2024



FINE SURGICAL INSTRUMENTS FOR RESEARCH™



#### Markus Gawenda Managing Partner

## 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.

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

M. funda

#### TABLE OF CONTENTS | CATALOG 2024

Letter from the Managing Partner		1	
Table of Contents		2 - 3	
Catalog Features		4 - 5	
Company Timeline		6 - 7	
Handcrafted		8 - 9	
	Custom Design	8	
	Repair Service	9	
Satisfaction guaranteed		10 - 11	
	Quality Control	10	
	Scissors Test	11	
Alloys & Materials		12 – 13	
Maintenance and Care		14 - 17	

















Scissors		19 - 51
	Spring	19 - 30
	Fine	33 - 44
	Surgical	45 - 51
Bone Instruments		52 - 65
	Rongeurs	52 - 55
	Cutters	56 - 62
	Accessories	64 - 64
	Curettes & Chisels	65
Knives & Scalpels		66 - 77

Forceps/Tweezers	79 – 111
FST by Dumont	79 – 88
Fine	89 - 99
Moria	92 - 93
S&T	94
Standard	100 - 111
Hemostats	112 - 117
Vascular Instruments	118 - 127
Clamps	118 - 121
Occluders & Ligation	122 - 125
Dilation & Cannulation	124 - 127

Probes & Hooks	129 - 134
Spatulae	132 - 138
Spoons	139
Pins & Holders	140 - 141
Wound Closure	142 - 153
Needle Holders & Suture	142 - 150
Staplers, Clips & Applicators	151 - 153
Retractors	154 - 161

Animal Accessories	163 - 168
Feeding Needles	163 - 164
Animal Identification	165 – 168
Instrument Care & Accessories	169 - 180
Instrument Care	169 - 170
Sterilization & Storage	171 – 180
Surgical Accessories	181 – 184
Surgical Accessories  Drill Accessories	<b>181 – 184</b> 181
Drill Accessories	181
Drill Accessories Cauterizers	181 182 – 183
Drill Accessories  Cauterizers  Laboratory Accessories	181 182 - 183 <b>185 - 197</b>

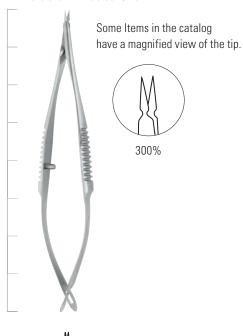
Student Instruments	199 – 221	
Quality instruments with the student in mind		
Scissors	200 - 204	
Cutter	205	
Scalpel Handles	206	
Forceps	207 - 212	
Hemostats	213 - 216	
Artery Clamps	217 - 219	
Pin & Needle Holders	220	
Retractors, Vessel Dilator & Clamps	221	

# **Catalog Features**

#### **CATALOG FEATURES**

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

Most Items in the catalog are shown in actual Size.



have a illustrated view of the tip.

Straight

Sharp/Sharp

Most Items in the catalog

Detailed Item specifications

length: 8 cm
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 left-handed 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.

#### **WE PROUDLY STOCK**



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

#5XL	Extra Long #5 forceps.
#5/45	Tips angled at 45°.
#5/45C	Designed to pick up cover slips from multi-well plates.
#5/90	Tips angled at 90°.
#5AC	Self-closing Anti-Capillary forceps.
#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.

#### 2009

FST Catalog Cover wins 1st Showcase of Print and Design Excellence award. Since 2009, FST catalog covers and print Ads have won over 22 awards and are well know within the research community.

#### 1974

FST established by Hans Gawenda in North Vancouver B.C., Canada.

#### 1993

Set up European office in Heidelberg, Germany.

#### 2003

Deployed first website to make online ordering hassle-free















#### 1984

Opened a business office in Foster City, California, near San Francisco.

#### 1996

FST invents first and only available 0.5mm Rongeur

#### 1999

25th Anniversary of FST



Markus Gawenda joins the company US office in Foster City, California relocated and expanded.

2024

50th Anniversary of FST

2023

FST expands workshop in Germany

2014

FST wins Highest Attention-Getting Ads in Nature and Lab Animal Magazines.









2021

FST reaches 1.000 available products

2018

Launched redesigned website with zoom feature and multiple languages for a more immersive product experience.

# **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

fineness.

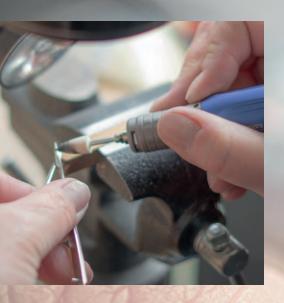
The result: a level of quality that makes its

have established themselves in the research

industry and are second to none in terms of

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.





#### **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.

#### **FINE SCIENCE TOOLS SERVICE**



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.



# 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®. 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® blades and over six times longer with our CeramaCut® 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.





**Tungsten Carbide**Lasts longer than
stainless steel by: **1.9x** 





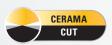
Stainless Steel with ToughCut Lasts longer than stainless steel by: 2.3x





**Tungsten Carbide with ToughCut**Lasts longer than
stainless steel by: **4.1x** 





CeramaCut (Ceramic Coated Tungsten Carbide with ToughCut) Lasts longer than stainless steel by: 6.6x

# **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® 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





#### 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

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.

and Care

#### **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**

A

Make sure all instruments are visibly clean and free from stains, wiping them carefully to remove all blood and tissue matter.



Rinse instruments thoroughly with distilled water, paying close attention to joints and hinges as these areas can accumulate unwanted material.



Air dry your instruments completely and use a can of compressed air to blow out any water at the joints and hinges. Then store them only in clean and dry environments.



#### **ULTRASONIC CLEANING**

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



NOT recommended for delicate and micro instruments.



Follow the manufacturer's guidelines for specific instructions and cleaning cycle times.



Instruments should be processed for the full recommended cycle time.

Place instruments in the open position in the ultrasonic cleaner.

- Do NOT allow instruments with sharp blades to touch other instruments.
- $\bigwedge$
- Do NOT place dissimilar metals (stainless, copper, chrome plated) in the same cleaning cycle.
- Make sure all instruments are completely submerged.



After the ultrasonic cleaning cycle is complete, rinse instruments thoroughly to remove all ultrasonic cleaning solution.



Dry instruments thoroughly with a clean towel.



Use a spray lubricant in the hinges to minimize the risk of corrosion and maintain functionality.



#### **STERILIZATION**

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

#### STEAM STERILIZATION/AUTOCLAVING

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



Lubricate all instruments that have any metal to metal interaction such as; scissors, rongeurs, needle holders, hemostats, and retractors. Do NOT use WD-40 or other industrial lubricants.

Instruments may be autoclaved individually or in sets.



- Individual instruments: Disposable wraps or sterilization pouches are ideal. Make sure the pouch size is sufficient for the instrument to be in an open (unlocked) position.
- Instrument sets: Open and unlock all instruments. Place the heavier instruments on the bottom of the set when two layers are needed.



Do NOT lock instruments during autoclaving. This will prevent the steam from reaching and sterilizing the metal to metal surfaces, and heat expansion during autoclaving can cause cracks in the hinge areas.



Do NOT over load the autoclave chamber as this may hinder steam penetration.



Place a towel on the bottom of the pan to absorb excess moisture during autoclaving. Make sure the towel has no detergent residue and is pH neutral if immersed in water.



At the end of the autoclave cycle (before the drying cycle) unlock the autoclave door and open it slightly. Run the dry cycle for the recommended time period by the autoclave manufacturer.

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



#### **HOT BEAD STERILIZATION**

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



Bench top set up.



Only 20 seconds of contact required to ensure your instruments are free of pathogens and microbial contaminants



Beads reach temperature of 240° - 270°C (464° - 518°F) within 15-20 minutes heating time.

Please see page 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**

	Spring Scissors	19 – 30	
	Fine Scissors	31 – 44	
	Surgical Scissors	45 — 51	
	Bone Instruments	52 – 65	
M	Knives & Scalpels	66 – 77	
Germany Stainbase			

#### **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.



15000-08





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

No. 15000-08

\$ 282.50



Curved Sharp/Sharp

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

No. 15000-04 \$ 447.50



Curved Sharp/Sharp

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

No. 15001-08 \$298.00



Angled to side Sharp/Sharp

 $8\,\mathrm{cm}$ Cutting edge: 2.5 mm Tip Ø: 0.05 mm

No. 15002-08 \$353.50

#### **Micro Vannas**

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



15000-00





Straight Sharp/Sharp

 $8\,\mathrm{cm}$ Cutting edge: 3 mm Tip Ø: 0.05 mm

No. 15000-00 \$338.50



Curved Sharp/Sharp

 $8\,\mathrm{cm}$ Cutting edge: 3 mm Tip Ø: 0.05 mm

No. 15000-10 \$ 361.50



 $8\,\mathrm{cm}$ Cutting edge: 2 mm Tip Ø: 0.05 mm

No. 15000-03







#### Vannas-Tübingen







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

No. 15003-08 \$ 325.00



Curved Sharp/Sharp

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

No. 15004-08 \$ 378.50



Angled up Sharp/Sharp

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

No. 15005-08 \$ 399.50



Angled to side Sharp/Sharp

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

No. 15008-08 \$ 409.50

#### **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.







Straight Sharp/Sharp

 $8.5 \, \text{cm}$  Cutting edge:  $5 \, \text{mm}$  Tip Ø:  $0.075 \, \text{mm}$ 

No. 15903-08 \$ 328.00



Curved Sharp/Sharp

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

No. 15904-08 \$ 381.50 The round handle allows an easy finger adjustment during the application. The hollow grind in the handle reduces the weight. The fine blades

**Vannas Spring Scissors Round Handle** 

are tapered to give a better overview.







Straight Sharp/Sharp

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

No. 15403-08 \$ 380.50



Curved Sharp/Sharp

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

No. 15404-08 \$ 395.50

F · S · T

#### **Vannas Scissors with Microserrations**

Microserrated to minimize slippage.







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

No. 15007-08 \$ 380.00



Straight Sharp/Sharp

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

No. 15070-08 \$ 387.00



Curved Sharp/Sharp

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

No. 15071-08 \$ 394.50

#### Vannas



# \*

Straight Sharp/Sharp

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

No. 15018-10 \$ 301.50



Curved Sharp/Sharp

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

No. 15019-10 \$ 315.50

#### **Miniature Vannas**

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





Moria 9600



Straight Sharp/Sharp

8 cm Cutting edge: 5 mm Tip Ø: 0.1 mm

No. 15396-00 \$ 739.50





Curved Sharp/Sharp

8 cm Cutting edge: 5 mm Tip Ø: 0.1 mm

No. 15396-01 \$ 784.00

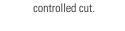
#### **Titanium Vannas**

TITANIUM .

#### Cohan-Vannas

#### ToughCut® Spring Scissors

Long cutting blades for a more controlled cut.







