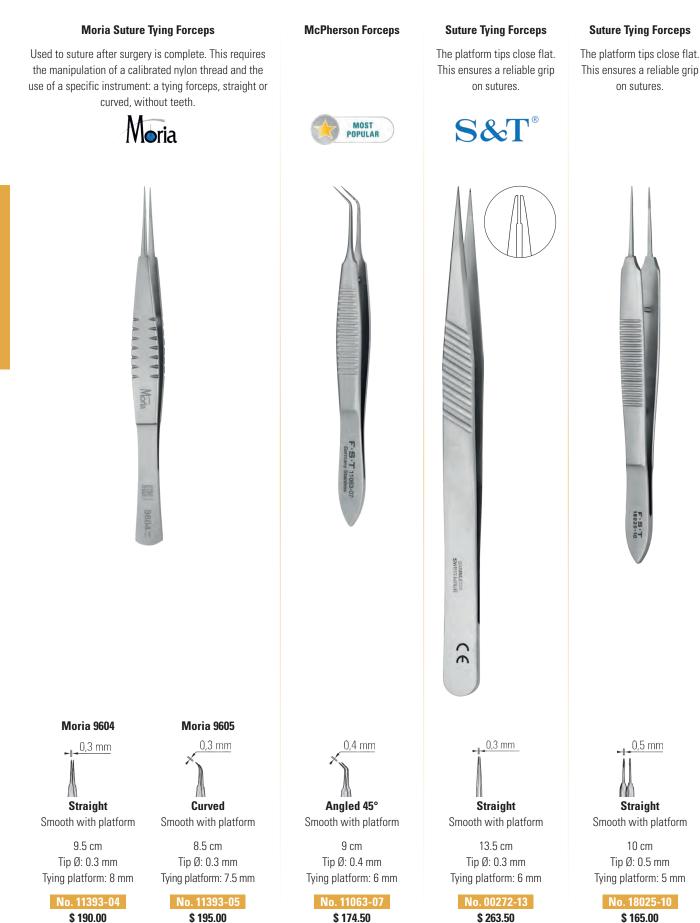
The fine Bonn forceps features a tying platform and is also available with additional 1x2 teeth. It's designed for tissue manipulation and suturing. The wide handle ensures safe handling. The fine and precise tips make it suitable for work under a high magnification.

#### Mirror Finish Suture Tying Forceps with Teeth

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



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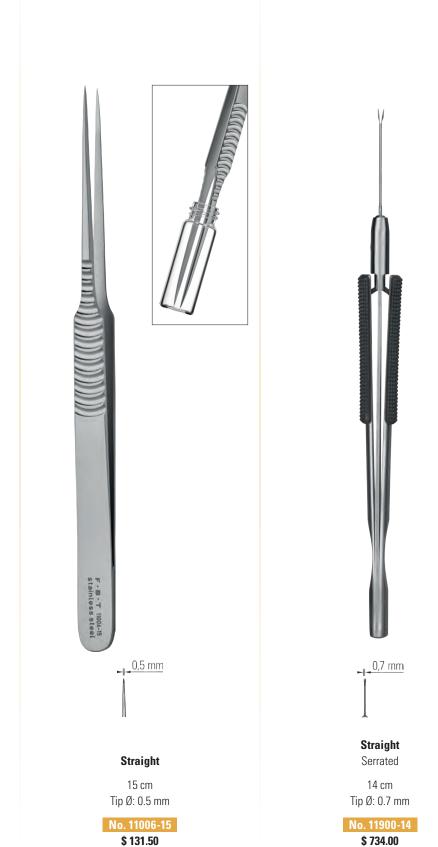
**Vitro Grasping Forceps** 

#### **Round Handled Suture Tying Forceps**

Round handles allow easy fingertip adjustments.

#### **Vial Forceps**

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



No. 18026-10 \$ 262.00

ONLY

RESEARCH

0,35 mm

Curved Smooth with platform

> 10.5 cm Tip Ø: 0.35 mm

Tying platform: 5.5 mm

F-S-T 18026-10

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

#### **Graefe Forceps**

#### **Bishop-Harman**

Extra light, fenestrated handles ensure a good grip.

#### **Octagon Forceps**

The octagon shaped grip provides a particularly secure finger hold.





The length of all forceps is 7 cm The dimensions of all tips are 0.6 x 0.5 mm





PRICES VALID NOV 1, 2023 TO OCT 31, 2024 · PRICES IN US CURRENCY · FOR ORDERING INFORMATION SEE INSIDE FRONT COVER

\$ 182.00

No. 11042-08

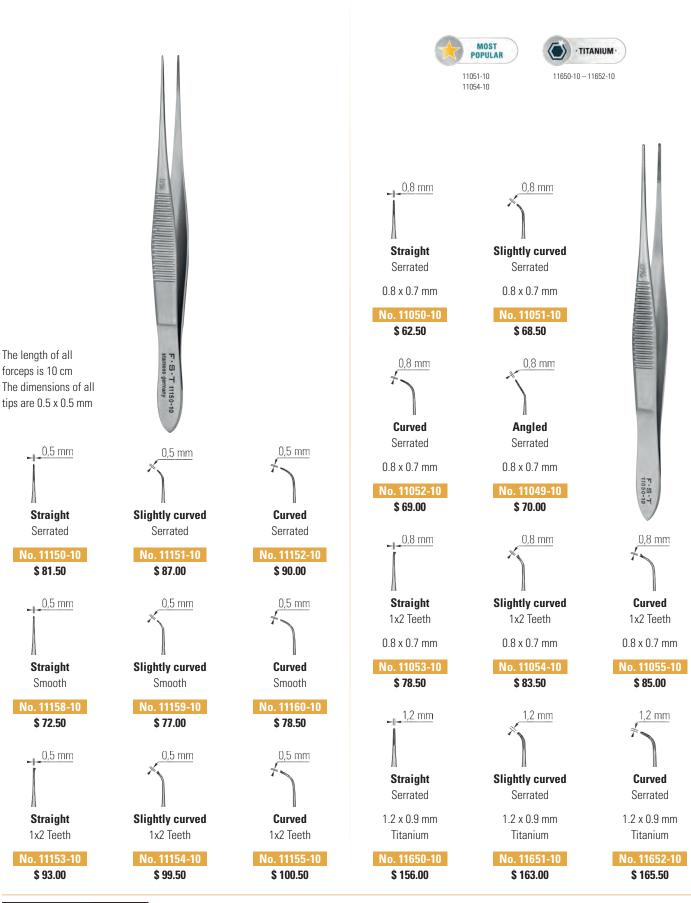
\$ 169.00

No. 11043-08

\$175.00

#### **Extra Fine Graefe Forceps**

**Graefe Forceps** 



RESEARCH ONLY

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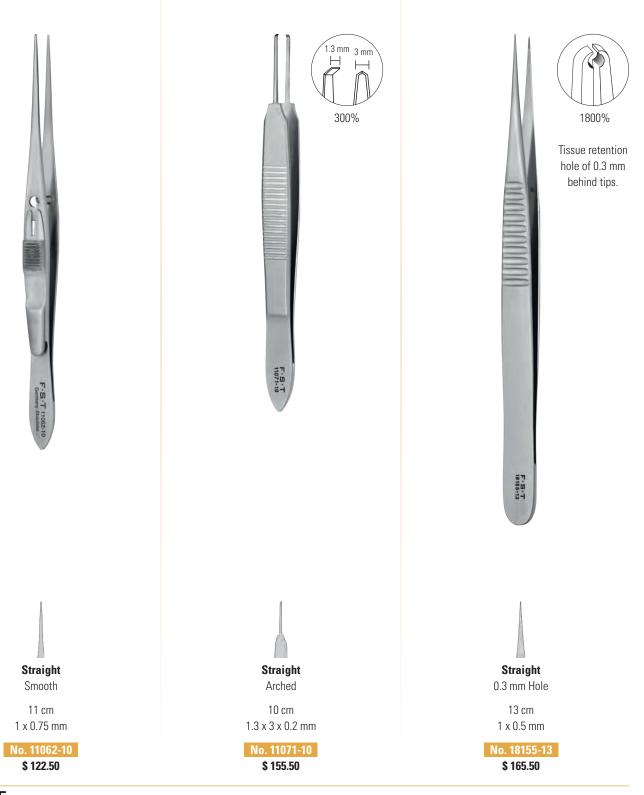
#### **Sliding Lock Forceps**

#### **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.

#### **Pierse Fixation Forceps**

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



100 F · S · T

**Cover Glass Forceps** 

#### **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.

#### **Cross Action** Forceps

These tissue transport forceps have a gentle action.





Straight Sharp







Curved Sharp



No. 11700-01 \$ 26.50

RESEARCH

DNLY



Angled 45°

Straight

Blunt

11.5 cm

1.5 x 0.4 mm

No. 11700-03

\$ 26.50

Curved

Blunt

11.5 cm

1.5 x 0.4 mm

No. 11700-04

\$ 26.50

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

\$ 32.50

\$ 69.00

\$ 39.50

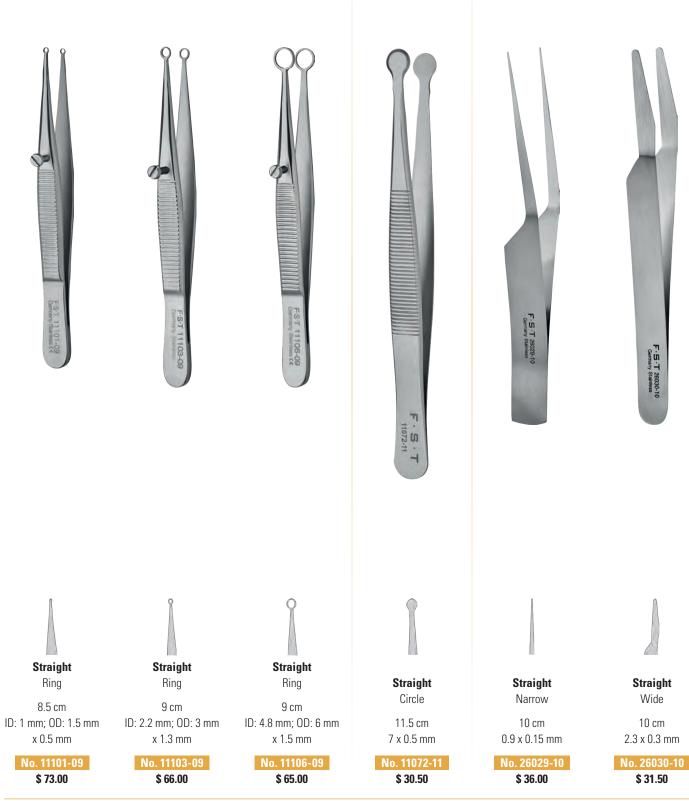
#### **Ring Forceps**

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

#### **Circle Forceps**

Cupped forceps for atraumatic gripping of organs and tissues.

Very delicate.



102 F · S · T

#### **STANDARD FORCEPS**

#### **Micro-Adson**

Our most delicate version of the popular Adson forceps.

#### **Micro-Adson with Fenestrated Handle**

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

F-5-T

Straight

Serrated

12 cm

0.8 x 1 mm

No. 11020-12

\$65.00

Straight

1x2 Teeth

12 cm

0.5 x 0.6 mm

No. 11032-12

\$76.00

0.5 mm

Ø

### Adson

Wide, strong grip with narrow tips.







RESEARCH ONLY

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1x2 teeth

12 cm

\$ 63.00

FORCEPS/TWEEZERS

Straight

12 cm

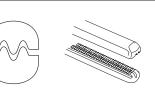
103

#### **Adson DeBakey**

**Adson-Graefe** 

Adson-Brown





#### 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.



12.5 cm 1.75 x 1.5 mm

No. 11617-12 \$ 160.00

Straight DeBakey serrations 15 cm 1.75 x 1.5 mm

No. 11616-15 \$ 166.00





12 cm 2 x 1.4 mm

Straight

F-S-T 11627-12

#### No. 11627-12 \$ 76.50



PRICES VALID NOV 1, 2023 TO OCT 31, 2024 · PRICES IN US CURRENCY · FOR ORDERING INFORMATION SEE INSIDE FRONT COVER

4.5 x 1.25 mm

No. 11030-12

\$ 135.50

#### **Standard Pattern**

Broad pattern with strong spring action.

#### Narrow Pattern

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





Straight		
	Serra	ated
Tip width (mm)		ltem

Price

		(mm)	(cm)
\$ 22.00	No. 11000-12	2.5	12
\$ 24.50	No. 11000-13	2.8	13
\$ 27.50	No. 11000-14	3.25	14.5
\$ 30.50	No. 11000-16	3.3	16
\$ 34.00	No. 11000-18	3.7	18
\$ 36.50	No. 11000-20	3.75	20
\$ 42.00	No. 11000-25	3.9	25
\$ 48.50	No. 11000-30	4	30



Serrated

Length (cm)	Tip width (mm)	ltem	Price
12	2.5	No. 11001-12	\$ 29.00
13	2.8	No. 11001-13	\$ 32.50
14.5	3.25	No. 11001-14	\$ 35.00
16	3.3	No. 11001-16	\$ 35.00
18	3.7	No. 11001-18	\$ 37.50
20	3.75	No. 11001-20	\$ 41.00



Length (cm)	Tip width (mm)	ltem	Price
12	2	No. 11002-12	\$ 27.50
13	2.15	No. 11002-13	\$ 30.50
14.5	2.25	No. 11002-14	\$ 33.50
14.5	2.25	No. 11602-14	\$ 105.00
16	2.35	No. 11002-16	\$ 36.50
18	2.4	No. 11002-18	\$ 42.00
20	2.75	No. 11002-20	\$ 43.50
25	3.2	No. 11002-25	\$ 46.50
			-

**Straight** Serrated



Serrated

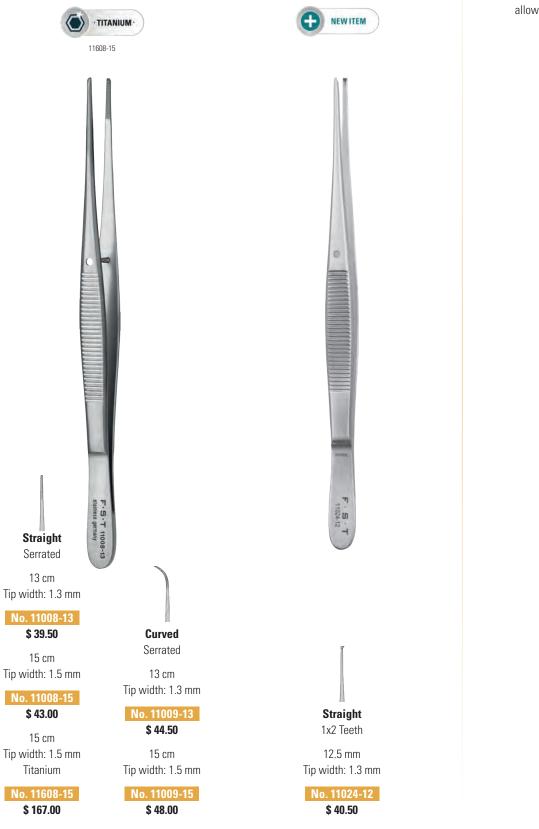
Length (cm)	Tip width (mm)	ltem	Price
12	2	No. 11003-12	\$ 32.50
13	2.15	No. 11003-13	\$ 35.50
14.5	2.25	No. 11003-14	\$ 41.00
16	2.35	No. 11003-16	\$ 41.50
18	2.4	No. 11003-18	\$ 44.00
20	2.75	No. 11003-20	\$ 47.00

F-S-T 11002-13

#### **STANDARD FORCEPS**

#### Semken

## The Semken tweezers are characterized by their slim shape and fine tips. Their anatomical (toothing) or surgical (1x2 teeth) tips make them ideal for grasping tissue. The serrated grip surface ensures a secure hold during use.