Sharp/Sharp  $9.5\,\mathrm{cm}$ Cutting edge: 5 mm

Straight

Tip Ø: 0.3 mm

No. 15610-08 \$ 417.50



Curved Sharp/Sharp

 $9.5\,\mathrm{cm}$ Cutting edge: 5 mm Tip Ø: 0.3 mm

No. 15615-08 \$ 438.00



Angled up Sharp/Sharp

 $9.5\,\mathrm{cm}$ Cutting edge: 5 mm Tip Ø: 0.3 mm

No. 15617-08 \$ 453.50



Straight Sharp/Sharp

6 cm Cutting edge: 6 mm Tip Ø: 0.1 mm

No. 15000-02 \$ 440.50



Curved Sharp/Sharp

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

No. 15000-01 \$ 484.00



#### Straight **Blunt/Blunt**

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

> No. 15000-12 \$ 453.50



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

No. 15000-11

\$ 477.00



Straight Sharp/Sharp

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

No. 15124-12 \$ 499.50



Curved Sharp/Sharp

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

No. 15123-12 \$ 516.50



#### **Round Handled Vannas**

Round handles allow easy fingertip adjustments.

#### Spring Scissors

#### **Ceramic Coated Spring Scissors**









Sharp/Sharp
12.5 cm
Cutting edge: 6 mm

Tip Ø: 0.075 mm





Curved Sharp/Sharp

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

No. 15401-12 \$ 472.50



Straight Sharp/Sharp

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

No. 15020-15 \$ 369.00



Curved Sharp/Sharp

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

No. 15021-15 \$ 374.50



Straight Sharp/Sharp

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

No. 15750-11 \$ 500.00



Curved Sharp/Sharp

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

No. 15751-11 \$ 543.50 Vannas-Wolff



Castroviejo

Ultra long cutting edge without sacrificing tip width.









Moria MC52



Straight Sharp/Sharp

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

No. 15370-52 \$ 757.50

Moria MC50



Curved Sharp/Sharp

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

No. 15370-50 \$ 683.00



Straight Sharp/Sharp

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

No. 15009-08 \$ 513.50



Angled to side Sharp/Sharp

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

No. 15006-09 \$ 321.00

**Dowell** 

#### Castroviejo with Ball Tip

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





 $9\,\mathrm{cm}$ Cutting edge: 8 mm Tip Ø: 1.3 mm Ball

No. 15033-09 \$ 349.50

#### **Spring Scissors**



10 cm Cutting edge: 8 mm Tip Ø: 0.15 mm

No. 15024-10 \$ 287.00



Straight **Blunt/Blunt** 

10 cm Cutting edge: 8 mm Tip Ø: 0.3 mm

No. 15025-10 \$ 298.00



Curved Sharp/Sharp

10 cm Cutting edge: 8 mm Tip Ø: 0.15 mm

No. 15023-10 \$ 330.50





Straight Sharp/Sharp

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

No. 15040-11 \$ 380.00



Angled up Sharp/Sharp

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

No. 15042-11

\$ 444.00

#### Noyes

#### **Tungsten Carbide Noyes**

#### Castroviejo

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 \$ 309.00



Curved Sharp/Sharp

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

No. 15011-12 \$ 320.00



Angled up Sharp/Sharp

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

> No. 15013-12 \$ 327.50



Straight Sharp/Sharp

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

No. 15514-12 \$ 373.00



Curved Sharp/Sharp

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

No. 15017-10 \$ 312.50



#### **Ceramic Coated Titanium Castroviejo**







#### Westcott



#### **Fine Angled Spring Scissors**

These spring scissors aid in cutting tissues from various angles.





Straight Sharp/Sharp

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

No. 15650-11 \$ 431.50



Curved Sharp/Sharp

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

No. 15651-11 \$ 442.00



Curved Sharp/Sharp

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

No. 15015-11 \$ 298.00



Angled up Sharp/Sharp

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

No. 15010-09 \$ 355.50



Angled up Sharp/Sharp

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

No. 15010-10 \$ 343.50

Trident II

Special design with short handle and inner spring.



Very delicate blades.

#### **Long Handle Spring Scissors**









\$ 302.50

Moria MC19/B



Angled up Sharp/Sharp

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

No. 15371-92 \$ 655.00



Straight Sharp/Sharp

8 cm Cutting edge: 8 mm Tip Ø: 0.2 mm

No. 15110-08 \$ 434.50



Angled to side

Sharp/Sharp

 $8\,\mathrm{cm}$ 

Cutting edge: 8 mm



#### **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.



Tip Ø: 0.175 mm

No. 15031-14

\$ 605.50



Cutting edge: 2.5 mm

Tip Ø: 0.175 mm

No. 15030-14

\$610.00

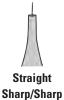
#### **Ultra Fine Clipper Scissors II**

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



#### Uses:

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



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

No. 15300-00

\$ 317.00

#### **Biemer Scissors**

These scissors are designed to securely cut vessels without slipping.







Straight **Blunt/Blunt** 

8.5 cm Cutting edge: 4 mm Tip Ø: 2 mm

No. 15032-08

\$ 345.00



Straight Blunt/Blunt

13 cm Cutting edge: 2 mm Tip Ø: 2 mm

No. 15032-13

\$ 422.50

#### **Extre Fine Bonn**

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



14084-08 14085-08





Straight Sharp/Sharp

8.5 cm Cutting edge: 10 mm

No. 14084-08

\$ 113.00



Curved Sharp/Sharp

8.5 cm Cutting edge: 10 mm

No. 14085-08 \$116.00



Straight Sharp/Blunt

8.5 cm Cutting edge: 10 mm

No. 14083-08 \$ 106.00

#### 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. 14184-09 \$ 147.00



Curved Sharp/Sharp

8.5 cm Cutting edge: 10 mm

No. 14185-09 \$ 158.00



Straight **Blunt/Blunt** 

8.5 cm Cutting edge: 10 mm

No. 14084-09 \$ 188.00



Curved **Blunt/Blunt** 

8.5 cm Cutting edge: 10 mm

No. 14085-09

\$191.00

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

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



14090-09





#### Straight Sharp/Sharp

9 cm Cutting edge: 16 mm

No. 14090-09 \$ 101.00

11 cm Cutting edge: 16 mm

No. 14090-11 \$110.50



#### Curved Sharp/Sharp

 $9\,\mathrm{cm}$ Cutting edge: 16 mm

No. 14091-09 \$117.50

11 cm Cutting edge: 16 mm

No. 14091-11 \$115.00

#### **Fine Iris Scissors**

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





10.5 cm Cutting edge: 16 mm

No. 14094-11 \$ 105.50



Curved Sharp/Sharp

10.5 cm Cutting edge: 16 mm

No. 14095-11

\$ 110.50



**Left Handed Iris Scissors** 

LEFT HANDED

#### **Iris Scissors**

Delicate pattern.



14060-11





Sharp/Sharp 9 cm

Cutting edge: 16 mm

No. 14060-09 \$84.00

10.5 cm Cutting edge: 16 mm

No. 14060-10 \$84.00

11.5 cm Cutting edge: 16 mm

No. 14060-11 \$83.50



Curved Sharp/Sharp

9 cm Cutting edge: 16 mm

No. 14061-09 \$84.00

10.5 cm Cutting edge: 16 mm

> No. 14061-10 \$83.50

11.5 cm Cutting edge: 16 mm

No. 14061-11 \$ 85.50



**Curved to side** Sharp/Sharp

9 cm Cutting edge: 16 mm

No. 14062-09 \$ 98.00

10.5 cm Cutting edge: 16 mm

> No. 14062-10 \$ 104.50



Angled to side

Cutting edge: 16 mm

\$ 98.00



No. 14063-11 \$ 98.00



#### Sharp/Sharp

9 cm

No. 14063-09



Straight Sharp/Sharp

10.5 cm Cutting edge: 18 mm

No. 14160-10 \$ 133.50



Straight Sharp/Sharp

10.5 cm Cutting edge: 18 mm

No. 14161-10

\$134.00

#### **Moria Iris Scissors**





#### Moria 4877



Straight Sharp/Sharp

12.5 cm Cutting edge: 10.5 mm

> No. 14370-22 \$ 155.00

Moria 4878



Curved Sharp/Sharp

10.5 cm Cutting edge: 14 mm

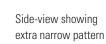
No. 14370-23 \$ 156.50

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

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







Straight Sharp/Sharp

10.5 cm Cutting edge: 16 mm

No. 14088-10 \$ 89.00





#### ToughCut®





MOST

POPULAR





9 cm Cutting edge: 16 mm

No. 14058-09 \$ 82.00

11.5 cm Cutting edge: 16 mm

No. 14058-11 \$ 85.00



Curved Sharp/Sharp

9 cm Cutting edge: 16 mm

> No. 14059-09 \$ 89.00

11.5 cm Cutting edge: 16 mm

No. 14059-11 \$ 93.00

#### **Tungsten Carbide**



14568-09 14568-12







9 cm Cutting edge: 16 mm

No. 14568-09 \$ 116.50

11.5 cm Cutting edge: 16 mm

No. 14568-12 \$ 133.00



Curved Sharp/Sharp

9 cm Cutting edge: 16 mm

No. 14569-09 \$ 130.00

11.5 cm Cutting edge: 16 mm

No. 14569-12 \$ 143.00



#### ToughCut® and Tungsten Carbide







9 cm Cutting edge: 16 mm

No. 14558-09 \$ 211.00

11.5 cm Cutting edge: 16 mm

No. 14558-11 \$ 230.00



Curved Sharp/Sharp

9 cm Cutting edge: 16 mm

> No. 14559-09 \$ 228.50

11.5 cm Cutting edge: 16 mm

No. 14559-11 \$ 248.50

#### CeramaCut®

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





Straight Sharp/Sharp

9 cm Cutting edge: 16 mm

No. 14958-09 \$ 384.00

11.5 cm Cutting edge: 16 mm

No. 14958-11 \$ 371.00



Curved Sharp/Sharp

9 cm Cutting edge: 16 mm

No. 14959-09 \$ 374.50

11.5 cm Cutting edge: 16 mm

No. 14959-11 \$ 382.00 Fine Scissors Lexer-Baby







Straight Sharp/Blunt

10 cm Cutting edge: 17 mm

No. 14028-10 \$ 81.00



Curved Sharp/Blunt

10 cm Cutting edge: 17 mm

No. 14029-10 \$ 90.00



Blunt/Blunt 10 cm

No. 14078-10

\$ 69.50

Curved
Blunt/Blunt

10 cm Cutting edge: 16 mm

No. 14079-10 \$ 79.00



#### **Strabismus**

#### **Tungsten Carbide Strabismus**







Straight Blunt/Blunt

9 cm Cutting edge: 12 mm

No. 14074-09 \$ 88.00

11.5 cm Cutting edge: 20 mm

No. 14074-11 \$ 88.00



Curved Blunt/Blunt

9 cm Cutting edge: 12 mm

No. 14075-09 \$ 98.00

11.5 cm Cutting edge: 20 mm

No. 14075-11 \$ 97.50





Straight Blunt/Blunt

9 cm Cutting edge: 12 mm

No. 14574-09 \$ 135.00

11 cm Cutting edge: 20 mm

> No. 14574-11 \$ 139.50



Curved Blunt/Blunt

9 cm Cutting edge: 12 mm

No. 14575-09 \$ 141.00

11 cm Cutting edge: 20 mm

No. 14575-11 \$ 149.00 Walton

Stevens Tenotomy







9.5 cm Cutting edge: 10 mm

No. 14077-09 \$ 96.00



Curved Sharp/Sharp

10.5 cm Cutting edge: 10 mm

No. 14077-10 \$ 104.00



Straight Sharp/Sharp

11 cm Cutting edge: 13 mm

No. 14064-11 \$ 94.50



Curved Sharp/Sharp

11 cm Cutting edge: 13 mm

No. 14065-11 \$ 99.50



Straight Blunt/Blunt

11 cm Cutting edge: 13 mm

No. 14066-11 \$ 85.00



Curved Blunt/Blunt

11 cm Cutting edge: 13 mm

No. 14067-11 \$ 93.00



#### LaGrange

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



Transplant scissors with light and delicate pattern.





11.5 cm Cutting edge: 12 mm

> No. 14173-12 \$ 128.50





12 cm Cutting edge: 16 mm

No. 14105-12 \$ 104.00

#### **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.









Angled to side Sharp/Sharp

10 cm Cutting edge: 6 mm

No. 14081-09 \$ 100.50



Angled to side Sharp/Sharp

10.5 cm Cutting edge: 8 mm

No. 14082-09 \$ 104.50



Straight Sharp/Sharp

9 cm Cutting edge: 16 mm

No. 14076-09 \$ 69.50

#### **Bonn Artery**

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

#### Tissue Separating Scissors







Straight Sharp/Ball tip

9 cm Cutting edge: 10 mm 1.5 mm Ball Diameter

No. 14086-09 \$ 122.50



Straight Sharp/Ball tip

11.5 cm Cutting edge: 16 mm 1.5 mm Ball Diameter

No. 14080-11

\$ 100.50



11.5 cm Cutting edge: 16 mm

No. 14072-10 \$ 97.50

# **FINE SCISSORS Adjustable Loops Fine Scissors** Graefe Kaye The finger loops can be enlarged to fit These scissors have semi-sharp outer almost any size. edges to better facilitate dissection. LARGE LOOP LARGE LOOP SERRATED



10.5 cm Cutting edge: 12 mm

No. 14037-10 \$ 144.00



Straight Sharp/Sharp

9.5 cm Cutting edge: 8 mm

No. 14106-09 \$ 91.50



Straight Blunt/Blunt

9.5 cm Cutting edge: 8 mm

No. 14108-09 \$ 86.50



Curved Blunt/Blunt

10.5 cm Cutting edge: 14 mm

No. 14171-10 \$ 130.00

#### **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.





14001-12 - 14001-18

14008-14



Length (cm)	Cutting edge (mm)	Straight Sharp / Blunt	Price	
14.5	30	No. 14008-14	\$ 197.50	



Length	Cutting edge	Curved Sharp / Sharp	Price	Curved Sharp / Blunt	Price	Curved Blunt / Blunt	Price
12	26	No. 14005-12	\$ 54.50	No. 14004-12	\$ 57.00	No. 14003-12	\$ 51.00
13	28	No. 14005-13	\$ 57.00	No. 14004-13	\$ 55.50	No. 14003-13	\$ 52.50
14.5	30	No. 14005-14	\$ 59.50	No. 14004-14	\$ 57.50	No. 14003-14	\$ 53.00
16.5	36	No. 14005-16	\$ 67.00	No. 14004-16	\$ 62.00	No. 14003-16	\$ 59.00
18.5	40			No. 14004-18	\$ 66.50	No. 14003-18	\$ 60.50
20	44					No. 14003-20	\$ 62.00

#### ToughCut® Standard Pattern





14054-13



#### Straight Sharp/Blunt

13 cm Cutting edge: 28 mm

#### No. 14054-13

\$ 97.50



#### Straight Sharp/Blunt

17.5 cm Cutting edge: 42 mm

#### No. 14130-17

\$ 101.00

#### **Tungsten Carbide Standard Pattern**





Straight Sharp/Sharp

14.5 cm Cutting edge: 34 mm

#### No. 14502-14

\$177.50



#### Curved Sharp/Sharp

14.5 cm Cutting edge: 34 mm

#### No. 14505-14

\$ 174.00

#### Standard Pattern with Serrations





#### Straight Sharp/Blunt

14.5 cm Cutting edge: 34 mm

#### No. 14501-14

\$ 173.50



Curved Sharp/Blunt

14.5 cm Cutting edge: 34 mm

No. 14504-14

\$ 170.50



Straight
Sharp/Blunt

14 cm Cutting edge: 30 mm

No. 14007-14

\$ 73.00

#### Standard Pattern with Large Finger Loops





#### Tungsten Carbide Mini-Lister





#### Lister

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







14.5 cm Cutting edge: 30 mm

> No. 14101-14 \$ 66.50



Angled to side

9 cm Cutting edge: 14 mm

No. 14531-09 \$ 177.00



Angled to side

14 cm Cutting edge: 26 mm

> No. 14131-14 \$ 109.00

#### **Metzenbaum Baby**

#### **Tungsten Carbide Metzenbaum Fino**







70% of

Cutting edge: 20 mm

No. 14019-13

\$ 93.50

14.5 cm

Cutting edge: 22 mm

No. 14019-14

\$ 94.50

18 cm

Cutting edge: 24 mm

No. 14019-18

\$ 130.00







14.5 cm Cutting edge: 22 mm



18 cm Cutting edge: 24 mm No. 14518-18 \$ 143.00

Cutting edge: 22 mm

No. 14518-14

\$138.50

18 cm Cutting edge: 24 mm

No. 14519-18 \$ 145.50

Curved

Blunt/Blunt

Cutting edge: 20 mm

No. 14018-13

\$69.50

14.5 cm

Cutting edge: 22 mm

No. 14018-14

\$ 71.00

18 cm

Cutting edge: 24 mm

No. 14018-18

\$121.00

#### Metzenbaum

#### ToughCut® Metzenbaum







14.5 cm Cutting edge: 22 mm

> No. 14024-14 \$ 80.50



14.5 cm Cutting edge: 22 mm

> No. 14016-14 \$ 70.00

18 cm Cutting edge: 24 mm

> No. 14016-18 \$ 76.50



Curved Blunt/Blunt

14.5 cm Cutting edge: 22 mm

> No. 14017-14 \$ 76.00

18 cm Cutting edge: 24 mm

> No. 14017-18 \$ 81.00



Straight Blunt/Blunt

14.5 cm Cutting edge: 22 mm

> No. 14116-14 \$ 79.50

18 cm Cutting edge: 24 mm

No. 14116-18 \$ 92.00 Curved Blunt/Blunt

14.5 cm Cutting edge: 22 mm

> No. 14117-14 \$ 90.50

18 cm Cutting edge: 24 mm

> No. 14117-18 \$ 96.00

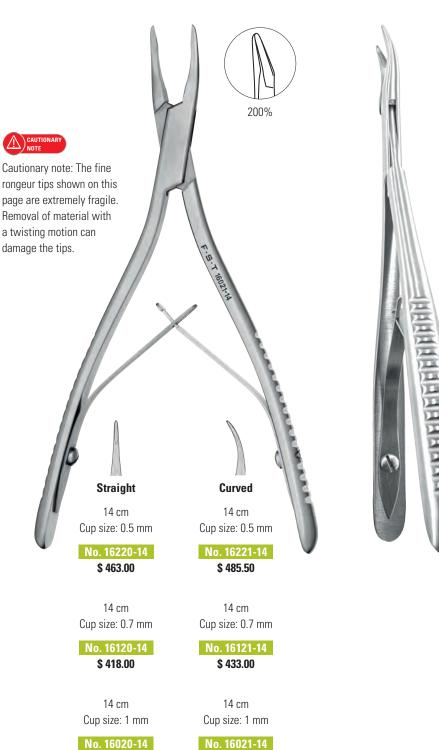
Mayo ToughCut® Mayo **Tungsten Carbide Mayo** TOUGH TUNGSTEN 14512-15 & 14512-17 0 80% of 80% of 80% of actual size actual size actual size F-S-T 14010-15 Straight Straight Straight Curved Curved Curved Straight **Blunt/Blunt Blunt/Blunt** Blunt/Blunt **Blunt/Blunt Blunt/Blunt Blunt/Blunt Blunt/Blunt** 15 cm Cutting edge: 28 mm No. 14010-15 No. 14011-15 No. 14110-15 No. 14111-15 No. 14510-15 No. 14511-15 No. 14512-15 \$ 70.00 \$82.50 \$ 93.00 \$ 99.00 \$ 158.50 \$ 163.50 \$ 201.50 17 cm Cutting edge: 32 mm No. 14010-17 No. 14011-17 No. 14110-17 No. 14111-17 No. 14510-17 No. 14511-17 No. 14512-17 \$ 68.50 \$71.00 \$ 93.50 \$ 101.00 \$143.00 \$148.00 \$215.50

#### Mayo-Stille Mayo-Noble **Decapitation Scissors** Stop guard at tips to prevent slippage. 80% of 80% of 70% of actual size actual size actual size Straight Curved Blunt/Blunt **Blunt/Blunt** 15 cm 15 cm Cutting edge: 28 mm Cutting edge: 28 mm No. 14012-15 No. 14013-15 \$ 65.50 \$ 71.50 Straight Curved Straight **Blunt/Blunt** Blunt/Blunt **Blunt/Blunt** 17 cm 17 cm 16.5 cm 16.5 cm 21 cm Cutting edge: 32 mm Cutting edge: 32 mm Cutting edge: 30 mm Cutting edge: 30 mm Cutting edge: 50 mm No. 14012-17 No. 14014-17 No. 14015-17 No. 14200-21 No. 14013-17 \$ 71.00 \$ 76.50 \$ 111.50 \$121.00 \$ 121.00