#### **DeBakey Round Handle Forceps**

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



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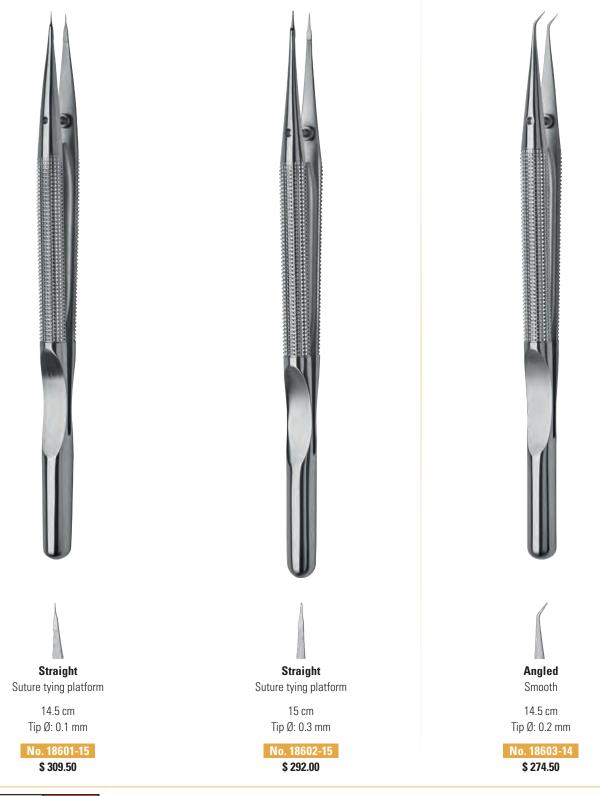
S·T

SCIENCE TOOLS

#### **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.



**Tissue Forceps** 



Used with rongeur No. 16021-14 in laminectomy to securely hold spinal column.



108 F · S · T FINE SCIENCE TOOLS

#### Gillies

#### Russian

Special cupped pattern for superior grip.

#### **Organ Holding Forceps**

With limit screw to prevent excessive applied pressure.



F-S-T 11026-15 6 mm 11 mm Straight Cupped teeth

15 cm 6 x 11 mm

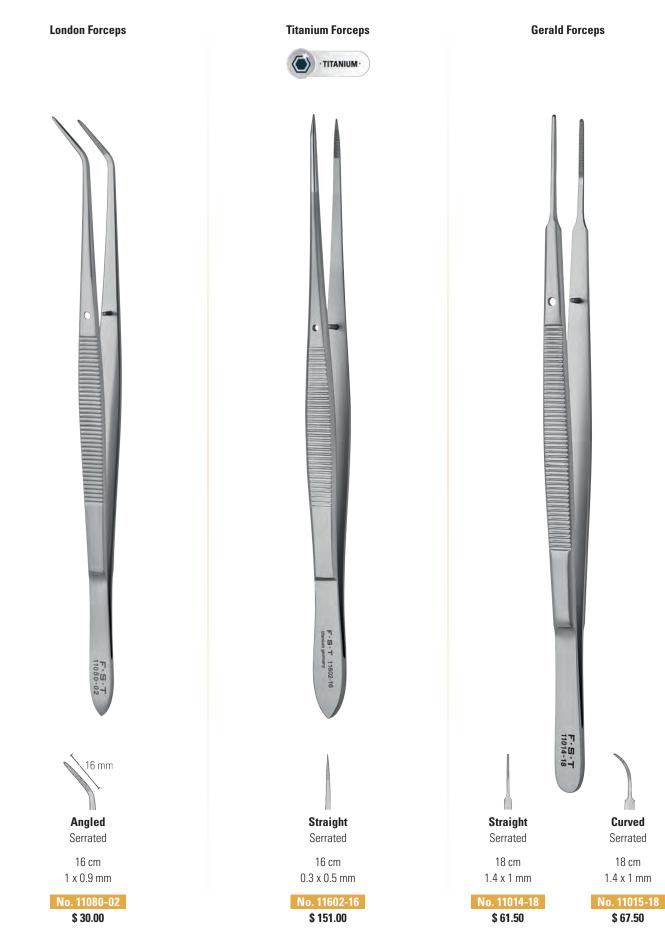
No. 11026-15 \$ 62.00



No. 11028-15

\$ 48.00

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110 F · S · T

**Taylor Forceps** 

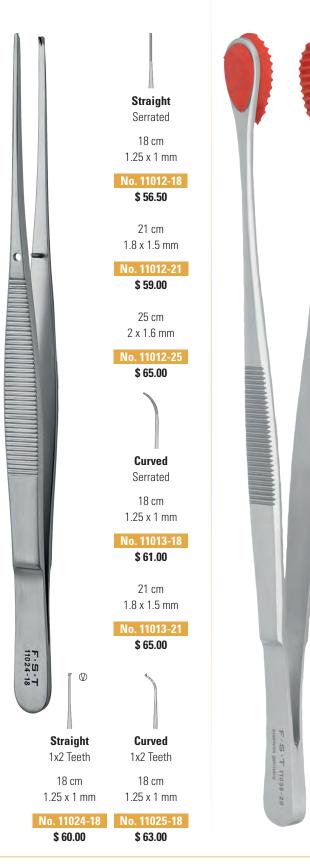
Serrated and smooth versions available.

**Potts-Smith Forceps** 

**Mouse Handling Forceps** 

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





PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

21 cm

Forceps with serrated silicone tips

Gripping surface:

15 x 20 mm

No. 11036-20

\$ 38.00

Replacement silicone tips

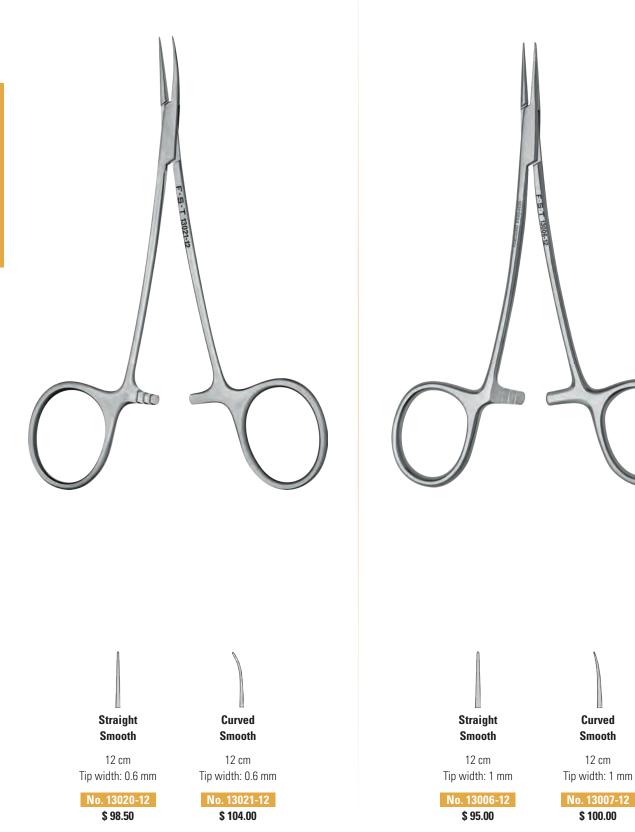
Pkg. of 2 tips

No. 11036-90

\$ 16.50

#### **Ultra Fine Hemostat**

**Fine Hemostat** 



112 F · S · T

#### **Micro-Mosquito**

#### Halsted-Mosquito



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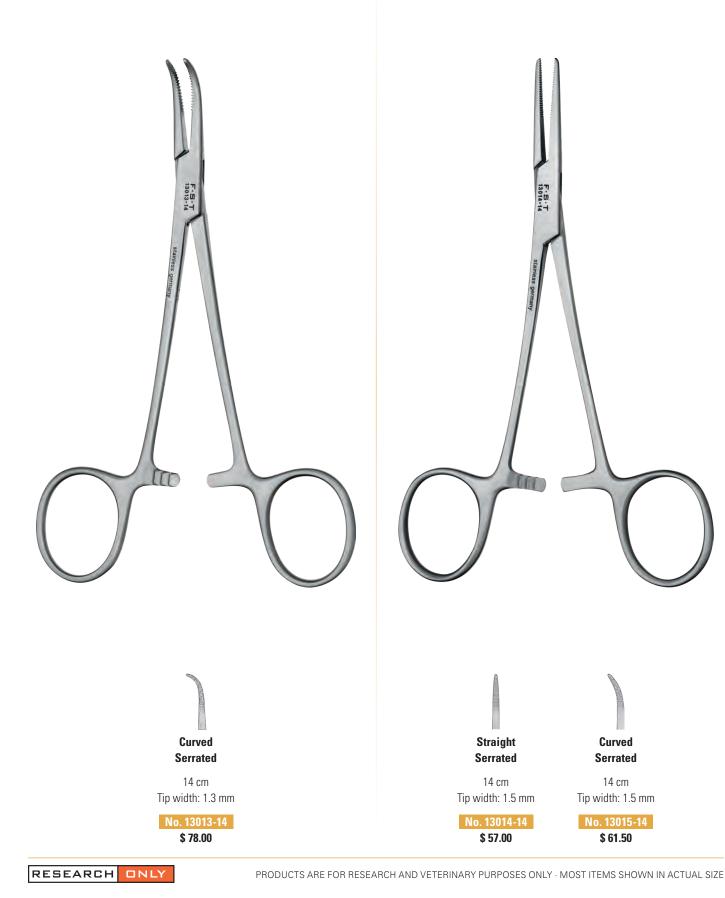
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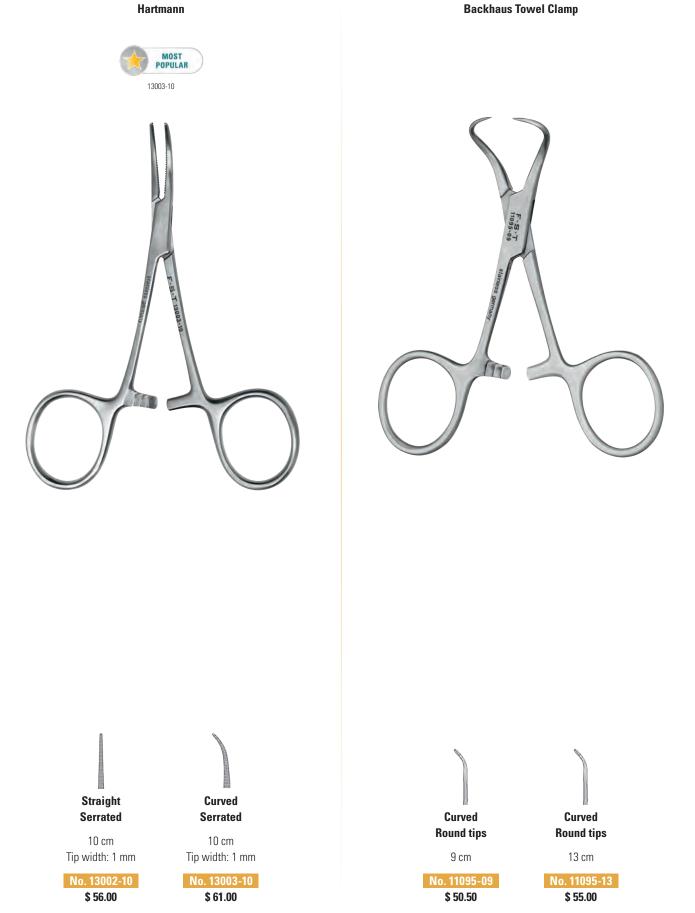


114 FINE SCIENCE TOOLS

**Baby-Mixter** 

**Providence-Hospital** 





116 F · S · T

Lorna Towel Clamp

## Allis Clamp

Tissue and organ holding forceps.







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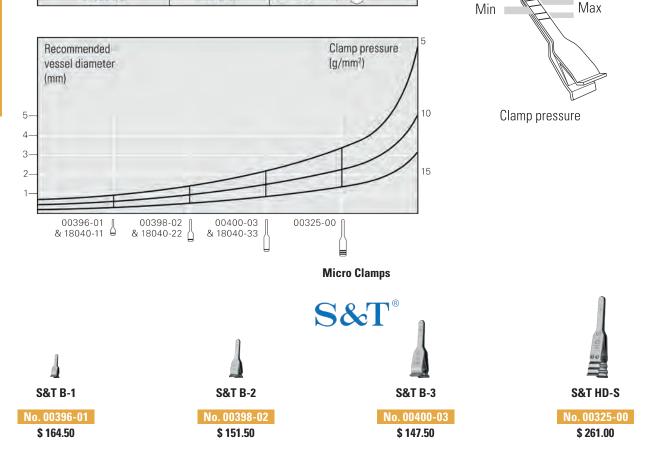
PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

#### **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/mm2 when used on the largest vessel in its range, and 15g/mm2 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 = 0
00398-02 & 18040-22	5.5 x 1.5	0.6 - 1.5 • •
00400-03 & 18040-33	7.5 × 1.75	1.0 - 2.25 。 〇
00325-00	10 x 2.15	2.0 - 5.0 0



#### **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** 

**Micro Clamp Applying Forceps** 





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#### Micro Clip Applicator with Lock



## Forceps Style Clip Applicator

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

> F-5-T 18057-14

14 cm

For use with FST 18055 and

18555 series micro serrefines.

Lock: No

No. 18057-14

\$ 103.50



Application forceps for Biemer clamps made of surgical stainless steel.





## 14 cm For use with FST 18058 (Biemer Clip) series

Lock: No

No. 18059-14 \$ 93.50

#### **Stainless Steel Micro Serrefines**

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



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

## Delicate atraumatic serration \$76.50



Jaw dimesions (mm)	Total length <sup>(mm)</sup>	Jaw pressure (g)	ltem	
10 x 2	19	60	No. 18055-01	
8 x 2	16	85	No. 18055-02	
6 x 1	15	100	No. 18055-03	
4 x 0.75	13	125	No. 18055-04	

## \$ 90.50

Jaw dimesions (mm)	Total length (mm)	Jaw pressure (g)	ltem	
6 x 1	17	85	No. 18055-05	
4 x 0.75	16	85	No. 18055-06	$\sim$

## **Titanium Micro Serrefines**

Delicate atraumatic serration

\$ 160.00

Lightweight with strong clamping pressure.