#### 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.



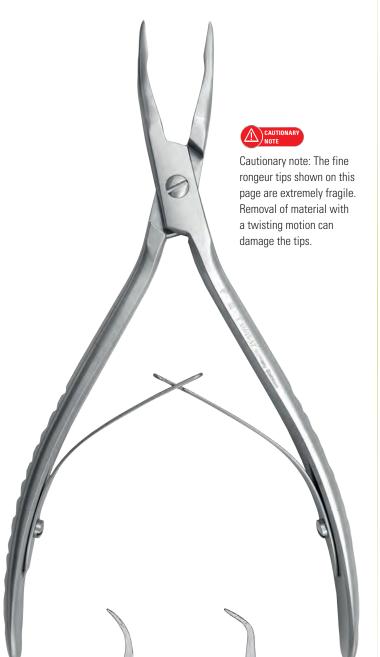


\$ 421.00

\$ 409.50

#### **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.





17 cm Cup size: 1 mm Cup size: 1.2 mm

No. 16016-17

\$ 300.00



Luer

Shallow bend

17 cm

No. 16015-17

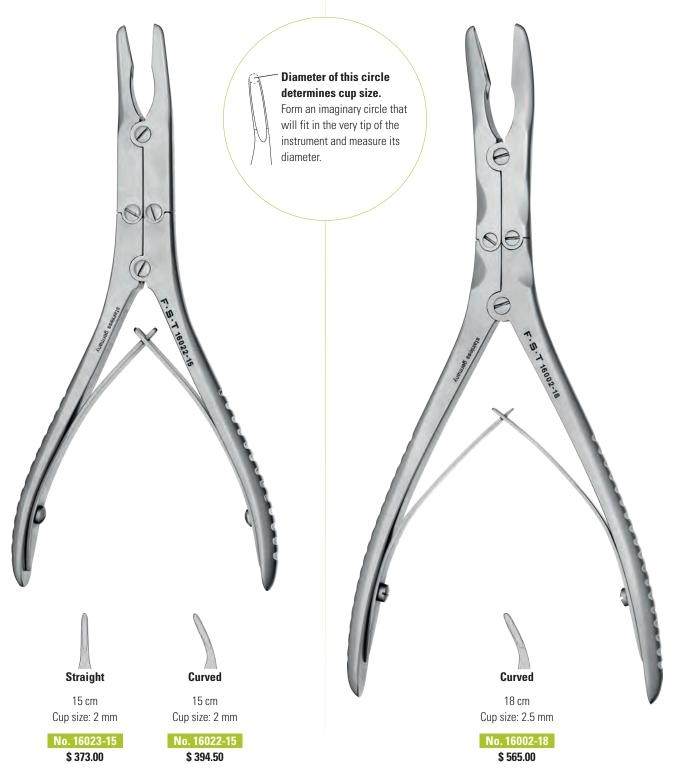
\$ 393.00

#### Baby-Beyer

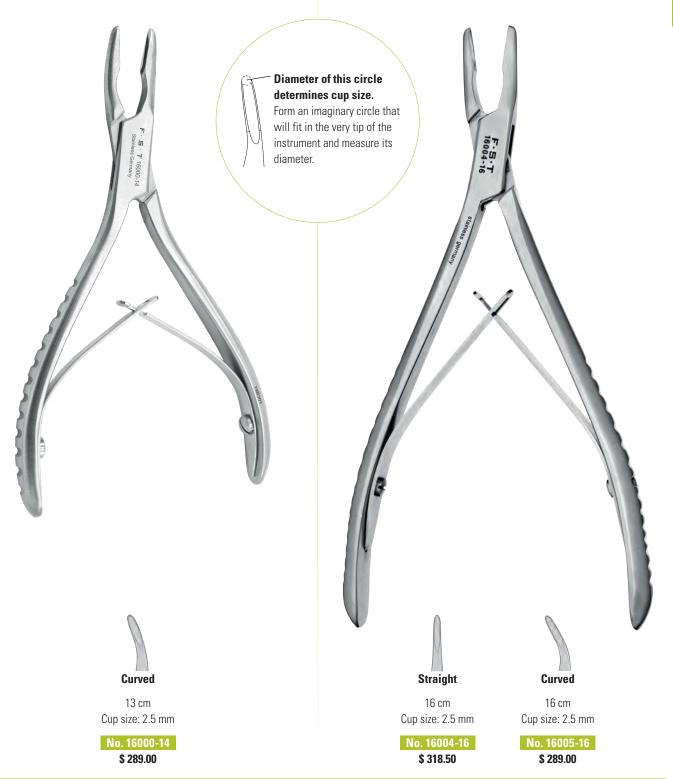
Double-action rongeur with strong jaws helps relieve hand strain.

#### 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.



#### **Bone Trimmers**

#### Cartilage Cutter

Round cutting blades for tissue, cartilage and soft bone.





Curved

14 cm Cutting edge: 8 mm

No. 16109-14

\$ 304.50





Curved

14 cm Cutting edge: 9 mm

No. 16107-14

\$ 157.00

#### **Dumont #15a Bone Cutter**

Cutting edge on both outside and inside bevel.

Cuts suture, cartilage, bone and steel wire to

0.06 mm, and copper wire to 0.15 mm.









#### **Angled**

11.5 cm Cutting edge: 10 mm Jaw Opening: 2.5 mm Hard carbon steel

No. 11215-01

\$ 105.50

#### **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 Epoxy coated carbon steel

No. 11215-02

\$ 97.50

#### Tungsten Carbide #15AGHM Cutter







#### **Angled**

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

No. 11515-02

\$ 112.00

#### **Bone Nipper**



Strong jaws for cutting tough cartilage.







Angled up

11 cm Cutting edge: 5 mm

No. 16102-11 \$ 134.00



Angled up

10 cm Cutting edge: 7 mm

No. 16101-10 \$ 144.50

#### **Malleus Nipper**







Straight

11 cm Cutting edge: 9 mm

No. 16140-11 \$ 143.00



**Angled Down** 

11 cm Cutting edge: 9 mm

No. 16141-11 \$ 157.00



Angled up

11 cm Cutting edge: 9 mm

No. 16142-11 \$ 169.50







Straight Blunt/Blunt

13 cm Cutting edge: 12 mm

No. 16144-13 \$ 183.50

#### Delicate Bone Cutting Spring Scissors

Slim, strong blades for cutting fine bones and tissues.





Curved Blunt/Blunt

12 cm Cutting edge: 12 mm

No. 16143-12

#### **Littauer Bone Cutter**

#### **Beebee Bone Scissors** Very strong jaws with sharp points.

**Tungsten Carbide Bone Scissors** Strong heavy blades for cutting bone.

TUNGSTEN













Straight

No. 16152-11 \$ 121.00



12.5 cm Cutting edge: 17 mm

No. 16152-12 \$ 133.50



15 cm Cutting edge: 19 mm

No. 16152-15 \$ 138.00



**Straight** 

10 cm Cutting edge: 15 mm

No. 16044-10 \$ 52.50



Straight

12.5 cm Cutting edge: 15 mm

No. 16030-12 \$ 177.50



Straight

16 cm Cutting edge: 15 mm

No. 16030-16 \$ 198.50



#### 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.



Angled up

15 cm Cutting edge: 18 mm

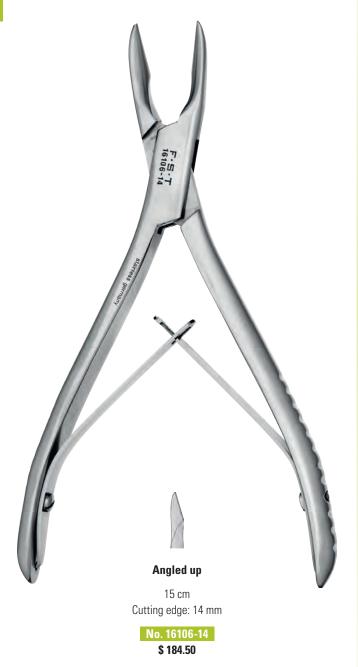
No. 16130-15 \$ 497.00



**Cleveland Cutter** 

Listen

Gross anatomy bone cutter.



Straight

14 cm Cutting edge: 20 mm

No. 16104-14

\$ 227.00

20 cm Cutting edge: 30 mm

No. 16104-19

\$ 291.50

17 cm Cutting edge: 15 mm

No. 16105-16

\$ 206.50

#### **Bone Pliers**

To peel back skull flaps.

#### **Bone Shears**





15.5 cm

No. 16025-14

\$ 274.50



#### Curved

24 cm Cutting edge: 6.5 cm

No. 16150-24 \$ 94.50

#### **Bone Forceps**

Strong cross-serrated tips for bone crushing and removal.



## **Angled**

11.5 cm Tip Ø: 1 mm Cross serrated

No. 16060-11

\$ 165.00

#### **Miniature Self-Tapping Bone Screws**

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





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

No. 19010-10

\$ 222.00

Pkg. of 10 screws

No. 19010-11

\$ 26.50

For pre-drilling use our 0.7 mm burrs, see page 181.

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

> No. 19010-00 \$ 132.00

Pkg. of 10 screws

No. 19010-01

\$ 16.00

For pre-drilling use our 0.9 mm burrs, see page 181.

#### **Bone Wax**

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



Pkg. of 12 foil packs (2.5 g each)

No. 19009-00

\$ 212.50

#### **Micro Curette Delicate Bone Austin Chisel Dissecting** Scraper Chisel Curette tips consist of a scoop with sharp edges and are used for scraping or cleaning. They can also be used for separating For scraping tissue and transporting, inoculating plates or transferring small without cutting amounts of chemicals. into bone. Serrations on cutting edge 1.5 mm ● I 1.5 mm T 2 mm ¶ <sup>™</sup> 0.5 mm 12.5 cm 13 cm 13 cm 13 cm 16.5 cm 16 cm 16 cm 12.5 cm No. 10080-05 No. 10081-10 No. 10082-15 No. 10083-20 No. 10075-16 No. 10096-16 No. 10097-16 No. 10095-12 \$ 120.00 \$ 119.50 \$ 118.50 \$ 166.00 \$ 140.00 \$ 157.00 \$ 157.00 \$ 68.50

#### Von Graefe Knife

Used for cutting dura.



#### **Cataract Knife**

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



#### Sichel





13 cm Cutting edge: 1.5 mm

> No. 10059-13 \$ 128.50



Straight

12.5 cm Cutting edge: 4 mm

No. 10055-12 \$ 127.50



Angled 30°

12.5 cm Cutting edge: 4 mm

No. 10056-12 \$ 144.00



Curved

12 cm Cutting edge: 9 mm

No. 10073-14

\$ 104.00

### Micro Knife Micro Knife Side Cut **Circle Knife** Sharp cutting edge around tip. 200% 250% 2 mm 28 mm Straight Side cut Round 13 cm 15 cm 16 cm Cutting edge: 28 mm Cutting edge: 2 mm Cutting edge: 2 mm No. 10370-13 No. 10058-15 No. 10059-15