Jaw dimesions (mm)	Total length (mm)	Jaw pressure (g)	ltem	
10 x 2	19	60	No. 18555-01	$\bigcirc$
8 x 2	16	85	No. 18555-02	$\frown$
6 x 1	15	100	No. 18555-03	$\frown$
4 x 0.75	13	125	No. 18555-04	



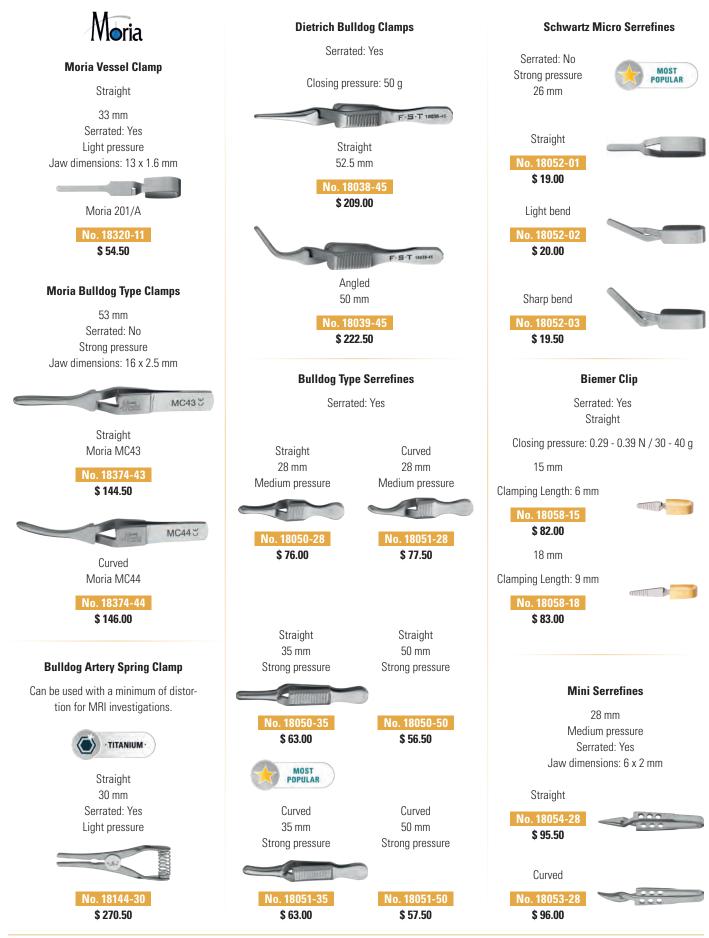
14 cm For use with FST 18055 and 18555 series micro serrefines.

Lock: Yes

No. 18056-14 \$ 344.50



### **CLAMPS & OCCLUDERS**



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**VASCULAR INSTRUMENTS** 

### Horizon<sup>™</sup> Metal Ligation System

The Horizon<sup>™</sup> System provides surgeons with a strong, secure clip coupled with an efficient, convenient easy-load cartridge system. The preformed chevron shape of the Horizon<sup>™</sup> 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.



Silver Neuro Clips

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

Pkg. of 100 clips

No. 18040-00 \$ 85,50



#### 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 instruction**

1. Apply the occluder cuff around the exposed blood vessel. Secure it in place with suture material through the eyelets.

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.

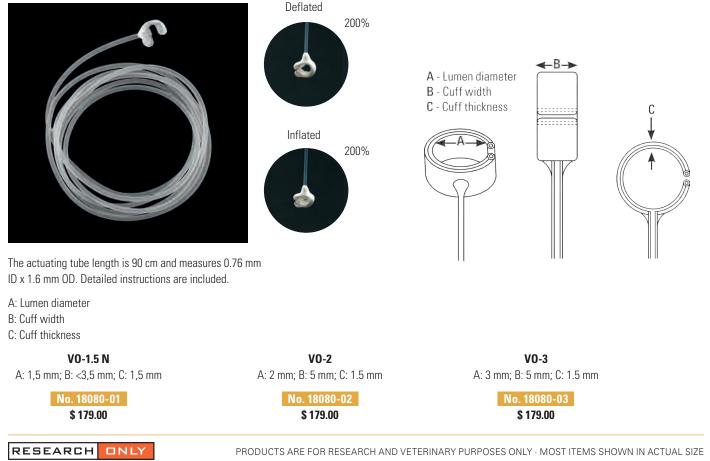
3. To deflate, simply withdraw the air or liquid.

#### 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.
- Easily maintained: can be autoclaved or cold sterilized.
- 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.



#### **Vessel Dilators**

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



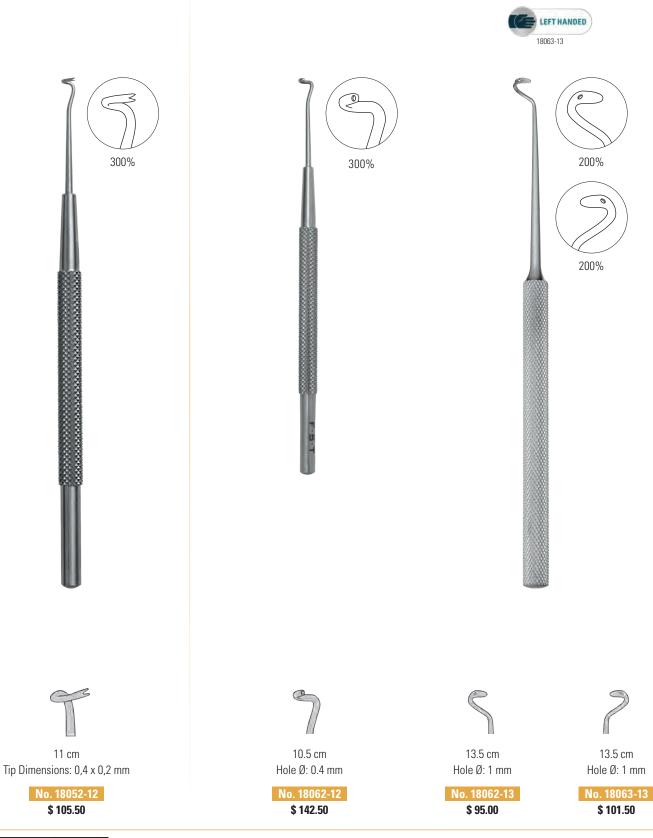
124 F · S · T

## V-Hook

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

**Ligation Aids** 



RESEARCH ONLY

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#### **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.



## Approach

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





#### Insertion

Remove trocar and advance cannula.





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 \$ 47.00



### **CANNULATION FORCEPS**

#### **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.









13 cm

For tubing of 0.35 mm OD

No. 11280-11

\$ 293.00

11 cm

For tubing of 0.5 mm OD

No. 11281-11

\$ 268.00

11 cm

For tubing of 1 mm OD

No. 11282-11

\$ 245.00



11.5 cm For tubing of 0.35 mm OD

> No. 18403-11 \$ 201.00

11.5 cm For tubing of 0.6 mm OD

> No. 18406-11 \$ 193.00

13.5 cm For tubing of 0.6 mm OD

> No. 18406-13 \$ 186.50

11 cm For tubing of 0.35 mm OD

#### No. 00608-11 \$ 285.50

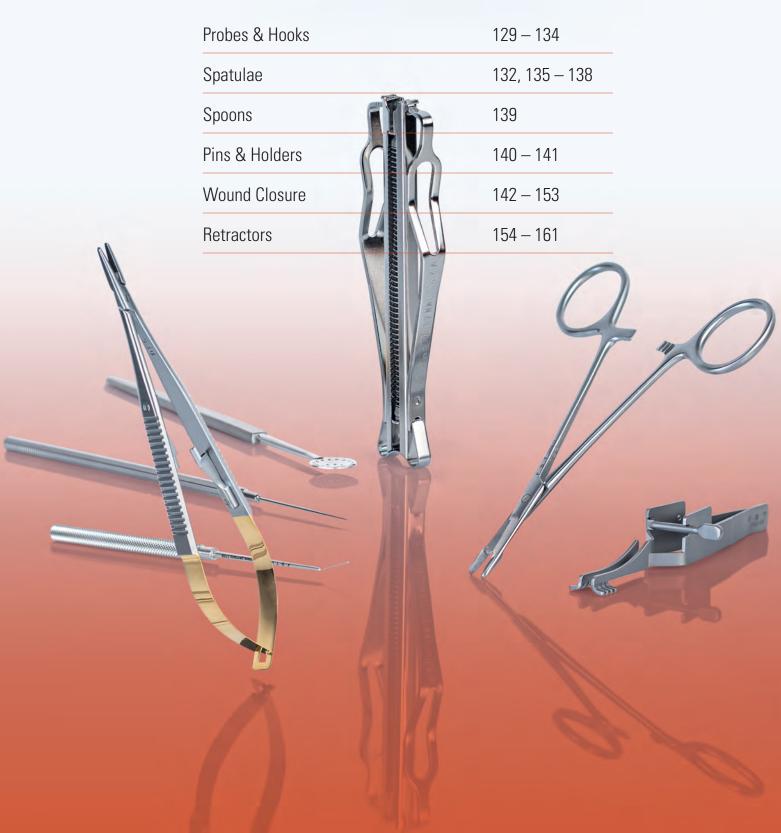
11 cm For tubing of 0.5-1 mm OD

## No. 00574-11 \$ 266.50

RESEARCH ONLY

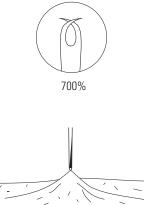
PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

# PROBES, NEEDLE HOLDERS, WOUND CLOSURE, RETRACTORS & CLAMPS

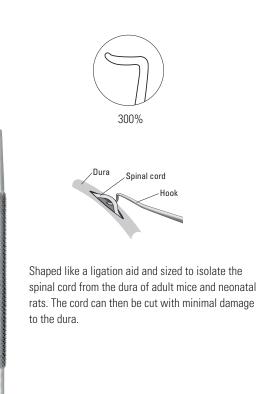


#### **Double Pronged Pick**

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



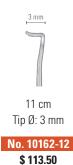
The tip consists of two very sharp, nearly horizontally opposed points. By applying gentle downward pressure and twisting slightly in a clockwise fashion, the points will embed themselves horizontally into fine membranes or skin etc., so that it may be lifted upward. This instrument also has been used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



**Spinal Cord Hook** 

11 cm Tip Ø: 1 mm No. 18067-11 \$ 122.00

1 mm





F.S.T 10162-12

**Bonn Micro Probes** 



Actual size Angled 45° 13.5 cm Tip Ø: 0.025 mm

No. 10032-13 \$ 81.50





Wide Hook

13.5 cm Tip Ø: 0.038 mm





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Actual size



**Straight** 13.5 cm Tip Ø: 0.025 mm



Actual size



Narrow Hook

Tip Ø: 0.025 mm **No. 10031-13** 

\$ 86.00



Angled 45°

300%

15.5 cm Tip Ø: 0.038 mm

No. 10066-15 \$ 84.50



No. 10065-15 \$ 88.50

**Mico Hooks** 

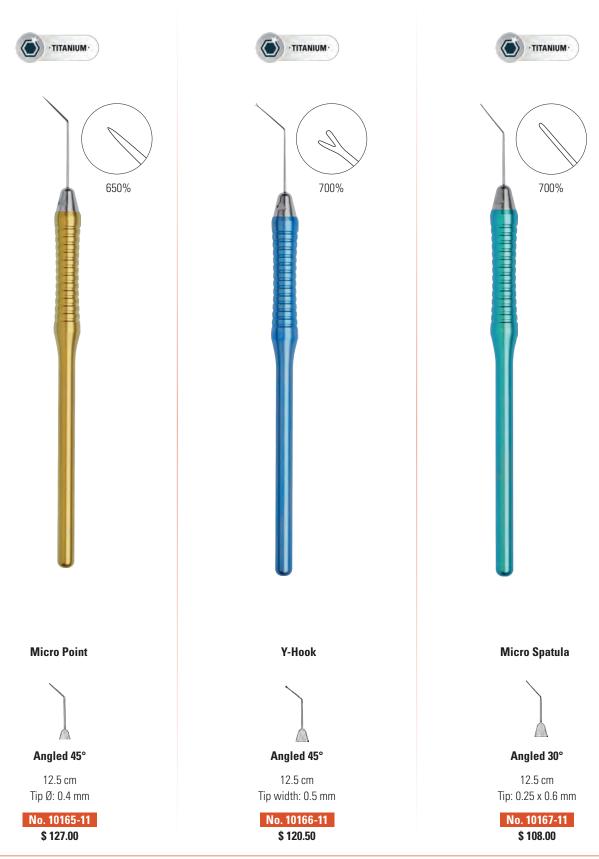


**Probes and Explorers** 

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

#### 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.





132 F · S · T FINE SCIENCE TOOLS

#### **PROBES & DIRECTOR**



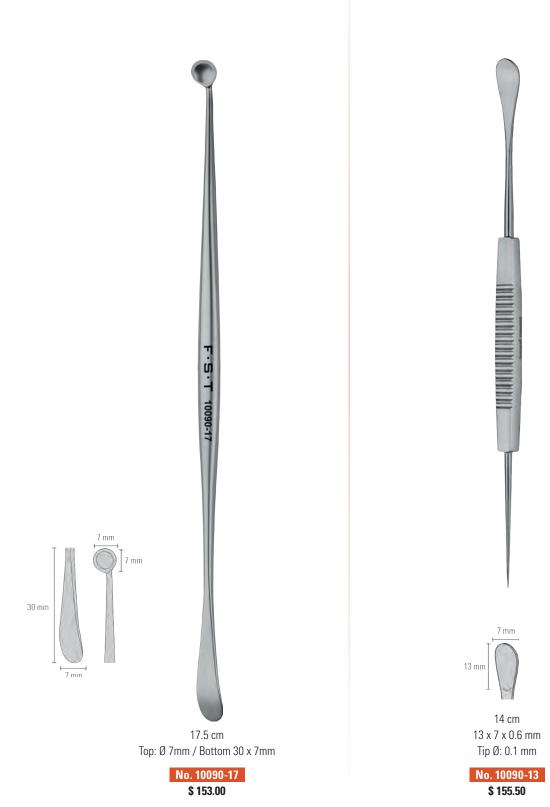
133

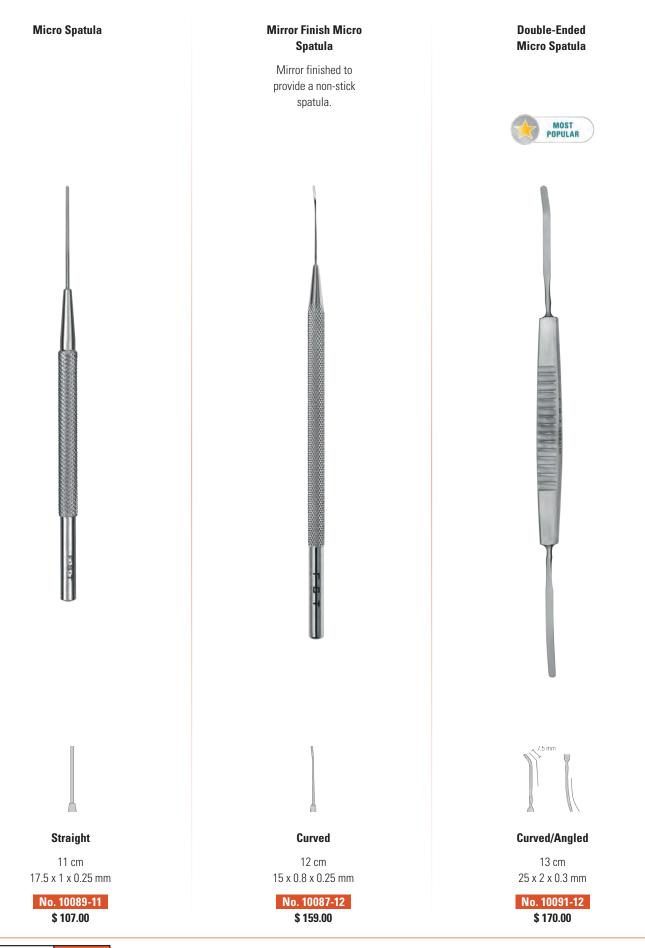
RESEARCH ONLY

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Combination Spoon and Spatula

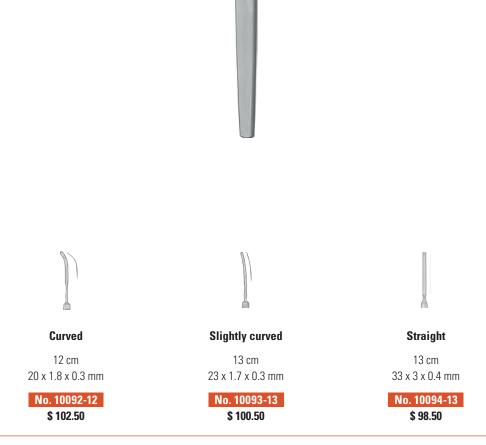
Combination Probe and Spatula





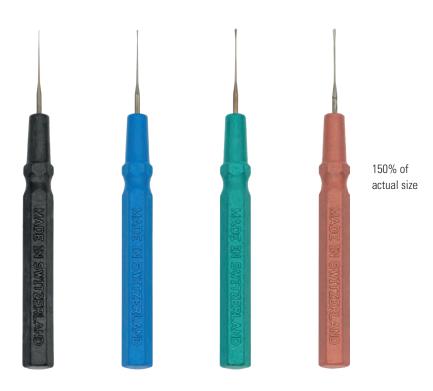
RESEARCH ONLY

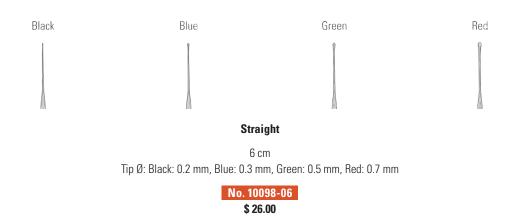
PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE



F-8-T 10092-12







RESEARCH ONLY

#### Mini Hippocampal Dissecting Tool

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

#### **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 20 x 6 mm & 13 x 3 mm Tip thickness: 0.5 mm

> No. 10099-12 \$ 200.00



**SPOONS** 



RESEARCH ONLY

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139

SPOONS

Pin Holder

Light weight

MOST





Moria MC1

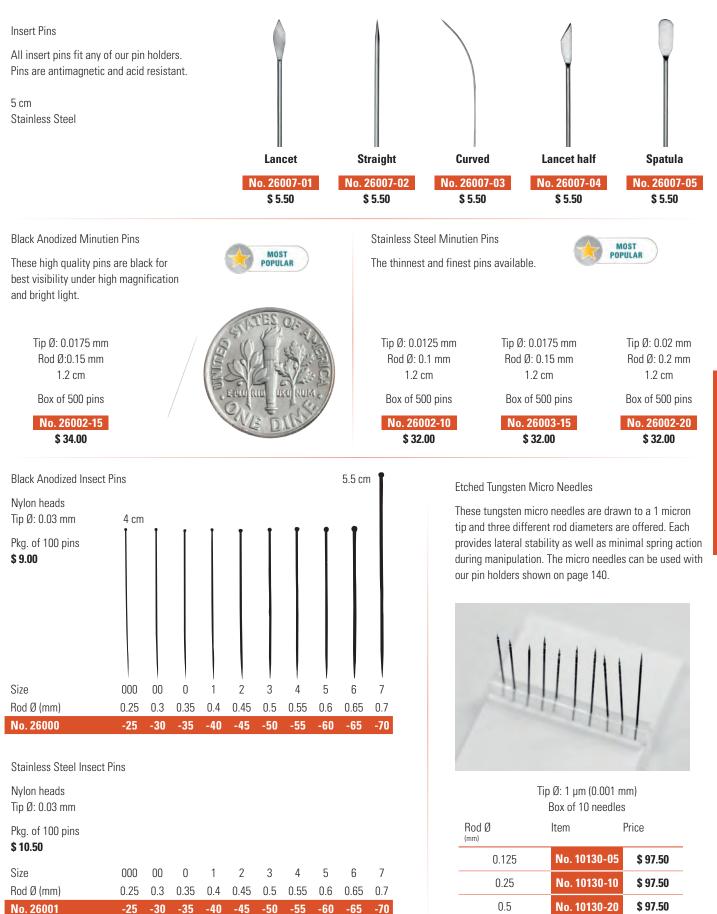
12 cm Nickel-plated Jaw opening: 0 to 1 mm

> No. 26016-12 \$ 47.00

17 cm Aluminum handle with nickel-plated chuck Jaw opening: 0 to 1 mm

> No. 26018-17 \$ 27.00





RESEARCH

ONLY

PINS & HOLDERS

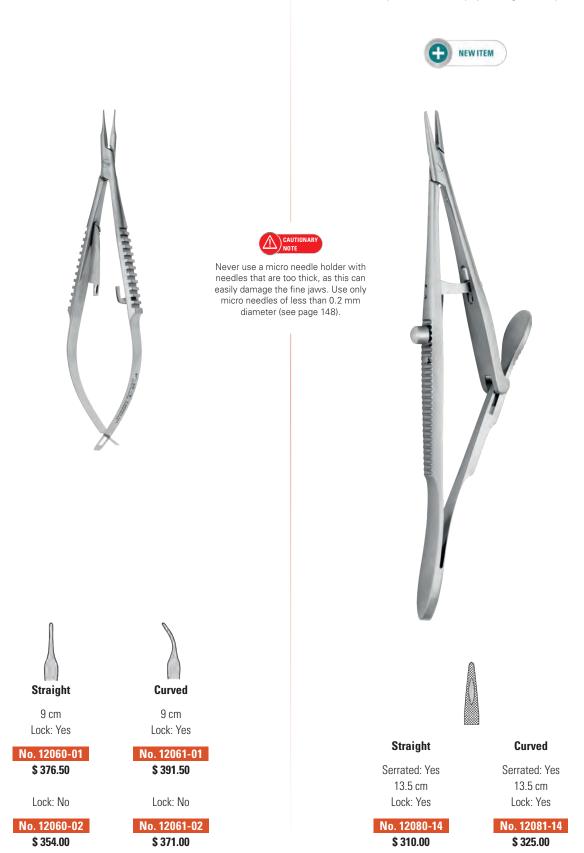
PINS

Castroviejo

Micro pattern, with slightly blunted tips.

#### Kalt Needle Holder

The Kalt needle holder is characterized by its extraordinary design and good handling. The closure system closes softly and securely and can be easily opened again with your thumb.







WOUND CLOSURE

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**NEEDLE HOLDERS** 



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WOUND CLOSURE







WOUND CLOSURE

### **Microsurgical Needles with Suture Thread Attached**

The combination of proprietary needle design technology and state-of-the-art manufacturing techniques has enabled FST to provide a microsurgical needle that is unmatched in the industry. FST 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.

400% of aktual size

No. 12052-11

No. 12052-10

Features:

- Needle and thread combination comprising of nonabsorbable 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 Standard taper point needle Standard taper point needle No. 12052-09 No. 12052-08

Suture size	Suture length	Needle Ø (micron)	Needle Ø $_{\rm (mm)}$	Needle chord length (mm)	Circle	Arch	ltem	Price
11/0	10	50	0.05	3.8	3/8	3.8	No. 12052-11	\$ 220.00
10/0	10	70	0.07	3.8	3/8	3.8	No. 12052-10	\$ 169.00
9/0	15	100	0.1	5	3/8	5.1	No. 12052-09	\$ 107.00
8/0	15	140	0.14	5	3/8	6.4	No. 12052-08	\$ 80.50

FINE SCIENCE TOOLS

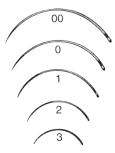
### **Suture Needles**

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

# Sterile: No

Sterne. No

Pkg. of 12 needles



Size	ltem	Price
00	No. 12050-20	\$ 27.50
0	No. 12050-10	\$ 27.50
1	No. 12050-01	\$ 27.50
2	No. 12050-02	\$ 27.50
3	No. 12050-03	\$ 27.50

Silk Suture	Size	Suture Ø	Spool length (m)	ltem	Price
Silk suture has a smooth flow through tissue	7/0	0.05	91	No. 18020-70	\$ 77.50
while maintaining knot security.	a       (mm)       (m)       (m)         mass a smooth flow through tissue training knot security.       7/0       0.05       91         6/0       0.08       23         5/0       0.12       23         4/0       0.17       23         3/0       0.22       23         2/0       0.32       23	No. 18020-60	\$ 34.50		
Braided Silk	5/0	0.12	23	No. 18020-50	\$ 35.00
Sterile: No	4/0	0.17	23	No. 18020-40	\$ 35.00
Can be ETO sterilized	3/0	0.22	23	No. 18020-30	\$ 36.50
	2/0	0.32	23	No. 18020-20	\$ 45.00
	0	0.37	23	No. 18020-00	\$ 47.00
	1	0.45	23	No. 18020-01	\$ 51.50
	2	0.55	23	No. 18020-02	\$ 68.50
	3	0.65	23	No. 18020-03	\$ 60.00

### For Suture Tying Forceps, see pages 79, 80 and 81.

Size	Suture Ø	Spool length (m)	ltem	Price
8/0	0.04	91	No. 18030-80	\$ 94.50
7/0	0.05	91	No. 18030-70	\$ 76.50
6/0	0.07	91	No. 18030-60	\$ 88.50
5/0	0.1	91	No. 18030-50	\$ 90.50
4/0	0.15	91	No. 18030-40	\$ 91.50
3/0	0.2	91	No. 18030-30	\$ 93.50

# RESEARCH ONLY

**Nylon Monofilament Suture** 

Nylon monofilament Non sterile

Can be ETO sterilized

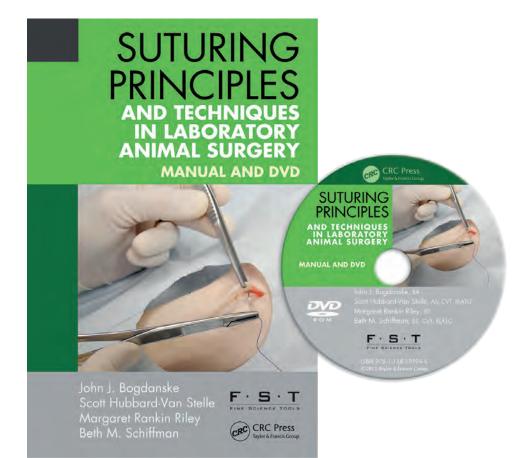
Nylon is known for its uniform diameter flexibility and outstanding consistent knot security.

### **Suturing Principles and Techniques in Laboratory Animal Surgery**

This manual introduces the reader into the basic principles, materials and surgical instruments required for suturing and wound closure used on laboratory animals. It 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 included DVD provides descriptive narrative and step-by-step video demonstrations for each of the suturing techniques.

For your convenience all instruments which are used for the demonstrations are listed with their FST item numbers

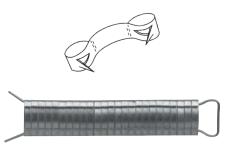






**CLIPS** 

	Size (mm)	ltem	
Michel Suture Clips	7.5 x 1.75	No. 12040-01	
<ul> <li>Anti-magnetic</li> <li>Acid-resistant stainless steel</li> </ul>	11 x 2	No. 12040-02	
<ul> <li>Pkg. of 1.000 clips</li> </ul>	12 x 2.5	No. 12040-03	



### **Applying Forceps**



12.5 cm For clip sizes 12040-02 and 12040-03

> No. 12018-12 \$ 41.00

**Applying and Removing Instruments** 

Price

\$ 112.00

\$ 110.00

\$ 105.50



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### **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 guick 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.



### Manipler<sup>®</sup> Skin Stapler

Quality, slim, lightweight design with consistent actuation and staple count indicator.

### Disposable, sterile and not autoclavable.



WOUND CLOSURE

FINE SCIENCE TOOLS

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### **Surgical Staple Remover**

Compatible with Reloadable Skin Stapler with Rotating Head and Manipler<sup>®</sup> Skin Stapler.

### AutoClip® System

The AutoClip<sup>®</sup> 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.



Clips



Applier



### AutoClip® Kit

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

No. 12020-00

\$ 334.50

AutoClip® applier 11.5 cm

No. 12020-09

\$ 209.50

Pkg. of 100 clips **No. 12022-09** 

AutoClip® clips

9 mm

\$ 30.00

AutoClip <sup>®</sup> clips
9 mm
Pkg. of 1000 clips
No. 12022-19

\$ 258.00



No. 12023-00 \$ 122.50

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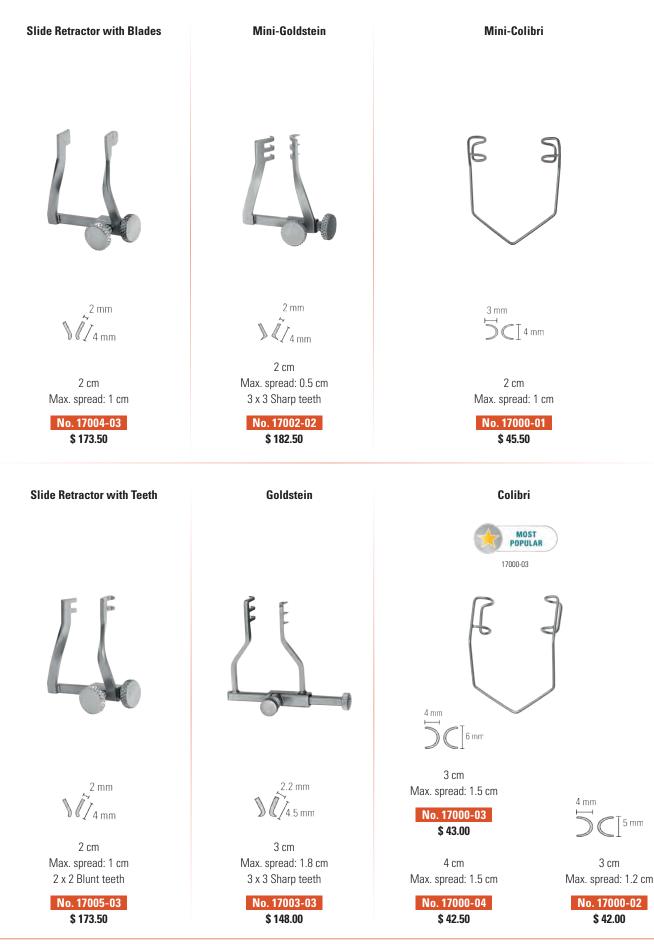
PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

### **RETRACTORS**



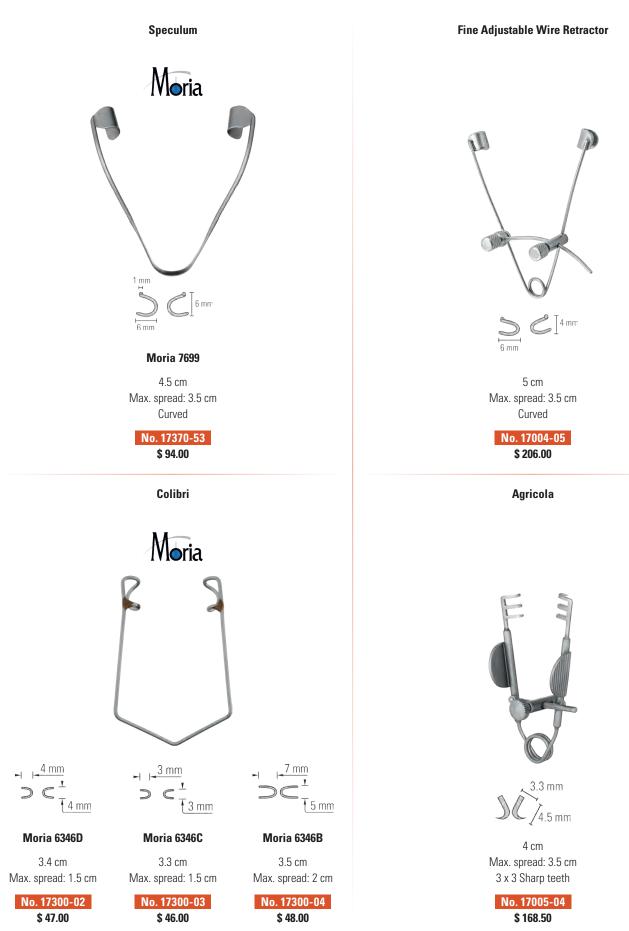
154 F · S · T

**RETRACTORS** 



155

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### Alm Retractor with Blunt Teeth