\$ 137.00

\$ 157.00

\$ 192.00

#### **Gross Anatomy Knives**

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



# 40% of actual size

#### Dissection knives

26 cm Cutting edge: 13 cm

No. 10157-13 \$ 26.00 28 cm Cutting edge: 15 cm

No. 10157-15

\$ 26.50

Cutting edge: 18 cm
No. 10157-18

31 cm

\$ 31.50

**Brain sectioning knife** 

44 cm Cutting edge: 30 cm

No. 10152-30 \$ 53.00



150%

#### **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.



Approximate blade length: 6 mm

No. 10110-01 \$153.50

Straight

Straight Approximate blade length: 12 mm

> No. 10110-03 \$153.50

Straight

Approximate blade length: 6 mm

No. 10110-05 \$171.00

**Angled** 

Approximate blade length: 6 mm

No. 10110-07

\$ 180.50

#### **Ceramic Blades**

#### Advantages:

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

#### **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.



#### **Ceramic Blades**

#### Angled 45°

33 x 6 x 0.5 mm Cutting edge: 4.5 mm Pkg. of 5 blades

No. 10025-44 \$ 221.50

#### Angled 45°

33 x 6 x 0.5 mm Cutting edge: 2.5 mm Pkg. of 5 blades

No. 10025-43 \$ 221.50

#### Angled 23°

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

No. 10025-23 \$ 133.00

#### Angled 45°

33 x 6 x 0.5 mm Cutting edge: 8 mm Pkg. of 5 blades

> No. 10025-45 \$144.00



12 cm Cutting edge: 1 mm Tip thickness: 0.15 mm





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



No. 10100-30 \$ 545.00



#### Cutting angle: 45°

12 cm Cutting edge: 1 mm Tip thickness: 0.15 mm

> No. 10100-45 \$ 567.00

Aluminum Alloyed

Handle

12.5 cm

No. 10025-50

\$14.00

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



11 cm Jaw width: 4 mm Flat surface

No. 10052-11 \$ 225.00



9 cm Jaw width: 4 mm

Concave / Convex surface Handle diameter: 5.5 mm

> No. 10053-09 \$ 427.00



13 cm Jaw width: 4 mm

Concave / Convex surface Handle diameter: 8 mm

> No. 10053-13 \$ 418.00

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

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



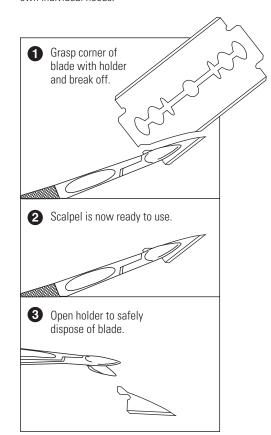


Blade thickness: 0.1 mm Pkg. of 10 blades

No. 10050-00 \$ 23.50

#### **Create Your Own Blade**

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



#### **Carbon Steel Scalpel**

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









#### 22.5° Cutting angle

13.5 cm Cutting edge: 4.5 mm Tip thickness: 0.15 mm

\$ 38.50



#### **Crescent blade**

14 cm Cutting edge: 11 mm Tip thickness: 0.2 mm

### No. 10317-14

\$ 39.00



#### 15° Cutting Angle

13 cm Cutting edge: 5 mm Tip thickness: 0.15 mm

### No. 10315-12

\$35.50



#### Needle blade

14.5 cm Tip thickness: 0.2 mm

\$51.00

#### Interchangeable Carbon Steel Blades







**Angled** Carbon steel

Cutting edge: 10 mm Pkg. of 5 blades

#### No. 10035-15 \$39.00



Curved Carbon steel

Cutting edge: 10 mm Pkg. of 5 blades

#### No. 10035-20 \$ 39.00



Small / Flat Carbon steel

Cutting edge: 1.5 mm Pkg. of 5 blades

#### No. 10035-05 \$35.50



Large / flat Carbon steel

Cutting edge: 2.75 mm Pkg. of 5 blades

#### No. 10035-10

\$35.50



Cutting edge: 4 mm

## No. 10318-14



\$ 59.50

Handle for Interchangeable Blades  $9.5\,\text{cm}$ 

No. 10035-00

\$ 63.50



Cane Carbon steel

Cutting edge: 12 mm Pkg. of 5 blades

No. 10035-25 \$40.00



Arc Carbon steel

Cutting edge: 12 mm Pkg. of 5 blades

No. 10035-30

\$82.00



#### Scalpel Handle #4 with Silicone

For heavy, gross anatomy work.

Molded to fit hand.

#### Standard Scalpel Handle #4 Solid

Especially suitable for large dissections.

#### Blades for #4 Scalpel Handle

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





Box. of 100 blades

No. 10020-00 \$ 68.50



Box. of 100 blades

No. 10021-00 \$ 68.50



Box. of 100 blades

No. 10022-00 \$ 68.50



Box. of 100 blades

No. 10023-00 \$ 68.50





13.5 cm
No. 10009-13
\$ 65.00

13 cm
No. 10004-13
\$ 20.50

#### #3 Standard

#### #3 Secure

#### Blades for #3 and #7 Scalpel Handles

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

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





Box. of 100 blades

No. 10010-00 \$ 69.50



Box. of 100 blades

No. 10011-00 \$ 69.50



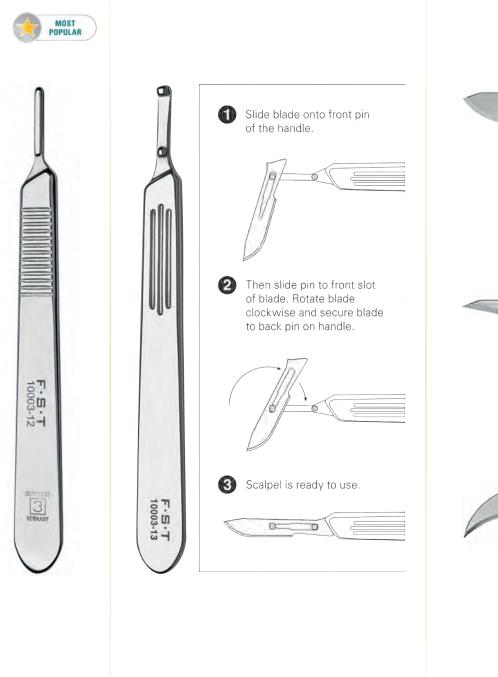
Box. of 100 blades

No. 10012-00 \$ 69.50



Box. of 100 blades

No. 10015-00 \$ 69.50



12 cm

No. 10003-12 \$ 20.50

12 cm No. 10003-13 \$ 34.50

#### **Short Scalpel** Handle #7

#### **Standard Scalpel** Handle #7

#### Scalpel Blade Remover

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

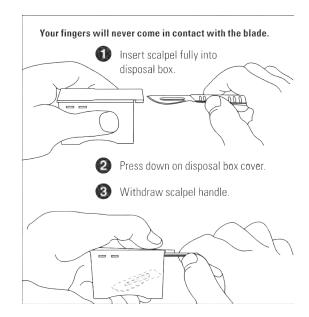


\$ 23.50



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









12 cm

No. 10007-12 \$ 26.00

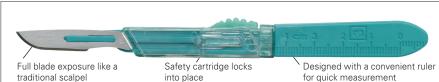
16.5 cm

No. 10007-16 \$ 29.50

#### **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.









Scalpel shown with safety cartridge closed and locked into place.

7.5 cm Box of 100 blades No. 10060-00

\$ 96.00

13 cm No. 10060-13 \$ 23.00

#10 scalpels Pkg. of 10 blades

No. 10000-10

\$ 46.50

#11 scalpels Pkg. of 10 blades No. 10000-11 \$ 49.50

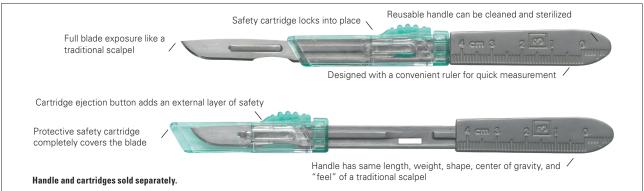
Pkg. of 10 blades

#15 scalpels

No. 10000-15 \$ 49.50

#### **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.** 





\$ 32.50

\$ 47.00

\$ 47.00

\$ 47.00

# FORCEPS, TWEEZERS, HEMOSTATS & VASCULAR INSTRUMENTS





#### **Dumont #5SF**

The finest tips ever produced by Dumont.

#### 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.





## 0,05 mm **Biology**

11 cm Inox 0.05 x 0.01 mm

No. 11254-20

\$ 70.00

#### **Dumont #5 Ceramic Coated**

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





# 0,05 mm

#### **Biology**

11 cm Ceramic coated Inox 0.05 x 0.01 mm

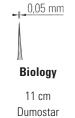
> No. 11252-50 \$121.00

### **Dumont #5CO**

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







0.05 x 0.01 mm No. 11295-20

\$ 94.50





**Super fine** 

11 cm

Inox

0.025 x 0.005 mm

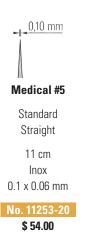
5SF



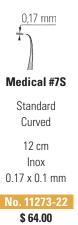
#### **Dumont Medical Micro-Blunted Atraumatic Tipped Forceps**

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.



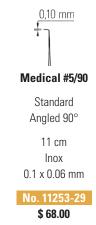














#### Dumont #55

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

#### **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.

#### **Dumont #5**

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



11252-20









11251-10





11 cm Inox 0.05 x 0.02 mm

#### No. 11255-20

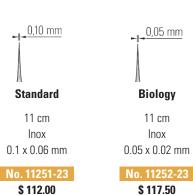
\$ 56.00

11 cm Dumostar 0.05 x 0.02 mm

No. 11295-51

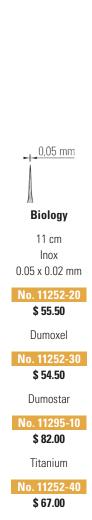
\$ 78.00











Dumoxel

No. 11251-30

\$ 49.50

Dumostar

No. 11295-00

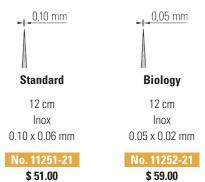
\$74.50



#### **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 #5XL





No. 11253-10 \$ 95.00



#### **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® coating provides a non-stick surface.



## 0,10 mm **Standard**

11 cm Teflon coated Inox 0.1 x 0.06 mm

No. 11626-11

\$ 68.50

#### **Dumont #5/45**

45° tips for improved visibility and control.





# 0,10 mm

#### Standard

11 cm Dumoxel 0.1 x 0.06 mm

No. 11251-35

\$ 56.00

#### **Dumont #5/45 Cover Slip Forceps**

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





#### 1 mm from tip to bend

11.5 cm Dumoxel Upper tip: 0.1 x 0.08 mm Lower tip: 0.1 x 0.02 mm

No. 11251-33

\$ 91.50



0,10 mm

**Standard** 

11 cm Inox

0.1 x 0.06 mm

No. 11253-27

\$107.00

Dumont #3

Tapered and sturdy shanks.



#### Dumont #6

Sharply angled tips for access to difficult areas.









12 cm Dumoxel 0.17 x 0.1 mm

No. 11231-30 \$ 48.50



12 cm Dumostar 0.17 x 0.1 mm

No. 11293-00 \$ 72.50 Standard

11 cm
Inox
0.17 x 0.1 mm

0,17 mm

No. 11231-20 \$ 46.50



**Standard** 

11.5 cm Inox 0.17 x 0.1 mm

No. 11260-20

\$ 68.50



#### Dumont #7 **Fine Tips**

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





#### **Biology**

11.5 cm Inox 0.07 x 0.03 mm

No. 11274-20

\$ 68.50

#### **Dumont #7**







0,07 mm

**Biology** 

11.5 cm Dumoxel 0.07 x 0.04 mm

\$65.00

Dumostar

No. 11297-10

\$89.00

Titanium

No. 11272-40

\$ 74.00



#### **Standard**

11.5 cm Dumoxel 0.17 x 0.1 mm

### No. 11271-30

\$ 54.50

Dumostar

#### No. 11297-00 \$ 85.50

#### Dumont #7 **Ceramic Coated**









#### **Biology**

11.5 cm Ceramic coated Inox 0.07 x 0.04 mm

No. 11272-50 \$ 126.00

#### **Dumont #7B**







#### **Standard**

11.5 cm Inox 0.17 x 0.1 mm

No. 11270-20

\$ 64.00



#### F · S · T by DUMONT 9

#### 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.

#### **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.









11 cm Dumoxel 0.13 x 0.08 mm

No. 11241-30 \$ 51.00 Dumostar

No. 11294-00 \$71.00



Dumoxel 0.06 x 0.04 mm

No. 11242-40 \$ 55.50

0,40 mm **Standard** 12 cm Inox 0.4 x 0.02 mm

> No. 11223-20 \$ 79.00



12 cm Epoxy coated Inox 1.5 x 0.7 mm

No. 11220-21

\$ 41.50



#### **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.



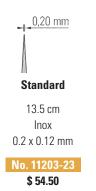




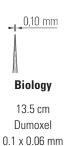












No. 11200-33 \$ 51.50

\$ 44.50



**Dumont Mini Forceps** 

Dumont #2E Components Forceps

**Dumont #5AC** 













7 cm Inox 0.12 x 0.07 mm

No. 11200-10 \$ 43.50



Standard
7 cm
Inox
0.14 x 0.06 mm

No. 11200-12 \$ 43.00



8.2 cm Inox 0.09 x 0.05 mm

No. 11200-14 \$ 44.50



For components

11.5 cm Dumoxel 8 x 1.2 mm

No. 11229-08 \$ 66.50



For components

11.5 cm Dumoxel 10 x 1.2 mm

No. 11229-10 \$ 68.00



Type #5 Anti-Capillary Biology

11.5 cm Inox 0.07 x 0.02 mm

No. 11258-20 \$ 93.00



#### **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.



S. T 11911-11

Angled 30°

11 cm

Gold plated

Stainless Steel

0.1 x 0.06 mm

No. 11911-11

\$ 48.50

# O,1 mm Straight

S

CE

11 cm Gold plated Stainless Steel 0.1 x 0.06 mm

No. 11915-11 \$ 47.00



Curved

12 cm Gold plated Stainless Steel 0.2 x 0.1 mm

No. 11917-12

\$ 49.50



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.