**Alm Retractor with Blades** 





5.5 mm

7 cm

Max. spread: 4 cm

Slightly curved

4 x 4 Blunt

No. 17008-07

\$154.00



4.5 mm

5.5 mm

7.5 cm

Max. spread: 4.5 cm

Slightly bent

No. 17009-08

\$ 185.00

RETRACTORS



7 cm Max. spread: 4 cm Slightly curved down

No. 17010-07 \$ 165.00



PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

16 mm

7 cm

Max. spread: 4 cm

Slightly curved

4 x 4 Blunt

No. 17009-07

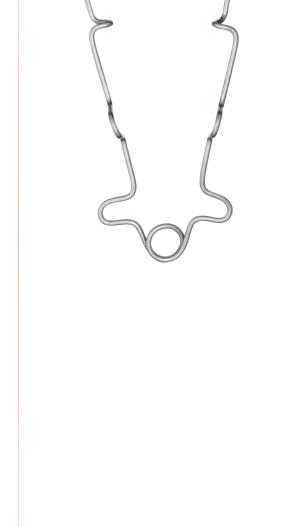
\$ 171.50

# **Spring-Loaded Retractor**

Curved atraumatic blades



Bowman





Heiss Gelpi - 17017. 2 3 mm 8 mm 6.5 mm 10 cm



Max. spread: 2.3 cm 4 x 4 Blunt teeth

No. 17011-10 \$ 157.00

Angled down Max. spread: 3 cm 1 x 1 Sharp teeth

No. 17017-10 \$ 260.00



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### Weitlaner-Locktite

Wullstein





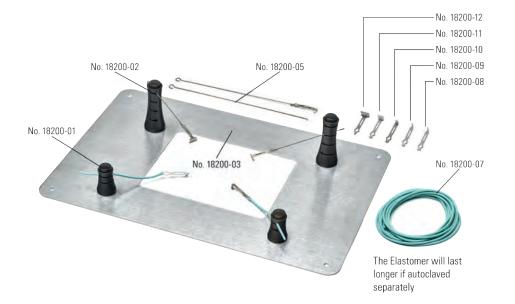


2 mm J H 16 mm 5 mm

Angled down 3 x 3 Blunt teeth

11 cm Max. spread: 3 cm

No. 17018-11 \$ 284.00



### **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 \$ 407.00

RESEARCH ONLY

# 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 \$ 492.00

### Individual parts:

Short fixator, 3 cm high Fach

No. 18200-01 \$ 68.00

Tall fixator, 6 cm high Each

No. 18200-02

\$ 80.00

Small base plate, (20 x 30 cm) Each

### No. 18200-03 \$ 84.00

Large base plate, (25 x 35 cm) Each

### No. 18200-04

\$ 98.50

Wire handles, 10 cm long Pkg. of 10

No. 18200-05 \$ 57.00

Wire handles, 14 cm long Pkg. of 10 No. 18200-06 \$ 60.00

φ 00.00

Elastomer, 2 m roll **No. 18200-07** 

### \$ 26.50

Sharp retractors, 1 mm wide Pkg. of 10

No. 18200-08 \$ 86,50

Blunt retractors, 1 mm wide Pkg. of 10

No. 18200-09

## \$ 86.00

Blunt retractors, 2.5 mm wide Pkg. of 10

### No. 18200-10 \$ 86.50

Blunt retractors, 5 mm wide Pkg. of 10 No. 18200-11

# \$ 87.00

Blunt retractors, 7.5 mm wide Pkg. of 10 No. 18200-12 \$ 87.50

# ACCESSORIES & INSTRUMENT CARE

Animal Accessories	163 — 168
Instrument Care & Accessories	169 — 180
Surgical Accessories	181 — 184
Laboratory Accessories	185 — 197



### **Reusable Gavage Feeding Needles**

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



Gauge	Length (mm)	Tip Ø	Tip Shape	Shape	Mice	Rats	Guinea pigs <sup>(g)</sup>	ltem	Price
24	25	1.25	Round	Straight	>14			No. 18061-24	\$ 61.50
22	25	1.25	Round	Straight	15-20			No. 18061-22	\$ 61.50
20	38	2.25	Round	Straight	20-25	50-75		No. 18064-20	\$ 61.50
20	38	2.25	Round	Curved	20-25	50-75		No. 18065-20	\$ 61.50
18	38	2.25	Round	Straight	20-30	100-200	250-300	No. 18061-38	\$ 61.50
18	50	2.25	Round	Curved	25-30	100-200	250-300	No. 18061-50	\$ 61.50
16	75	3	Round	Curved		150-300	350-450	No. 18061-75	\$ 61.50
16	100	3	Round	Curved		150-300	350-450	No. 18061-10	\$ 61.50





Barrel tip

No. 18060-20

NEW ITEM

Gauge	Length	Tip Shape	Shape	Mice	Rats	Guinea pigs (g)	ltem	Price
24	25	Barrel	Straight	>14			No. 18060-24	\$ 36.00
22	25	Barrel	Straight	15-20			No. 18060-22	\$ 36.00
20	30	Barrel	Straight	20-25	50-75		No. 18060-20	\$ 36.00
20	38	Barrel	Straight	20-25	50-75		No. 18063-20	\$ 36.00
20	38	Barrel	Curved	20-25	50-75		No. 18067-20	\$ 38.50
18	38	Barrel	Straight	20-30	100-200	250-300	No. 18060-18	\$ 36.00
18	50	Barrel	Curved	25-30	100-200	250-300	No. 18067-50	\$ 38.50
16	75	Barrel	Curved		150-300	350-450	No. 18067-75	\$ 38.50
16	100	Barrel	Curved		150-300	350-450	No. 18067-10	\$ 38.50

### 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.** 



### **Disposable Flexible PTFE Feeding Needles**

These affordable needles feature flexible PTFE tube with silicone 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.** 





Price	ltem	Guinea pigs	Rats	Mice	Tip Ø	Length	Gauge
\$ 32.00	No. 18961-20		50-75	20-25	1.8	38	20
\$ 32.00	No. 18961-18	250-300	100-200	20-30	2	38	18
\$ 32.00	No. 18961-17	250-300	100-200	25-30	2.4	52	17
\$ 32.00	No. 18961-15	400-600	200-350		2.6	78	15
\$ 32.00	No. 18961-75	250-300	150-250	25-30	2	75	18
\$ 24.00	No. 18961-85	250-300	150-250	25-30	2.4	85	17



### 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.** 

### **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 discomfort. The ear puncher should be lubricated to improve longevity. **Autoclavable.** 



\$130.00

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\$ 240.00

\$ 265.00

### **EAR PUNCHES**

### 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**.

### 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.** 

> F·S·T 24214-02 made in germany

### **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.



### Handle and Tip

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

> No. 24213-02 \$ 99.00

### **Replacement Tip**

Punch Ø: 2 mm

No. 24213-12 \$ 54.00



11.5 cm Stainless Steel and anodized aluminum Punch Ø: 2 mm

> No. 24214-02 \$ 81.00



10.5 cm Punch Ø: 2 mm

No. 24212-02 \$ 41.50

Punch Ø: 1 mm

No. 24212-01 \$ 43.00

### **MARKING PENS**

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.

**Marking Pen** 

CAUTION: Color can stain skin and clothing. The use of gloves and lab coats is recommended. These colors will not work on black fur.



Markings can be removed from the skin with isopropyl alcohol. A six-inch ruler calibrated in both centimeters and inches is included.

### 

F · S · T FINESCIENCE.COM (M. 1. 2

### 50% of actual size

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

### **Self Piercing Ear Tags**

These ear tags come numbered from 1-1000. The silver colored ear tags are made of monel and the laser marked 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.





Alloy: Monel

0.8 cm

No. 1-100

\$ 34.50

No. 24221-10

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

Customized ear tags available in packages of 100 or 500. The following markings are possible: 1 to 6 numbers only or 1 to 6 letters and numbers.

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





No. 24221-50

\$138.00



Picture similar

Alloy: Monel 0.8 cm No. 501-1000 Ear tags - #s 501 to 1000

No. 24221-90 \$138.00

### **Animal Microtattoo System**

A guick, 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 (No. 24201-00) 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







Green tattoo paste 29.6 ml No. 24201-01

\$ 9.50

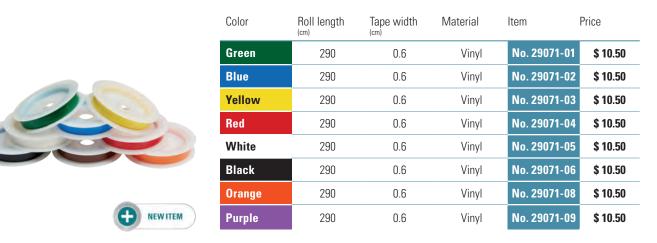
### **Fine Forceps Repair Kit**

Realign and repair fine forceps with this convenient kit. Bent forcep tips can be restraightened with the chain nose pliers. The sharpening stone has two grooves, 1.6 mm and 0.8 mm, to assist in resharpening the forcep 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.



### **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.** 



### 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, Purple, Blue and Orange. **Autoclavable**.



### **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. 9 colors available. **Autoclavable.** 



Color	Roll length	Tape width	Material	ltem	Price
Green	510	0.6	Vinyl	No. 29070-01	\$ 11.50
Blue	510	0.6	Vinyl	No. 29070-02	\$ 11.50
Yellow	510	0.6	Vinyl	No. 29070-03	\$ 11.50
Red	510	0.6	Vinyl	No. 29070-04	\$ 11.50
White	510	0.6	Vinyl	No. 29070-05	\$ 11.50
Black	510	0.6	Vinyl	No. 29070-06	\$ 11.50
Brown	510	0.6	Vinyl	No. 29070-07	\$ 11.50
Orange	510	0.6	Vinyl	No. 29070-08	\$ 11.50
Purple	510	0.6	Vinyl	No. 29070-09	\$ 11.50



### **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.

10 x 18 cm For instruments up to 13 cm long

Pkg. of 100 pouches

No. 28000-07 \$ 46.00

RESEARCH ONLY

13 x 26 cm For instruments up to 23 cm long

Pkg. of 100 pouches

No. 28000-10 \$ 58.00 18 x 30 cm For instruments up to 26 cm long

Pkg. of 100 pouches



PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

### **HOT BEAD STERILIZER**

### **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), 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.

60 % of actual size

### FST 250 Sterilizer

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

> No. 18000-45 \$ 601.00

### **Replacement glass beads for FST 250**

### Weight: 150 g

No. 18000-46 \$ 38.50

### FST 350 Sterilizer

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

> No. 18000-50 \$ 772.50

### **Replacement glass beads for FST 350**

Weight: 300 g

No. 18000-51 \$ 51.50



PRICES VALID NOV 1, 2023 TO OCT 31, 2024 · PRICES IN US CURRENCY · FOR ORDERING INFORMATION SEE INSIDE FRONT COVER

SCIENCE TOOLS

### **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 shown. Instruments not included. Small Sterilizer 110V 60 % of actual size Well Ø: 4 cm Well depth: 8 cm Well volume: 100 ml Total unit size: 14.5 x 15.5 x 15.5 cm No. 18090-45 \$ 549.00 **Small Sterilizer 220V** Well Ø: 4 cm Well depth: 8 cm Well volume: 100 ml Total unit size: 14.5 x 15.5 x 15.5 cm No. 18090-46 \$ 549.00 **Replacement glass beads for small sterilizer** Weight: 150 g No. 18000-47 \$ 25.00

### Tall Sterilizer 220V

Well Ø: 4 cm Well depth: 14 cm Well volume: 175 ml Total unit size: 14.5 x 15.5 x 21.5 cm

> No. 18090-51 \$ 599.00

### **Replacement glass beads for tall sterilizer**

Weight: 300 g

No. 18000-52 \$ 42.50

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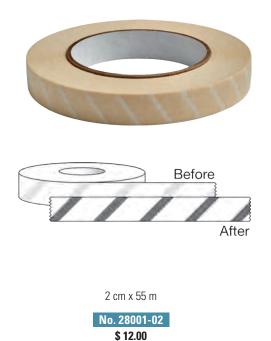
### **Tall Sterilizer 110V**

Well Ø: 4 cm Well depth: 14 cm Well volume: 175 ml Total unit size: 14.5 x 15.5 x 21.5 cm

> No. 18090-50 \$ 599.00

### **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.



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.



INSTRUMENT CARE & ACCESSORIES



### 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.** 

**Magnetic Sterilization Mat** 

Used during sterilization and for safe anti-slip placement around surgical

settings. Autoclavable.

Instruments not included.

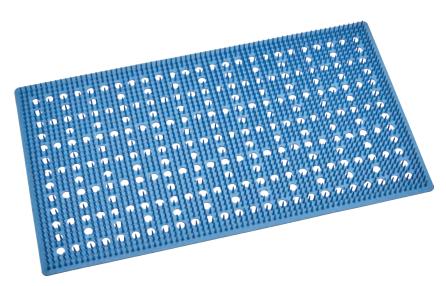
30 x 20 cm

No. 20350-00 \$ 159.00

30 x 20 cm No. 20325-00 \$ 128.50

### Silicone Mat

Large, economical silicone mat. Autoclavable.



46 x 25 cm

No. 20325-10 \$ 89.00 INSTRUMENT CARE & ACCESSORIES

### **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.



### **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.



\$190.00



### **Sterilization Container**

This sterilization container is made from Ultem<sup>®</sup> 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.



RESEARCH ONLY

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

### **Dual Clasping Stainless Steel Sterilization Container**

This container will assist in the sterilization and storage of your fine surgical instruments. It comes with a custom fit silicone mat 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.





### **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.





#### **Colored Aluminum Cases**

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



#### **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.** 



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RESEARCH

ONLY

#### **INSTRUMENT STORAGE**

#### **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.** 

36 x 23 cm (unfolded) Black Vinyl

No. 20831-10 \$ 11.00



#### **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.** 



#### **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.** 



No. 29060-01 \$ 11.50



4.8 x 25.4 mm Pkg. of 25 Material: Plastisol

No. 29060-05 \$ 11.50

2 x 19 mm

Pkg. of 25

Material: Plastisol

No. 29060-02

\$ 11.50

9.5 x 25.4 mm Pkg. of 25 Material: Plastisol

No. 29060-06 \$ 11.50



2.8 x 19.1 mm Pkg. of 25 Material: Plastisol

No. 29060-03





3.2 x 25.4 mm

Pkg. of 25 Material: Plastisol

No. 29060-04 \$ 11.50



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

> No. 29060-00 \$ 14.00





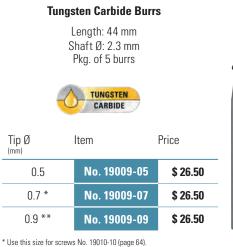
taii	nless Steel Burrs	
S	ength: 44 mm haft Ø: 2.3 mm Pkg. of 10 burrs	
	ltem	Price
	No. 19008-07	\$ 20.50
	No. 19008-09	\$ 20.50
	No. 19008-14	\$ 20.50

\* Use this size for screws No. 19010-10 (page 64). \*\* Use this size for screws No. 19010-00 (page 64).

Ca	rbon Steel Burrs	
ç	Length: 44 mm Ghaft Ø: 2.3 mm Pkg. of 10 burrs	۴
	VABLE POI	IOST PULAR
Tip Ø	19007- Item	Price
0.5	No. 19007-05	\$ 16.00
0.7 *	No. 19007-07	\$ 16.00
0.9 **	No. 19007-09	\$ 16.00
1.4	No. 19007-14	\$ 16.00
2.1	No. 19007-21	\$ 16.00
2.9	No. 19007-29	\$ 26.00

\* Use this size for screws No. 19010-10 (page 64).

\*\* Use this size for screws No. 19010-00 (page 64).



 $^{\ast\ast}$  Use this size for screws No. 19010-00 (page 64).

#### **Stainless Steel Trephines**

Side opening for clearing of material.

S	Length: 44 mm Chaft Ø: 2.3 mm Fold individually		1.8 - 2.7 mm	5 mm
Tip Outer Ø	ltem	Price		ľ
1.8	No. 18004-18	\$ 19.50	4	
2.3	No. 18004-23	\$ 20.00	ainless	
2.7	No. 18004-27	\$ 24.00		
5	No. 18004-50	\$ 36.00		

#### **Stainless Steel Mandrel**

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



Length: 45 mm Shaft Ø: 2.3 mm

No. 18000-18 \$ 5.50

#### **Stainless Steel Circular Saw**

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



Thickness: 0.1 mm Pkg. of 10 saws

No. 18000-20 \$ 33.00



#### **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.** 

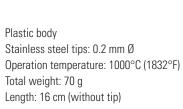




#### Low Temperature Cautery Kit

This low temperature cautery kit is a great alternative to disposable cautery units. Temperature at the tips is approximately 649°C (1200°F). Replacement cautery tips are available. **Not autoclavable.** 





Cautery kit includes:

- 1 Cautery handle
- 2 AA batteries
- 2 Standard tips
- 1 Storage case
- 2 Fine tips

65% of actual size



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

Cautery kit includes:

- 1 Cautery handle
- 1 AA battery
- 2 Fine tips
- 1 Storage case
- 2 Elongated fine tips



SURGICAL ACCESSORIES



#### **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**.



Cautery Kit

No. 18000-00 \$ 429.50



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#### **Neuro Punches**

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

#### **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 nonirritating to delicate tissue and leaves no fibrous residue that might cause wound contamination. The Absorption Spears are sterilized by radiation.







Price	ltem f	Length (cm)	Gauge	OD (mm)	ID (mm)
\$ 36.00	No. 18036-24	4.2	24	0.61	0.31
\$ 36.00	No. 18036-22	4.5	22	0.7	0.41
\$ 36.00	No. 18036-19	4.5	19	1	0.69

### Sample Corers

For quantitative analysis. Comes with plunger.

8.5 cm



ID (mm)	OD (mm)	Gauge	ltem	Price
0.35	0.8	21	No. 18035-35	\$ 73.50
0.5	1	19	No. 18035-50	\$ 74.00
0.8	1.45	17	No. 18035-80	\$ 74.00
1	1.8	15	No. 18035-01	\$ 65.50
2	3	11	No. 18035-02	\$ 65.50
3	4	8	No. 18035-03	\$ 65.50
5	6	4	No. 18035-05	\$ 65.50





#### **Miniature File Set**

Comes with 8 different file profiles in a vinyl pouch.

# NOT 10 cm Carbon Steel No. 30076-14 \$109.00 **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 \$ 15.00



No. 29008-12 \$15.00

#### 4-in-1 Screwdriver

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

#### **Ceramic Blade Cutter**

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





#### **Replacement blade** Straight Straight 13 cm Cutting Edge: 58 mm Cutting Edge: 58 mm No. 10025-70 No. 10025-71 \$19.00 \$13.00

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

Handle 9.5 cm, with

attachment 11.5 cm

Nickel handle

No. 30051-10

\$ 29.00

#### **UTILITY SCISSORY**

#### **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.

#### **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.



21 cm Stainless steel with plastic handle

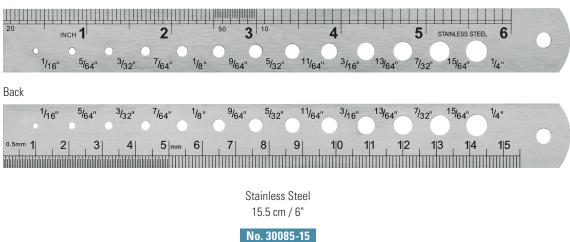
No. 37500-00 \$ 28.00 13 cm Stainless steel with plastic handle

No. 37500-05 \$ 24.50



#### **Ruler with Gauge Measurements**





\$ 5.50

#### **Rulter with Metric Conversion Table**

Front



Back



Stainless Steel 30 cm / 12"

No. 30085-30 \$ 4.50

#### **Ruler Label**

Used for stable measurements in all surgical platforms.



LABORATORY ACCESSORIES

50% of actual size

#### **Plastic Vernier Caliper**

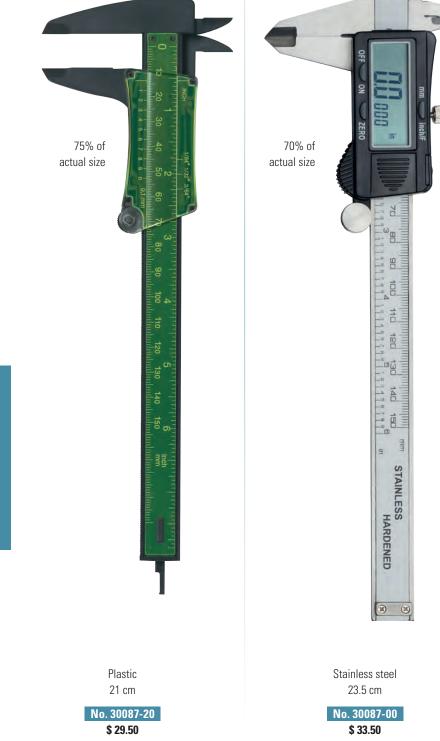
Tough polymer is unbreakable under normal conditions. Measures inside, outside, step and depth, metric and inch to 0.1 mm or 1/64". Maximum measurement: 153 mm.

#### **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.

#### **Castroviejo Surgical Caliper**

Used for precise measurement during surgery.





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

8.5 cm



#### 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.



#### **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)



76 x 26 mm 1 mm with 100 divisions (0.01 mm)

> No. 29025-02 \$ 174.50

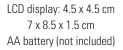


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#### **ACCESSORIES**

#### **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.







#### **Gold Wire Contacts**

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

Total length: 16 mm (if connected) Ø:1.2 mm Opening for wire: 0.63 mm

Pkg. of 50 Male contacts

No. 19003-00 \$ 92.50

Pkg. of 50 Female contacts

No. 19003-01 \$ 141.50





#### **Headband Magnifier**

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



#### **VisorLIGHT**<sup>™</sup>

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.

Magnification: 2.5x Working distance: 20 cm (8")

> No. 28030-02 \$ 66.50

Magnification: 2.75 Working distance: 15 cm (6")

> No. 28030-03 \$ 75.00

Magnification: 3.5x Working distance: 10 cm (4")

> No. 28030-04 \$ 79.00



AA battery (not included)
No. 28030-10
\$ 41.00

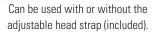
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#### Interchangeable Magnifier Headset with LED

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)



Magnification: 1x, 1.5x, 2x, 2.5x and 3.5x Field of view: Variable Working distance: Variable

> No. 28080-10 \$ 34.50





#### **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.

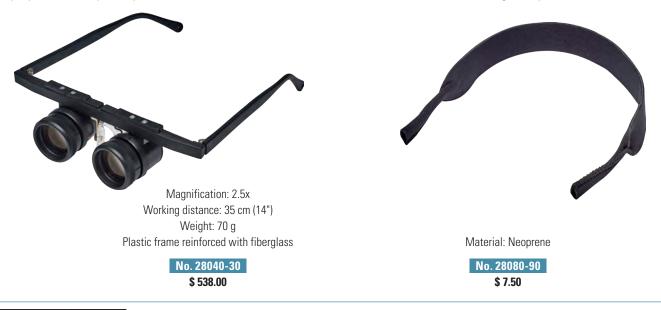


#### **Eschenbach Magnifier Spectacles**

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

#### **Spectacles Headband**

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



#### **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.



Magnification: 2x Field of view: 110 mm (4") Working distance: 40 cm (16") Weight: 49 g

> No. 28030-20 \$ 152.00

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





#### **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: SMD LED Power source: 120 V & 230 V

#### No. 28015-25 \$ 667.00



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: 7,5 cm (3") Lens material: PXM® lightweight lens with patented Ceratec®scratch resistant coating Illumination: SMD LED Power source: 6V (4 AA-Batteries included)



RESEARCH ONLY

LABORATORY ACCESSORIES

#### **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)





#### **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





#### 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 adjust-able 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<sup>®</sup> can also be used as a screen reader. The "mobilux<sup>®</sup> 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 \$ 525.00

#### 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.

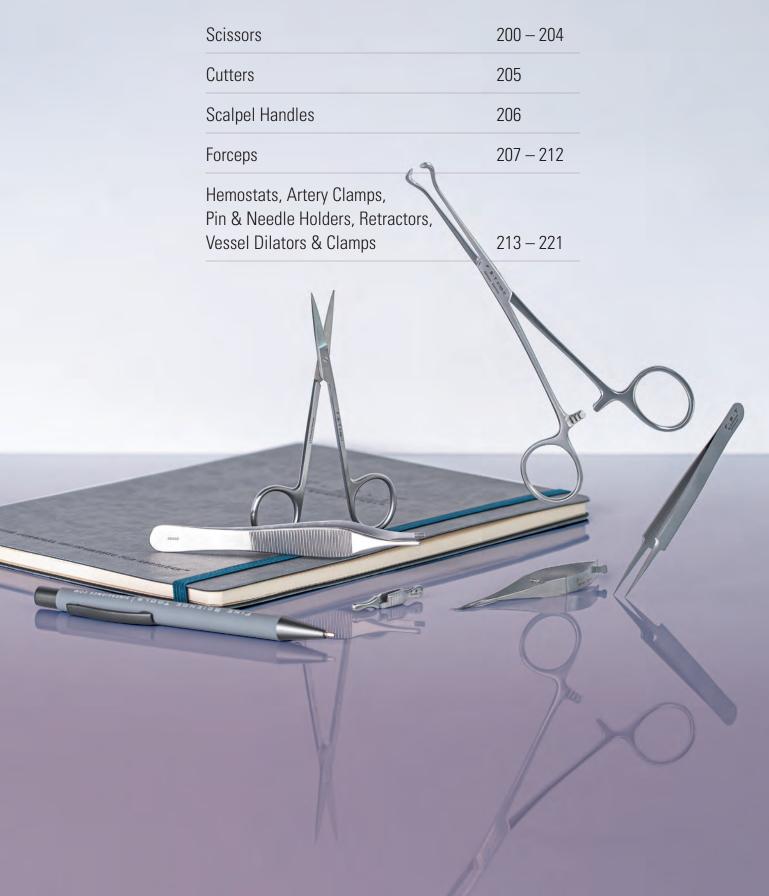


Can be used with the Eschenbach Clip-On LED light.

Magnification: 3x Working distance: 13 cm (5")

No. 28030-13 \$ 99.00

# **STUDENT INSTRUMENTS**



## **FST STUDENT QUALITY INSTRUMENTS**



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

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. Visit our website at **finescience.com** for more information.



F-B-T 0150

F . B .

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

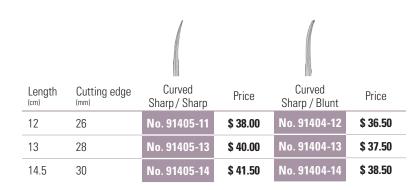
199



200 F · S · T FINE SCIENCE TOOLS

#### **Surgical Scissors**







for student instruments: 5-9=**5%** 10+=**10%** 

for discount.

Wagner



Straight

Sharp/Sharp

11.5 cm Cutting edge: 20 mm

No. 91468-12

\$ 27.50



Straight

Sharp/Sharp 9 cm

Cutting edge: 16 mm

No. 91476-09

\$ 21.50

%) discount

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



Mayo

#### **Lister Scissors**

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



RESEARCH ONLY

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

**Metzenbaum Baby** 

Metzenbaum







STUDENT

RESEARCH ONLY

#### Scalpel Handle #4





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





Dumont #5

MOST

Dumont #7





DISCOUNT 00 Quantity discount for student

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

207

#### Fine Forceps Straight

Fine Forceps Broad Shanks

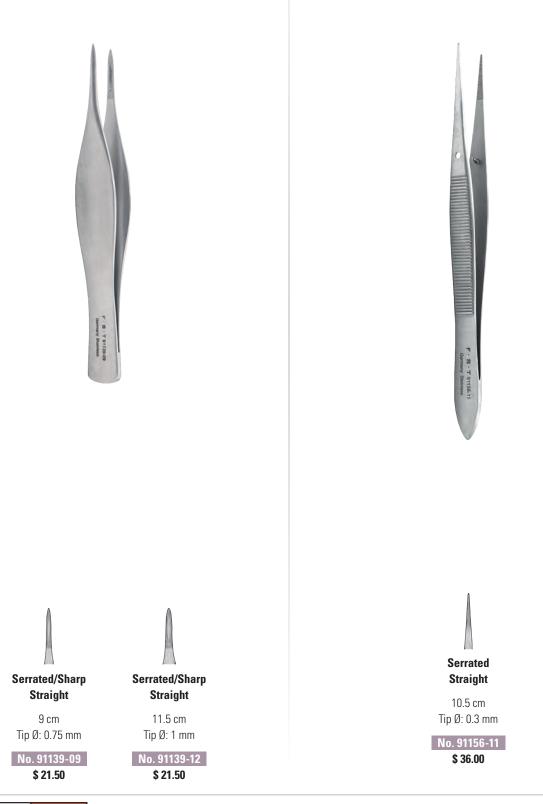
**Fine Forceps Curved** 

**Fine Forceps Angled** 





#### Feilchenfeld



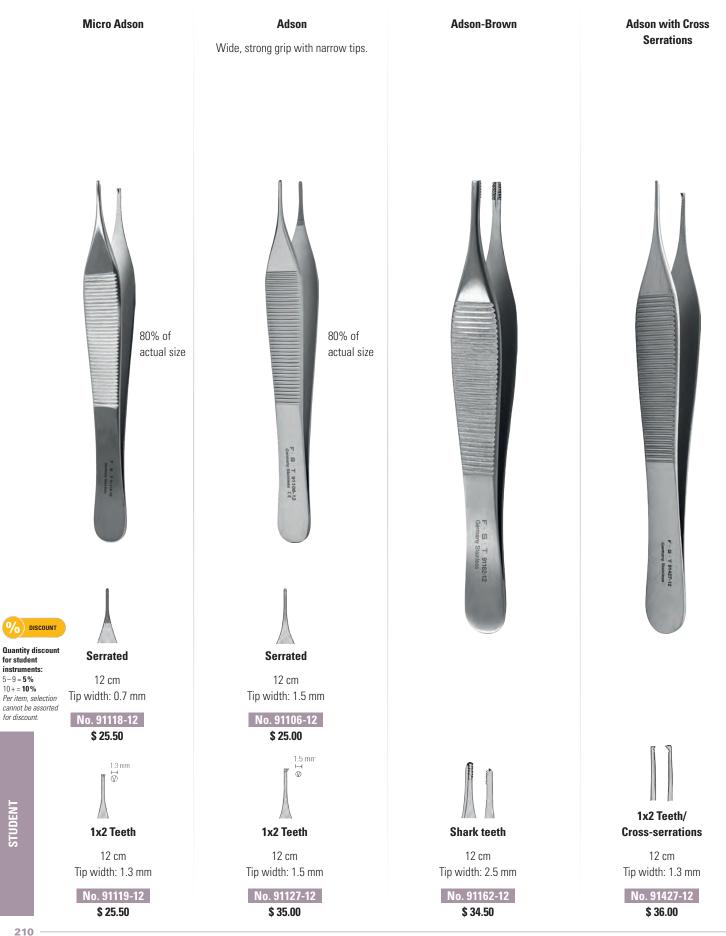
Quantity discount for student instruments: 5-9 = 5% 10+ = 10% Per item, selection cannot be assorted for discount.