0,15 mm

14 cm Diamond coated Stainless Steel 0.15 x 0.1 mm

No. 11990-14 \$ 57.50







Angled 30°

Diamond coated Stainless Steel 0.15 x 0.1 mm

No. 11991-14 \$ 65.00



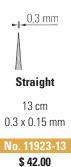
12 cm Diamond coated Stainless Steel 1.65 x 0.05 mm

No. 11992-12 \$ 52.50

#### **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.



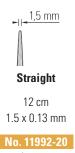


#### #2A Forceps

U

· T 11992

CE





# Curved

13 cm 1.5 x 0.1 mm

#### No. 11972-20 \$ 36.00

#### Forceps with Replaceable Tips

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





Pkg. of 2 tips and 3 screws Replacement plastic tips

Straight / Fine

4 cm

0.6 x 0.6 mm

No. 11988-01 \$12.50



Pkg. of 2 tips and 3 screws Replacement plastic tips

Straight / Very fine

4 cm 0.5 x 0.5 mm

No. 11988-02 \$ 12.50



Pkg. of 2 tips and 3 screws Replacement plastic tips

Curved / Very fine

4 cm 0.5 x 0.5 mm

No. 11988-03 \$12.50



13 cm 0.5 x 0.5 mm

Stainless Steel body with plastic tips

No. 11980-13 \$ 34.50

#### 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













\$ 70.00











#### **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.







No. 11370-32

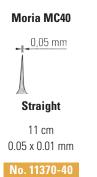
\$214.50

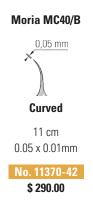


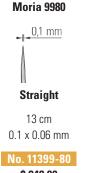


No. 11370-31

\$ 222.50









\$287.50

Moria 9987



#### **Moria Bonn Forceps**

#### **Moria Paufique Forceps**



11383-56







20x magnification

#### Moria 7835



Straight

Tying platform with 1x2 teeth

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

No. 11383-50

\$ 413.00

#### Moria TI7835



#### Straight

Tying platform with 1x2 teeth

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

No. 11383-56

\$ 428.00

#### Moria 3225



#### Straight

Tying platform with 1x2 teeth

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

No. 11390-25

\$ 258.00

## S&T®

#### Fine Forceps

#### SuperGrip Forceps

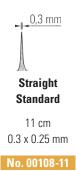
The tips are processed with MicroCrystals®, a method developed by S&T® to infuse tungsten carbide on stainless steel. The formation of this ultra-fine coating guarantees atraumatic handling of tissue while improving the grip dramatically. The recommended use is where forceps are utilized as needle holders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







300% The gripping surface is similar to a match head.



\$ 321.50







#### Bonn

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

#### Mirror Finish Suture Tying Forceps with Teeth

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

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









**Straight**Smooth with platform

7 cm Tip width: 0.3 mm Tying platform: 5 mm

No. 11083-07 \$ 290.50



Straight 1x2 Teeth

7 cm Tip width: 0.3 mm Teeth width: 0.1 mm

No. 11084-07 \$ 365.00



**Straight**Tying platform with 1x2 teeth

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

No. 11090-10 \$ 283.00



**Straight** Smooth with platform

10.5 cm Tip width: 0.3 mm Tying platform: 5 mm

> No. 11093-10 \$ 202.00



**Straight**Tying platform with

9 cm Tip width: 0.3 mm Tying platform: 6 mm

1x2 teeth

No. 11090-09 \$ 301.50

#### **Moria Suture Tying Forceps**

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





#### **McPherson Forceps**





#### **Suture Tying Forceps**

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





#### **Suture Tying Forceps**

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



#### Moria 9604



**Straight** Smooth with platform

9.5 cm Tip Ø: 0.3 mm Tying platform: 8 mm

No. 11393-04 \$ 280.50

#### Moria 9605



**Curved** Smooth with platform

8.5 cm Tip Ø: 0.3 mm Tying platform: 7.5 mm

> No. 11393-05 \$ 287.50



**Angled 45°** Smooth with platform

9 cm Tip Ø: 0.4 mm Tying platform: 6 mm

No. 11063-07 \$ 180.00



Smooth with platform

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

No. 00272-13

\$ 369.00



Smooth with platform

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

No. 18025-10 \$ 191.00



#### **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.

#### **Vitro Grasping Forceps**





Curved

Smooth with platform

 $10.5\,\mathrm{cm}$ Tip Ø: 0.35 mm Tying platform: 5.5 mm

No. 18026-10

\$ 259.50





**Straight** 

Serrated

14 cm Tip Ø: 0.7 mm

No. 11900-14

\$ 1034.00

Tip Ø: 0.5 mm

No. 11006-15 \$ 204.50

#### **Graefe Forceps**

#### Bishop-Harman

good grip.

#### **Octagon Forceps**

Extra light, fenestrated handles ensure a

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





The length of all forceps is 9.5 cm The dimensions of all tips are 0.8 x 0.5 mm



0,6 mm Curved



No. 11065-07

\$ 86.50



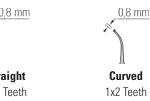


No. 11064-07 \$ 82.00

0,6 mm

Straight

\$ 169.50



Straight 1x2 Teeth No. 11066-07

\$ 88.50

Curved 1x2 Teeth Serrated No. 11067-07 No. 11069-08 \$ 100.50

Straight 1x2 Teeth No. 11070-08

\$ 225.50

The length of all forceps is 8.5 cm

The dimensions of all tips are 0.5 x 0.5 mm

No. 11042-08 \$175.50

Straight 1x2 Teeth

Curved 1x2 Teeth

No. 11041-08

\$172.50

No. 11043-08 \$ 186.50

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

#### **Graefe Forceps**

0,8 mm

Slightly curved

Serrated

0.8 x 0.7 mm

No. 11051-10

\$ 76.00

**Angled** 

Serrated

0.8 x 0.7 mm

No. 11049-10

\$ 78.00

0,8 mm





11051-10 11054-10

11650-10 - 11652-10



0,5 mm

Slightly curved

Serrated

No. 11151-10

\$ 85.00

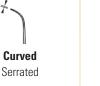
Smooth

No. 11159-10

\$ 75.00

0,5 mm







No. 11053-10

\$ 78.00

Straight

Serrated

1.2 x 0.9 mm

Titanium

No. 11650-10

\$138.00

0,8 mm

Straight

Serrated

0.8 x 0.7 mm

No. 11050-10

\$ 70.00

0,8 mm

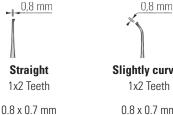
Curved

Serrated

0.8 x 0.7 mm

No. 11052-10

\$ 75.00







No. 11651-10

\$147.50



Curved

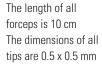
Serrated

1.2 x 0.9 mm

Titanium

No. 11652-10

\$ 145.50





Serrated

No. 11150-10 \$ 78.00



Smooth

No. 11158-10 \$ 72.50



1x2 Teeth

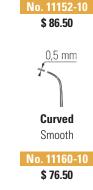
No. 11153-10 \$85.50

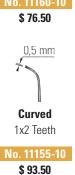




No. 11154-10

\$90.00







#### **Sliding Lock Forceps**

#### **Episcleral Forceps**

#### **Pierse Fixation 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.

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











Tissue retention hole of 0.3 mm behind tips.



**Straight** Arched

10 cm 1.3 x 3 x 0.2 mm

No. 11071-10 \$ 166.00



Straight 0.3 mm Hole

13 cm 1 x 0.5 mm

No. 18155-13 \$ 212.50

No. 11062-10 \$ 161.50

Straight

Smooth

11 cm

1 x 0.75 mm



#### **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.

#### **Cover Glass Forceps**







Straight Blunt 11.5 cm

1.5 x 0.4 mm No. 11700-03



Curved Blunt 11.5 cm 1.5 x 0.4 mm

No. 11700-04 \$ 24.50





**Angled** Cross serrated 10 cm 4 x 8 mm No. 11075-00

\$ 73.00





No. 11700-00 \$ 24.50

Straight

Sharp

11.5 cm

0.4 x 0.25 mm



Curved Sharp

11.5 cm 0.3 x 0.2 mm No. 11700-01

\$ 24.50



Angled 45° Sharp

11.5 cm 0.3 x 0.2 mm

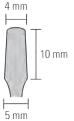
No. 11700-02 \$ 24.50



Straight Smooth

10.5 cm 4 x 10 x 0.6 mm

No. 11074-02 \$ 40.00



**Angled** Smooth

10.5 cm 4 x 10 x 0.6 mm

No. 11073-10 \$ 46.50

#### **Ring Forceps**

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



Cupped forceps for atraumatic gripping of organs and tissues.

#### **Live Insect Handling Forceps**

Very delicate.















Ring 8.5 cm ID: 1 mm; OD: 1.5 mm x 0.5 mm

> No. 11101-09 \$ 96.00



Straight
Ring
9 cm
ID: 2.2 mm; OD: 3 mm
x 1.3 mm

No. 11103-09 \$ 77.50



Straight
Ring
9 cm
ID: 4.8 mm; OD: 6 mm
x 1.5 mm

No. 11106-09 \$ 82.00



**Straight** Circle
 11.5 cm
 7 x 0.5 mm **No. 11072-11** 

Narrow 10 cm 0.9 x 0.15 mm No. 26029-10 \$ 35.50

Straight



Straight

Wide 10 cm 2.3 x 0.3 mm

No. 26030-10 \$ 32.50

\$ 34.50

#### 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.

#### Adson

Wide, strong grip with narrow tips.





11006-12 11027-12

11506-12











0.5 mm Ø

IØ Straight Tying platform with 1x2 teeth 12 cm

\$83.50

0.8 mm

Straight 1x2 Teeth 12 cm 1.5 x 0.8 mm No. 11027-12

\$ 36.00

No. 11006-12

\$ 32.50

1.5 mm IØ Straight Cross Serrated Tungsten Carbide

> 12 cm 1.5 x 1.3 mm

No. 11506-12 \$174.00



Straight Serrated

12 cm 0.8 x 0.9 mm

No. 11018-12 \$ 65.50



**Straight** 1x2 Teeth

12 cm 0.8 x 0.9 mm

No. 11019-12 \$ 78.00



1x2 Teeth 12 cm 0.5 x 0.6 mm

\$113.50

0.8 x 2 mm Tying platform: 6 mm No. 11032-12 No. 11022-12

#### 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.







**Straight**DeBakey serrations

12.5 cm 1.75 x 1.5 mm

No. 11617-12 \$ 151.00



**Straight**DeBakey serrations

15 cm 1.75 x 1.5 mm

No. 11616-15

\$ 158.50



**Straight** Fine teeth

12.5 cm 4.5 x 1.25 mm

No. 11030-12 \$ 127.50



**Straight** Shark teeth

12 cm 2 x 1.4 mm

No. 11627-12

\$ 69.50

#### **Standard Pattern**

Broad pattern with strong spring action.