RESEARCH ONLY

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

209

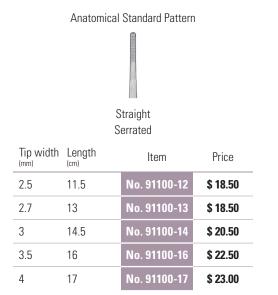
#### **STANDARD FORCEPS**





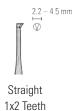
#### **Anatomical and Surgical Forceps**

Broad pattern with strong spring action.



MOST POPULAR 91100-12 F.S. ·T 91100-12 ny Stainless €

Surgical Standard Pattern



Tip width (mm)	Length (cm)	ltem	Price
2.2	12	No. 91121-12	\$ 18.00
2.4	13	No. 91121-13	\$ 18.00
2.6	14.5	No. 91121-14	\$ 18.00
2.8	15.5	No. 91121-15	\$ 18.50
3	16	No. 91121-16	\$ 18.50
3.5	18	No. 91121-18	\$ 19.50
4	20	No. 91121-20	\$ 19.50
4.5	25	No. 91121-25	\$ 20.00

Surgical Narrow Pattern



Item

No. 91123-12

No. 91123-14

No. 91123-16

DISCOUNT	<b>(%</b>
Quantity d	iscount

Price

\$18.00

\$18.00

\$19.00

-
~
F
S

Anatomical Narrow Pattern



Serrated

Tip width	Length	ltem	Price
1.5	11.5	No. 91102-12	\$ 17.50
2.1	13	No. 91102-13	\$ 17.50
2.2	14.5	No. 91102-14	\$ 18.00
2.3	16	No. 91102-16	\$ 18.50

Tip width Length

(cm)

11.5

14.5

16

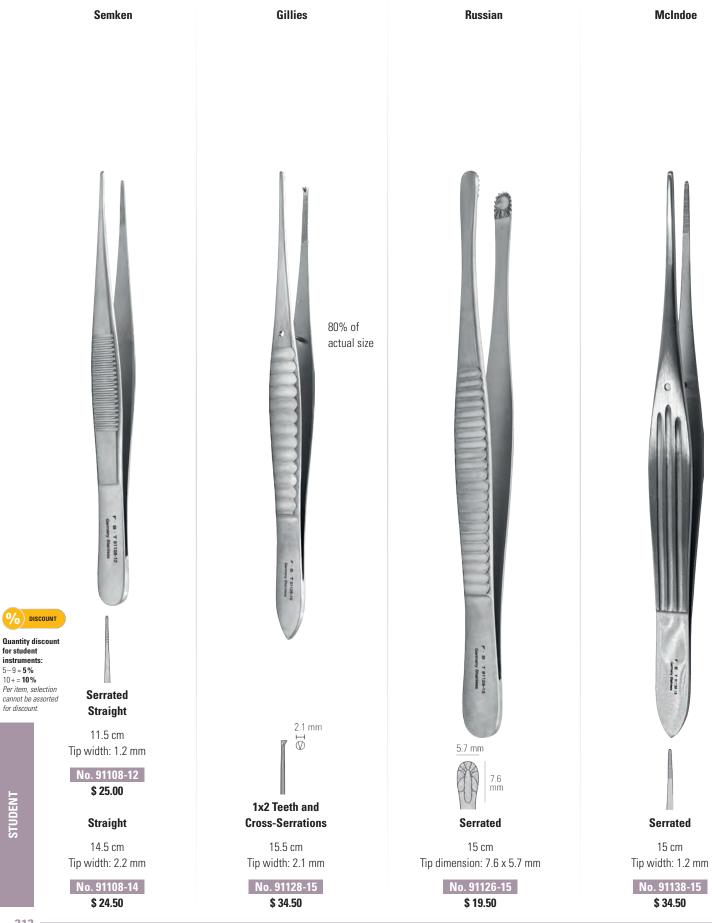
(mm)