Length (cm)	Tip width	ltem	Price
12	2.5	No. 11000-12	\$ 23.00
13	2.8	No. 11000-13	\$ 23.50
14.5	3.25	No. 11000-14	\$ 22.00
16	3.3	No. 11000-16	\$ 23.50
18	3.7	No. 11000-18	\$ 31.50
20	3.75	No. 11000-20	\$ 36.00
25	3.9	No. 11000-25	\$ 45.50
30	4	No. 11000-30	\$ 52.50

**Straight** 

Serrated



**Curved** Serrated

Length (cm)	Tip width	Item	Price
12	2.5	No. 11001-12	\$ 32.50
13	2.8	No. 11001-13	\$ 34.00
14.5	3.25	No. 11001-14	\$ 35.50
16	3.3	No. 11001-16	\$ 40.50
18	3.7	No. 11001-18	\$ 39.00
20	3.75	No. 11001-20	\$ 48.50

#### **Narrow Pattern**

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



11602-14





Length (cm)	Tip width	Item	Price
12	2	No. 11002-12	\$ 21.50
13	2.15	No. 11002-13	\$ 25.00
14.5	2.25	No. 11002-14	\$ 26.00
14.5	2.25	No. 11602-14	\$ 98.00
16	2.35	No. 11002-16	\$ 29.50
18	2.4	No. 11002-18	\$ 43.00
20	2.75	No. 11002-20	\$ 43.50
25	3.2	No. 11002-25	\$ 57.50

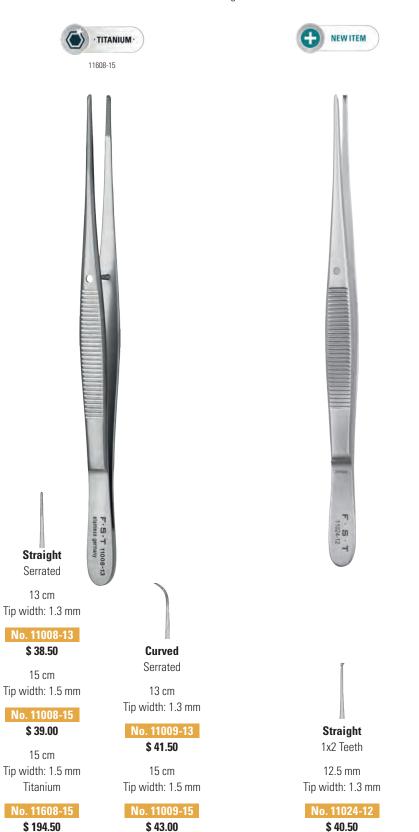


Length (cm)	Tip width	Item	Price
12	2	No. 11003-12	\$ 31.50
13	2.15	No. 11003-13	\$ 37.00
14.5	2.25	No. 11003-14	\$ 40.00
16	2.35	No. 11003-16	\$ 42.00
18	2.4	No. 11003-18	\$ 41.50
20	2.75	No. 11003-20	\$ 54.50

F-S-T

#### 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.



Straight

DeBakey serrations

15 cm Tip width: 1.2 mm

No. 11076-15 \$ 293.50





#### **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.





14.5 cm Tip Ø: 0.1 mm

No. 18601-15 \$ 478.50

RESEARCH ONLY



**Straight**Suture tying platform

15 cm Tip Ø: 0.3 mm

No. 18602-15 \$ 444.00



Angled

Smooth

14.5 cm

Tip Ø: 0.2 mm

No. 18603-14

\$ 400.50



#### **Tissue Forceps**







### Straight

1x2 Teeth / Narrow

10 cm

No. 11023-10

Straight \$35.50 1x2 Teeth / Standard

12 cm

12 cm

No. 11021-12 \$ 25.00

\$ 29.50 14.5 cm

No. 11023-14

\$ 30.00

15.5 cm

14.5 cm

15.5 cm

No. 11023-15 \$31.00

No. 11021-14 \$ 23.50

No. 11021-15 \$ 26.00

#### Straight

2x3 Teeth / Standard

14.5 cm

No. 11022-14 \$ 40.00

15.5 cm

No. 11022-15 \$ 40.00

#### **Tissue Forceps**

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





Curved

1x2 Teeth / Narrow

14 cm

No. 11029-14 \$ 34.00

#### Gillies

#### Russian

#### **Organ Holding Forceps**

With limit screw to prevent excessive applied pressure.









#### Straight

1x2 Teeth & cross serrated

15 cm 1.5 x 2 mm

No. 11028-15

\$ 50.00



F-S-T

Straight Cupped teeth

15 cm 6 x 11 mm

No. 11026-15 \$ 76.00



Straight Serrated

14.5 cm

8 x 11 mm

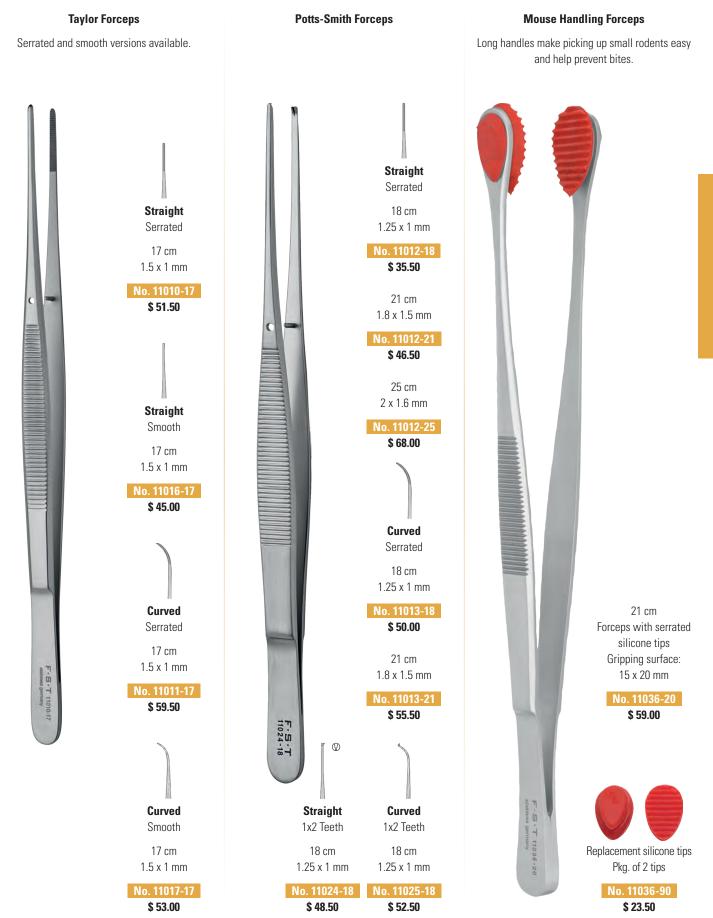
No. 11031-15 \$ 194.00

# **London Forceps Titanium Forceps** TITANIUM: 16 mm **Angled Straight** Serrated Serrated 16 cm 16 cm 1 x 0.9 mm $0.3 \times 0.5 \text{ mm}$ No. 11080-02



**Gerald Forceps** 

\$ 34.50



**Ultra Fine Hemostat** 





**Fine Hemostat** 



Tip width: 0.6 mm No. 13020-12 \$ 115.00



12 cm Tip width: 0.6 mm

No. 13021-12 \$ 124.00



Tip width: 1 mm

No. 13006-12 \$ 130.00



12 cm Tip width: 1 mm

No. 13007-12 \$ 118.50

## Micro-Mosquito **Halsted-Mosquito** MOST POPULAR LEFT HANDED 13008-12 13108-12 13108-12 Straight Curved Serrated Serrated 12.5 cm 12.5 cm Tip width: 1.3 mm Tip width: 1.3 mm Straight Curved Angled 90° No. 13008-12 No. 13009-12 **Serrated** Serrated Serrated \$ 39.00 \$ 43.50 12 cm 12 cm 12 cm Left handed Left handed Tip width: 1 mm Tip width: 1 mm Tip width: 1 mm No. 13010-12 No. 13012-12 No. 13011-12 No. 13108-12 No. 13109-12 \$ 110.50 \$ 115.00 \$ 127.00 \$ 118.50 \$ 124.00

Crile Kelly





Straight Serrated

Tip width: 1.5 mm
No. 13004-14

\$ 44.50

Curved Serrated

Tip width: 1.5 mm

No. 13005-14

\$ 46.50



14 cm Tip width: 1.5 mm

No. 13018-14 \$ 44.50



Curved Serrated

14 cm Tip width: 1.5 mm

No. 13019-14 \$ 48.00



#### Baby-Mixter Providence-Hospital







14 cm Tip width: 1.3 mm

No. 13013-14 \$ 68.00 Straight Serrated

14 cm Tip width: 1.5 mm

No. 13014-14 \$ 52.50



Curved Serrated

14 cm Tip width: 1.5 mm

No. 13015-14 \$ 57.00

#### Hartmann

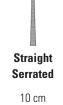


13003-10



#### **Backhaus Towel Clamp**





Tip width: 1 mm

No. 13002-10 \$ 44.50



10 cm Tip width: 1 mm

No. 13003-10 \$ 48.50





**Round tips** 

13 cm

No. 11095-13 \$ 46.50

### **Allis Clamp**

Tissue and organ holding forceps.







Straight 5x6 Teeth

15 cm Tip width: 4 mm

No. 11091-15 \$ 69.50

(**3**) ∏ 3 mm

**Straight** 4x5 Teeth

12 cm Tip width: 3 mm

No. 11092-12

\$ 65.50



Curved **Serrated** 

10 cm Tip width: 7 mm

No. 11096-10 \$ 57.00



Curved Serrated

13 cm Tip width: 7 mm

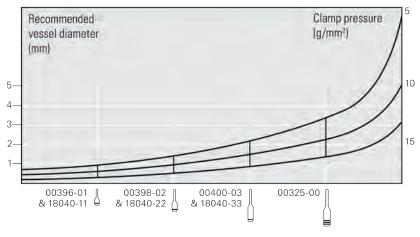
No. 11096-13 \$ 57.50

#### **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)	LxW (mm)	Vessel Diameter Range (mm)
00396-01 & 18040-11	3.5 × 1.0	0.4 - 1.0 - 6
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 0
00325-00	10 x 2.15	2.0 - 5.0 0













No. 00400-03 \$ 192.50



No. 00325-00 \$ 301.50

#### **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.



No. 18040-11 \$ 380.00



No. 18040-22 \$ 374.00



No. 18040-33 \$ 360.50

#### **Micro Clamp Applying Forceps**

#### **Micro Clamp Applying Forceps**







14 cm Only compatible with S&T Micro Clamps Lock: Yes

No. 00071-14

\$ 258.00

Lock: No

No. 00072-14 \$ 171.00







14.5 cm
Compatible with S&T Micro Clamps
and Double Micro Clamps.
Lock: No

No. 18040-14 \$ 190.50

#### **Micro Clip Applicator** with Lock







Lock: Yes

No. 18056-14 \$ 522.00

#### **Forceps Style Clip Applicator**

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





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

Lock: No

No. 18057-14 \$ 90.00

#### **Biemer Clip Applicator** (Forceps Style)

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 \$ 132.00

#### **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





Jaw dimesions (mm)	Total length (mm)	Jaw pressure (g)	Item	
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	

#### \$ 101.00

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	

#### **Titanium Micro Serrefines**

Lightweight with strong clamping pressure.