2

2.2

2.4

#### **STANDARD FORCEPS**



212 S·T FINE SCIENCE TOOLS

5-9=**5%** 

STUDENT

#### Halsted-Mosquito

Hartmann





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

RESEARCH ONLY

PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

Curved

Serrated

10 cm

Tip width: 1.5 mm

No. 91303-10

\$ 33.00



214 FINE SCIENCE TOOLS



RESEARCH ONLY

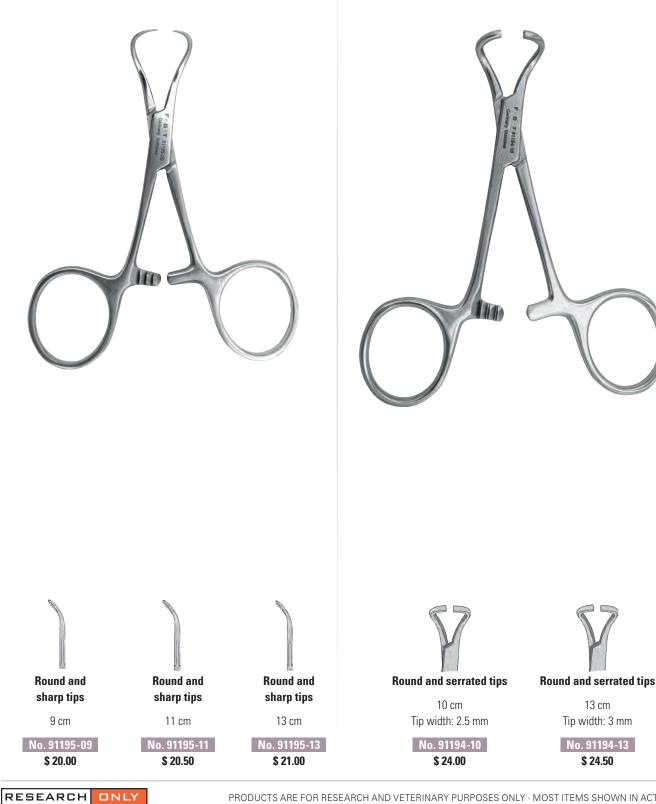
#### **Ochsner-Kocher**

Kocher



#### **Backhaus Towel Clamp**

**Tohoku Towel Clamp** 



Quantity discount for student

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

Lorna Towel Clamp



**Allis Clamp** 

**Lister Sine Clamp** 





**Cross-Serrated** 

15 cm

Tip width: 4 mm

No. 91198-15

\$ 24.00



Serrated

16 cm

Tip width: 3 mm

No. 91199-16

\$ 23.50



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

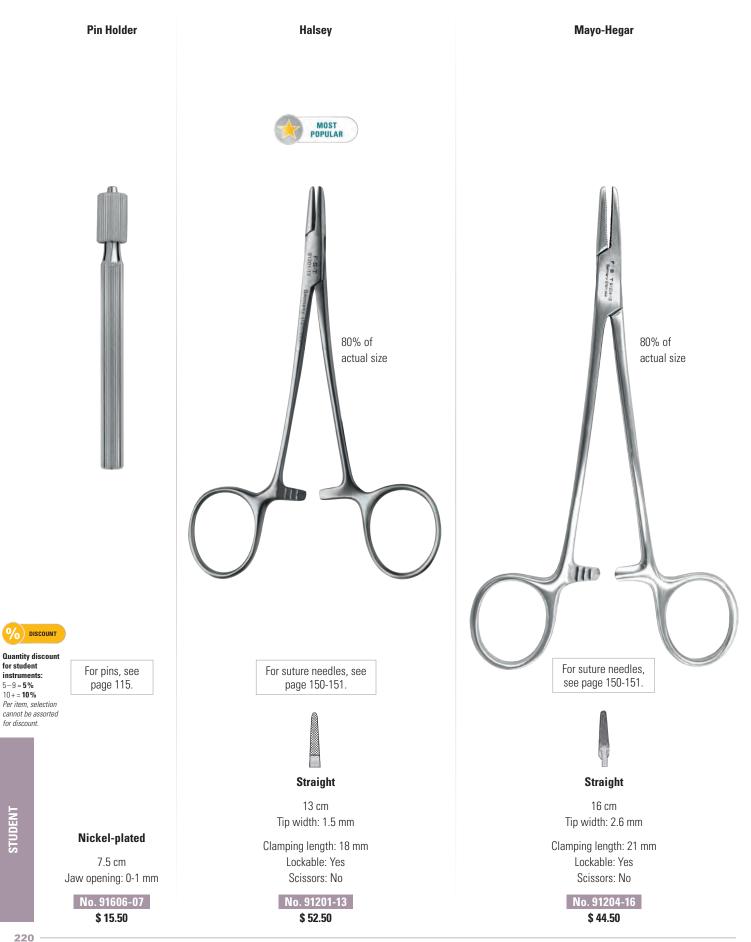
STUDENT

#### 5x6 Teeth

15 cm Tip width: 6 mm

No. 91191-15 \$ 26.00

RESEARCH ONLY



STUDENT



RESEARCH ONLY PRODUCTS ARE FOR RESEARCH AND VETERINARY PURPOSES ONLY · MOST ITEMS SHOWN IN ACTUAL SIZE

221

STUDENT

00071-41         119         10035-00         72         10110-05         69         11002-13         105         11042-08         98         11200-33         07           00172-41         191         10035-10         72         10110-0         68         11200-33         07           00172-51         1024         10035-12         72         10130-10         141         11005-10         99         11210-10         87           00172-51         1124         10035-70         72         10140-01         131         11005-12         09         11210-10         87           00172-11         124         10035-00         72         10140-01         131         11005-12         08         11025-10         99         11215-00         87           00172-11         124         10035-30         72         10140-03         131         11005-12         08         11025-10         99         11215-02         85           00272-11         118         1005-11         71         10175-13         88         11005-13         100         11024-07         88         11224-00         85           00282-11         94         10059-13         71<10157-15         88         11010-17												
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D0128-11         124         10038-15         72         10139-20         141         11002-16         11051-10         99         11210-10         87           00128-11         124         10035-20         72         1014-00         131         11002-10         103         11052-10         99         11215-01         57           00275-13         124         10035-20         72         10140.03         131         11006-15         97         11054-10         89         11215-01         57           00285-00         118         10055-11         71         10157-30         68         11008-13         106         11052-10         100         11223-20         86           00396-01         118         10055-13         71         10157-15         88         11001-17         111         11068-47         88         1123-10         88           00587-11         127         10056-12         86         10160-13         133         11011-7         111         11068-07         88         1123-10         84           006821         14         10056-15         67         10166-11         132         11012-21         111         11068-07         88         1124-40         85	00108-11	94	10035-10	72	10130-05	141	11003-14	105	11049-10	99	11203-23	87
D0122213         C2         D014001         C31         D00220         D5         D02220         D5         D02200         D5         D102000         D7         D014004         D31         D000010         D1         D2200         D8           D023000         D118         D05201         T1         D05213         T1         D015713         68         D1000110         D030407         D6         D12200         B5           D040003         D118         D055213         T1         D015718         68         D1000110         T1         D106407         B8         1122100         B4           D060511         D05713         B6         D105714         B8         1101210         D111         D106707         B8         1122100         B4           D060513         G7         D016711	00109-11	94	10035-12	72	10130-10	141	11003-16	105	11050-10	99	11203-25	87
IDC272.13         96         IDC35.25         72         ID140.402         131         IDD2-15         97         ID024.10         99         I1215.01         57           IDC275.00         ID18         ID050.00         71         ID140.04         131         ID005.15         97         ID054.10         100         1100.410         100         1100.410         100         1100.410         100         1100.410         100         1100.410         100         1100.410         100         1100.410         100         1100.410         100         1100.410         100         1100.410         100         1100.417         100         1100.417         100         1100.417         100         1100.417         100         110.440         98         1122.410         88           ID052.11         101         1005.412         66         1016.13         133         1101.17         111         1106.407         98         1124.40         86           ID000.11         76         1005.415         67         1016.11         132         1101.21         1111         1100.40         88         1124.40         86           ID000.11         76         1005.412         131         1016.41         132	00125-11	124	10035-15	72	10130-20	141	11003-18	105	11051-10	99	11210-10	87
00276-13         124         10035-30         72         10140-03         131         11006-15         97         11054-10         99         11215-02         57           000250         118         10055-10         71         10140-44         131         1100e-15         106         11005-10         99         11225-02         88           00384-02         118         10053-13         71         10157-15         68         1100e-15         106         11034-07         98         11225-10         88           0040-03         118         10055-12         66         10167-18         88         11011-17         111         11068-07         98         11223-10         84           00643-11         94         10055-13         66         10165-11         132         11012-21         111         1108-07         98         1124-40         86           0000-11         76         10059-13         66         10165-11         132         11012-21         111         1108-07         98         1124-40         86           0000-11         76         10059-13         76         10029-13         11011-17         111         11072-01         100         11251-20         81	00126-11		10035-20		10140-01		11003-20		11052-10		11210-20	
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00396-01         118         10052-11         71         10152-30         68         11002-15         106         11052-10         100         11222-00         86           00396-01         118         10033-30         71         10157-13         68         11002-15         106         11062-07         98         11222-00         88           0053/1         118         10033-33         71         10157-15         68         11001-17         111         11064-07         98         11231-30         84           0053/1         94         10055-12         66         10167-11         122         11012-18         111         11067-07         98         11243-30         84           0053/1         94         10055-16         7         10161-11         122         11012-21         1111         11067-07         98         11242-40         85           0000-10         76         10060-13         78         10167-11         122         11012-25         111         11077-10         100         11251-20         81           10000-11         76         10060-13         78         1026-13         133         11013-21         1111         11077-10         110         11251-33			10035-30		10140-03		11006-15					
D0398 02         118         D00539 02         11221 03         B00539 02         11221 03         B00539 02         11221 10         B8         D102310 7         111         I1065407         98         I1221 03         B4           D0639 11         127         1005541 2         66         10163-13         133         1011-17         111         11065407         98         11221-03         84           D0643 11         94         10058-15         67         10165-11         132         11012-18         111         11072-08         98         11225-0         81           10000-10         76         10065-13         70         1016-11         132         11012-18         111         11072-10         11251-03         81           10000-15         76         10060-13         76         10061-12         131         10315-12         72         1014-18         110         11072-11         102         11251-33         83           10002-10         75         10061-12         131         10317-14         72 <t< td=""><td>00325-00</td><td>118</td><td>10050-00</td><td>71</td><td>10140-04</td><td>131</td><td>11008-13</td><td>106</td><td>11055-10</td><td>99</td><td>11220-21</td><td>86</td></t<>	00325-00	118	10050-00	71	10140-04	131	11008-13	106	11055-10	99	11220-21	86
00400-03         118         10053-13         71         10157-15         68         11009-15         106         11064-07         98         11223-10         88           00569-11         127         10055-12         66         10167-13         133         11011-17         111         11066-07         98         11221-20         84           00632-11         94         10055-15         67         10162-12         129         11012-26         111         11067-07         98         11224-00         86           10000-10         76         10055-15         67         10165-11         132         11013-18         111         1107-10         100         11251-20         81           10000-15         76         10060-13         76         10280-13         133         11013-18         110         11027-10         101         11251-23         81           10002-12         74         10062-15         130         10317-14         72         11015-18         110         11075-00         101         11251-33         83           10002-12         74         10062-15         130         10317-14         72         11016-17         111         11075-00         101         11251							11008-15					
00574-11         127         10055-12         66         10157-18         68         11010-17         111         11065-07         98         11231-30         84           000832-11         94         10056-13         66         10182-12         123         1011-17         111         11067-07         98         11231-30         84           000849-11         94         10056-13         66         10165-11         132         11012-21         111         11070-08         98         11242-0         88           10000-10         76         10050-13         76         10167-11         132         11012-25         111         11070-08         98         11251-20         81           10000-10         76         10060-13         76         10129-13         133         11013-21         1111         11071-10         11251-32         81           10002-50         75         10062-15         130         10317-14         72         11016-17         111         11075-00         101         11251-33         83           10003-12         74         10065-15         130         1037-14         72         11017-17         111         11075-00         101         11251-33         8					10157-13		11009-13	106	11063-07	96	11229-08	
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10000-10         76         10059-15         67         10166-11         132         11012-25         111         11070-08         98         11251-10         81           10000-11         76         10060-13         76         10120-13         133         11013-21         111         11071-10         100         11251-20         81           10002-00         75         10061-12         131         103151-2         72         11014-18         110         11072-11         102         11251-20         81           10002-50         75         10061-12         131         10316-14         72         11015-18         110         11074-02         101         11251-33         83           10002-12         74         10066-15         130         10321-08         139         11017-17         111         11075-00         101         11252-30         81           10002-12         77         10066-15         130         10320-13         139         11012-12         103         1108-02         110         11252-20         81           10007-16         75         10075-16         65         10370-17         139         11021-12         103         1108-02         1252-30 <td< td=""><td>00632-11</td><td>94</td><td>10058-15</td><td>67</td><td>10162-12</td><td></td><td>11012-18</td><td>111</td><td>11067-07</td><td>98</td><td>11241-30</td><td>86</td></td<>	00632-11	94	10058-15	67	10162-12		11012-18	111	11067-07	98	11241-30	86
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10032-13         130         10110-01         69         11002-20         105         11040-08         98         11200-10         88         11280-11         127												
10033-13 130 10110-03 69 11002-25 105 11041-08 98 11200-12 88 11281-11 127												
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11282-11	127	11972-20	90	12076-12	143	14003-13	45	14061-09	33	14116-18	49
11293-00	84	11980-13	90	12080-14	142	14003-14	45	14061-10	33	14117-14	49
11294-00	86	11988-01	90	12081-14	142	14003-16	45	14061-11	33	14117-18	49
11295-00	81	11988-02	90	12102-12	145	14003-18	45	14062-09	33	14130-17	46
11295-10	81	11988-03	90	12500-12	144	14003-20	45	14062-10	33	14131-14	47
11295-20	79	11990-14	89	12501-13	144	14004-12	45	14063-09	33	14160-10	33
11295-51	81	11991-14	89	12502-12	145	14004-13	45	14063-11	33	14161-10	33
11297-00	85	11992-12	89	12502-14	145	14004-14	45	14064-11	40	14171-10	44
11297-10	85	11992-20	90	12503-15	146	14004-16	45	14065-11	40	14173-12	41
11370-31	92	12001-13	144	12504-15	146	14004-18	45	14066-11	40	14184-09	31
11370-32	92	12002-12	145	12505-15	147	14005-12	45	14067-11	40	14185-09	31
11370-40	92	12002-14	145	12510-14	145	14005-13	45	14068-12	35	14200-21	51
11370-42	92	12003-15	146	12512-12	145	14005-14	45	14069-12	35	14370-22	34
11373-12	92	12004-16	146	12565-14	143	14005-16	45	14070-12	35	14370-23	34
11373-22	92	12004-18	146	13002-10	116	14007-14	46	14071-12	35	14501-14	46
11383-50	93	12005-15	147	13003-10	116	14008-14	45	14072-10	43	14502-14	46
11383-56	93	12010-14	145	13004-14	114	14010-15	50	14074-09	39	14504-14	46
11390-25	93	12018-12	151	13005-14	114	14010-17	50	14074-11	39	14505-14	46
11393-04	96	12020-00	153	13006-12	112	14011-15	50	14075-09	39	14508-15	48
11393-05	96	12020-09	153	13007-12	112	14011-17	50	14075-11	39	14509-15	48
11399-80	92	12022-09	153	13008-12	113	14012-15	51	14076-09	42	14510-15	50
11399-87	92	12022-19	153	13009-12	113	14012-17	51	14077-09	40	14510-17	50
11412-11	91	12023-00	153	13010-12	113	14013-15	51	14077-10	40	14511-15	50
11413-11	91	12028-12	151	13011-12	113	14013-17	51	14078-10	38	14511-17	50
11445-12	91	12029-12	151	13012-12	113	14014-17	51	14079-10	38	14512-15	50
11480-11	91	12030-01	152	13013-14	115	14015-17	51	14080-11	43	14512-17	50
11485-11	91	12030-04	152	13014-14	115	14016-14	49	14081-09	42	14518-14	48
11487-11	91	12030-20	152	13015-14	115	14016-18	49	14082-09	42	14518-18	48
11506-12	103	12030-22	152	13018-14	114	14017-14	49	14083-08	31	14519-14	48
11515-02	57	12030-23	152	13019-14	114	14017-18	49	14084-08	31	14519-18	48
11602-14	105	12035-00	152	13020-12	112	14018-13	48	14084-09	31	14531-09	47
11602-16	110	12040-01	151	13021-12	112	14018-14	48	14085-08	31	14558-09	37
11608-15	106	12040-02	151	13108-12	113	14018-18	48	14085-09	31	14558-11	37
11616-15	104	12040-03	151	13109-12	113	14019-13	48	14086-09	43	14559-09	37
11617-12	104	12050-01	149	14000-12	45	14019-14	48	14088-10	34	14559-11	37
11626-11	83	12050-02	149	14000-13	45	14019-18	48	14090-09	32	14568-09	36
11627-12	104	12050-03	149	14000-14	45	14024-14	49	14090-11	32	14568-12	36
11650-10	99	12050-10	149	14000-16	45	14028-10	38	14091-09	32	14569-09	36
11651-10	99	12050-20	149	14000-18	45	14029-10	38	14091-11	32	14569-12	36
11652-10	99	12052-08	148	14000-20	45	14037-10	44	14094-11	32	14574-09	39
11700-00	101	12052-09	148	14001-12	45	14040-10	35	14095-11	32	14574-11	39
11700-01	101	12052-10	148	14001-13	45	14041-10	35	14101-14	47	14575-09	39
11700-02	101	12052-11	148	14001-14	45	14054-13	46	14105-12	41	14575-11	39
11700-03	101	12060-01	142	14001-16	45	14058-09	36	14106-09	44	14958-09	37
11700-04	101	12060-02	142	14001-18	45	14058-11	36	14108-09	44	14958-11	37
11900-14	97	12061-01	142	14002-12	45	14059-09	36	14110-15	50	14959-09	37
11911-11	89	12061-02	142	14002-13	45	14059-11	36	14110-17	50	14959-11	37
11915-11	89	12074-12	143	14002-14	45	14060-09	33	14111-15	50	15000-00	19
11917-12	89	12075-12	143	14002-16	45	14060-10	33	14111-17	50	15000-01	22
11923-13	90	12075-14	143	14003-12	45	14060-11	33	14116-14	49	15000-02	22

15000-03	19	15396-00	21	16152-11	60	18000-52	173	18051-35	121	18090-46	173
15000-04	19	15396-01	21	16152-12	60	18004-18	181	18051-50	121	18090-50	173
15000-08	19	15400-12	23	16152-15	60	18004-23	181	18052-01	121	18090-51	173
15000-10	19	15401-12	23	16220-14	52	18004-27	181	18052-02	121	18105-01	184
15000-11	22	15403-08	20	16221-14	52	18004-50	181	18052-03	121	18105-04	184
15000-12	22	15404-08	20	17000-01	155	18010-00	182	18052-12	125	18106-01	184
15001-08	19	15514-12	26	17000-02	155	18010-01	182	18053-28	121	18131-12	124
15002-08	19	15610-08	22	17000-03	155	18010-02	182	18054-28	121	18132-12	124
15003-08	20	15615-08	22	17000-04	155	18019-00	182	18055-01	120	18144-30	121
15004-08	20	15617-08	22	17001-07	158	18019-01	182	18055-02	120	18155-13	100
15005-08	20	15650-11	27	17002-02	155	18019-02	182	18055-03	120	18196-10	184
15006-09	24	15651-11	27	17003-03	155	18020-00	149	18055-04	120	18200-01	161
15007-08	21	15750-11	23	17004-03	155	18020-01	149	18055-05	120	18200-02	161
15008-08	20	15751-11	23	17004-05	156	18020-02	149	18055-06	120	18200-03	161
15009-08	24	15903-08	20	17005-03	155	18020-03	149	18056-14	120	18200-04	161
15010-09	27	15904-08	20	17005-04	156	18020-20	149	18057-14	120	18200-05	161
15010-10	27	16000-14	55	17006-05	158	18020-30	149	18058-15	121	18200-06	161
15011-12	26	16001-15	53	17007-08	158	18020-40	149	18058-18	121	18200-07	161
15012-12	26	16002-18	54	17008-07	157	18020-50	149	18059-14	120	18200-08	161
15013-12	26	16004-16	55	17009-07	157	18020-60	149	18060-18	163	18200-09	161
15015-11	27	16005-16	55	17009-08	157	18020-70	149	18060-20	163	18200-10	161
15017-10	26	16015-17	53	17010-07	157	18025-10	96	18060-22	163	18200-11	161
15018-10	21	16016-17	53	17011-10	159	18026-10	97	18060-24	163	18200-12	161
15019-10	21	16020-14	52	17012-11	160	18030-30	149	18061-10	163	18200-20	161
15020-15	23	16021-14	52	17012-13	160	18030-40	149	18061-15	164	18200-50	161
15021-15	23	16022-15	54	17017-10	159	18030-50	149	18061-18	164	18320-11	121
15023-10	25	16023-15	54	17018-11	160	18030-60	149	18061-20	164	18374-43	121
15024-10	25	16025-14	63	17020-17	154	18030-70	149	18061-22	163	18374-44	121
15025-10	25	16030-12	60	17021-13	154	18030-80	149	18061-24	163	18403-11	127
15027-18	28	16030-16	60	17022-13	154	18035-01	184	18061-38	163	18406-11	127
15028-18	28	16044-10	60	17023-13	154	18035-02	184	18061-50	163	18406-13	127
15030-14	29	16050-15	61	17300-02	156	18035-03	184	18061-75	163	18555-01	120
15031-14	29	16060-11	64	17300-03	156	18035-05	184	18062-12	125	18555-02	120
15032-08	30	16101-10	58	17300-04	156	18035-35	184	18062-13	125	18555-03	120
15032-13	30	16102-11	58	17370-53	156	18035-50	184	18063-13	125	18555-04	120
15033-09	25	16104-14	62	18000-00	183	18035-80	184	18063-20	163	18601-15	107
15036-14	29	16104-19	62	18000-01	183	18036-19	184	18064-20	163	18602-15	107
15037-14	29	16105-16	62	18000-02	183	18036-22	184	18065-20	163	18603-14	107
15040-11	25	16106-14	62	18000-03	183	18036-24	184	18067-10	163	18961-15	164
15042-11	25	16107-14	56	18000-04	183	18038-45	121	18067-11	129	18961-17	164
15070-08	21	16109-14	56	18000-10	126	18039-45	121	18067-20	163	18961-18	164
15071-08	21	16120-14	52	18000-18	181	18040-00	123	18067-50	163	18961-20	164
15110-08	28	16121-14	52	18000-20	181	18040-11	118	18067-75	163	18961-75	164
15111-08	28	16130-15	61	18000-30	167	18040-14	119	18070-00	122	18961-85	164
15123-12	22	16140-11	59	18000-35	188	18040-22	118	18070-10	122	19003-00	190
15124-12	22	16141-11	59	18000-45	172	18040-33	118	18073-00	122	19003-01	190
15300-00	30	16142-11	59	18000-46	172	18050-28	121	18080-01	123	19007-05	181
15370-50	24	16143-12	59	18000-47	173	18050-35	121	18080-02	123	19007-07	181
15370-52	24	16144-13	59	18000-50	172	18050-50	121	18080-03	123	19007-09	181
15371-92	28	16150-24	63	18000-51	172	18051-28	121	18090-45	173	19007-14	181

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19007-21	181	24202-13	167	28000-07	171	29070-07	170	91126-15	212	91401-14	201
19007-29	181	24202-14	167	28000-10	171	29070-08	170	91127-12	210	91402-10	201
19008-07	181	24202-15	167	28000-12	171	29070-09	170	91128-15	212	91402-12	201
19008-09	181	24202-16	167	28001-02	174	29071-01	170	91138-15	212	91402-13	201
19008-14	181	24212-01	166	28015-15	174	29071-02	170	91139-09	209	91402-14	201
19009-00	64	24212-02	166	28015-25	195	29071-03	170	91139-12	209	91404-12	201
19009-05	181	24213-02	166	28020-20	174	29071-04	170	91150-20	207	91404-13	201
19009-07	181	24213-12	166	28020-28	195	29071-05	170	91156-11	209	91404-14	201
19009-09	181	24214-02	166	28030-02	191	29071-06	170	91162-12	210	91405-10	205
19010-00	64	24215-02	165	28030-03	191	29071-08	170	91191-15	219	91405-11	201
19010-01	64	24220-00	168	28030-04	191	29071-09	170	91194-10	217	91405-13	201
19010-10	64	24221-10	168	28030-10	191	30051-10	185	91194-13	217	91405-14	201
19010-11	64	24221-50	168	28030-13	197	30076-14	185	91195-09	217	91408-14	200
20311-21	178	24221-90	168	28030-20	194	30085-15	187	91195-11	217	91409-15	203
20325-00	175	24916-01	165	28030-25	194	30085-30	187	91195-13	217	91410-17	203
20325-10	175	24916-02	165	28040-30	193	30087-00	188	91196-13	218	91411-17	203
20330-00	179	26000-25	141	28050-30	193	30087-20	188	91197-00	207	91413-14	203
20330-01	179	26000-30	141	28050-35	193	37500-00	186	91198-15	219	91413-18	203
20330-02	179	26000-35	141	28070-50	197	37500-05	186	91199-16	219	91413-20	203
20330-03	179	26000-40	141	28080-10	192	91003-12	206	91201-13	220	91416-14	204
20350-00	175	26000-45	141	28080-90	193	91004-13	206	91204-16	220	91417-18	204
20810-01	176	26000-50	141	29000-00	169	91100-12	211	91303-10	213	91419-14	204
20810-02	176	26000-55	141	29000-10	196	91100-13	211	91304-14	214	91427-12	210
20820-00	176	26000-60	141	29008-01	185	91100-14	211	91304-16	214	91460-11	200
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