Delicate atraumatic serration





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







#### **Moria Vessel Clamp**

Straight

33 mm Serrated: Yes Light pressure Jaw dimensions: 13 x 1.6 mm



Moria 201/A

No. 18320-11

\$ 50.00

#### **Moria Bulldog Type Clamps**

53 mm Serrated: No Strong pressure Jaw dimensions: 16 x 2.5 mm



Straight Moria MC43

No. 18374-43 \$ 141.50



Curved Moria MC44

No. 18374-44

\$ 141.50

#### **Bulldog Artery Spring Clamp**

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



Straight 30 mm Serrated: Yes Light pressure



No. 18144-30 \$ 371.50

#### **Dietrich Bulldog Clamps**

Serrated: Yes

Closing pressure: 50 g



Straight 52.5 mm

No. 18038-45

\$ 214.50



No. 18039-45

\$ 233.00

#### **Bulldog Type Serrefines**

Serrated: Yes

Straight
28 mm
Medium pressure
M

Curved 28 mm Medium pressure



No. 18050-28 \$ 88.00 No. 18051-28 \$ 96.50

Straight 35 mm Strong pressure

Straight 50 mm Strong pressure



No. 18050-35 \$ 66.50 No. 18050-50 \$ 59.00



Curved 35 mm Strong pressure

Curved 50 mm Strong pressure



No. 18051-35 \$ 70.00 No. 18051-50 \$ 71.50

#### **Schwartz Micro Serrefines**

Serrated: No Strong pressure 26 mm



Straight **No. 18052-01** 



\$ 16.00

Light bend No. 18052-02

\$ 17.50



Sharp bend

No. 18052-03

\$17.00



#### **Biemer Clip**

Serrated: Yes Straight

Closing pressure: 0.29 - 0.39 N / 30 - 40 g

15 mm

Clamping Length: 6 mm

No. 18058-15

\$ 113.00

18 mm

Clamping Length: 9 mm

No. 18058-18 \$ 115.00

### Mini Serrefines

28 mm Medium pressure Serrated: Yes Jaw dimensions: 6 x 2 mm

Straight

No. 18054-28 \$ 127.00



Curved

No. 18053-28 \$ 125,50





#### Horizon™ Metal Ligation System

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



#### Silver Neuro Clips

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

Pkg. of 100 clips

No. 18040-00

\$ 111.50



#### 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

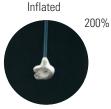
- Occlusion is accomplished without traction on vessels or surrounding
- The actuating tube may be exteriorized from the occlusion site for remote actuation.
- Performance during implantations is reliable and consistent.
- Easily maintained: can be autoclaved or cold sterilized.
- Made from soft, flexible 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.

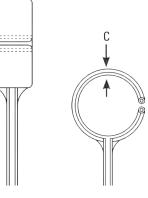












The actuating tube length is 90 cm and measures 0.76 mm ID x 1.6 mm OD. Detailed instructions are included.

A: Lumen diameter

B: Cuff width

C: Cuff thickness

VO-1.5 N

A: 1,5 mm; B: <3,5 mm; C: 1,5 mm

No. 18080-01

V0-2 A: 2 mm; B: 5 mm; C: 1.5 mm

No. 18080-02

V0-3

A: 3 mm; B: 5 mm; C: 1.5 mm

No. 18080-03 \$ 251.00







#### **Vessel Dilators**

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









Angled 10°

11 cm Tip Ø: 0.1 mm

No. 00126-11

\$ 460.00

Tip Ø: 0.2 mm

No. 00125-11 \$ 422.00





Angled 45°

13.5 cm Tip Ø: 0.2 mm

No. 00276-13 \$ 442.50







Angled 10°

12 cm Tip Ø: 0.1 mm

No. 18131-12 \$ 303.00

Tip Ø: 0.2 mm

No. 18132-12

\$ 299.50

#### V-Hook

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

#### **Ligation Aids**

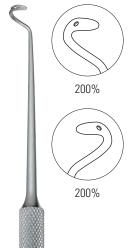
A handy instrument for leading a fine suture under and around a blood vessel for tying-off purposes.

Also useful for ligating peripheral nerves. Grooves toward hole help threading.













10.5 cm Hole Ø: 0.4 mm

No. 18062-12 \$ 171.00



13.5 cm Hole Ø: 1 mm

No. 18062-13 \$ 78.00



13.5 cm Hole Ø: 1 mm

No. 18063-13 \$ 74.50

Tip Dimensions: 0,4 x 0,2 mm

No. 18052-12
\$ 184.50

11 cm



#### **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.

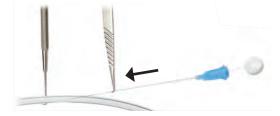


#### Features

- · 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.



#### 2 Insertion

Remove trocar and advance cannula.



#### 3 Secure

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



Instruments sold separately.

8 cm Cannula size: 0.33 mm OD - 0.16 mm ID

No. 18000-10

\$ 91.50

#### **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.













No. 11280-11 \$ 304.50

11 cm For tubing of 0.5 mm OD

> No. 11281-11 \$ 321.50

 $$11\ cm$$  For tubing of 1 mm OD

No. 11282-11 \$ 265.00



11.5 cm For tubing of 0.35 mm OD

> No. 18403-11 \$ 284.00

11.5 cm For tubing of 0.6 mm OD

> No. 18406-11 \$ 265.50

13.5 cm For tubing of 0.6 mm OD

> No. 18406-13 \$ 185.00

11 cm For tubing of 0.35 mm OD

> No. 00608-11 \$ 413.00

11 cm For tubing of 0.5-1 mm OD

> No. 00574-11 \$ 379.00



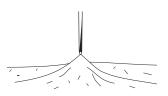
# PROBES, NEEDLE HOLDERS, WOUND CLOSURE, RETRACTORS & CLAMPS

	Probes & Hooks	129 – 134	
	Spatulae	132, 135 – 138	
	Spoons	139	
	Pins & Holders	140 – 141	
	Wound Closure	142 – 153	
20	Retractors	154 – 161	

#### **Double Pronged Pick**

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

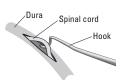




The tip consists of two very sharp, nearly horizontally opposed points. By applying gentle downward pressure and twisting slightly in a clockwise fashion, the points will embed themselves horizontally into fine membranes or skin etc., so that it may be lifted upward. This instrument also has been used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

#### **Spinal Cord Hook**





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





11 cm Tip Ø: 1 mm

No. 18067-11

\$ 161.00



11 cm Tip Ø: 3 mm

No. 10162-12

F-S-T 18067-11 stainless german

**Bonn Micro Probes** 

**Micro Points** 

Actual size



Angled 45°

13.5 cm Tip Ø: 0.025 mm

No. 10032-13 \$82.00

Actual size



Straight

13.5 cm Tip Ø: 0.025 mm

No. 10030-13 \$ 76.00

Actual size



**Wide Hook** 

13.5 cm Tip Ø: 0.038 mm

No. 10033-13 \$ 79.00

Actual size



**Narrow Hook** 

13.5 cm Tip Ø: 0.025 mm

No. 10031-13 \$88.00

300%



**Angled 90° Short** 

15.5 cm Tip Ø: 0.05 mm

No. 10063-15 \$101.00

300%



Angled 45°

15.5 cm Tip Ø: 0.038 mm

No. 10066-15 \$ 100.50

300%



Angled 90° Long

15.5 cm Tip Ø: 0.02 mm

No. 10065-15 \$ 99.00

#### **Probes and Explorers**





10140-01



Actual size



**Angled 80° Short** 

15.5 cm Tip Ø: 0.12 mm

No. 10140-04 \$ 20.00

Actual size



#### **Angled 80° Long**

15.5 cm Tip Ø: 0.15 mm

No. 10140-03 \$ 20.00





Straight

15.5 cm Tip Ø: 0.25 mm

No. 10140-01 \$ 19.00

Actual size



Angled 80°

15.5 cm Tip Ø: 0.15 mm

No. 10140-02 \$ 20.50



#### Micro hook

13 cm Tip Ø: 0.05 mm

No. 10064-14 \$ 100.50

175%



#### **Blunt hook**

12 cm Tip Ø: 0.3 mm

No. 10062-12 \$ 80.50 175%



#### Sharp hook

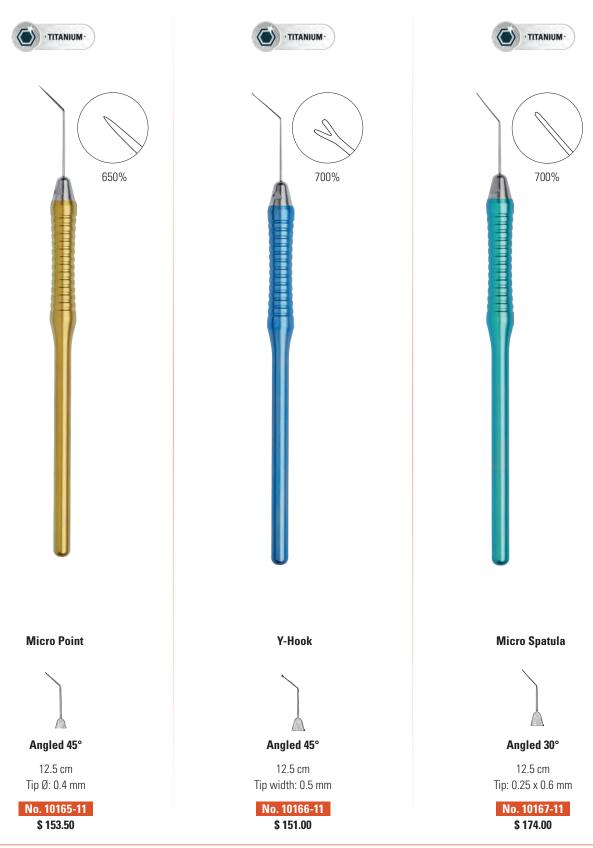
12 cm Tip Ø: 0.075 mm

No. 10061-12

\$ 79.00

#### 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.



## **Gross Anatomy Probe Grooved Director Vessel Dilating Probe** The Grooved Director is a specialized multipurpose device which is used by surgeons in different areas to probe cavities and wounds for example. MOST POPULAR **NEW ITEM** 200% **Angled** Angled 45° 12.5 cm 15 cm 13 cm Tip Ø: 1.2 mm with Tongue Tie Tip Ø: 0.6 mm No. 10088-15 No. 10160-13 No. 10290-13 \$ 163.50 \$ 25.00 \$ 22.00

#### **Combination Spoon and** Spatula

#### **Combination Probe and** Spatula



17.5 cm Top: Ø 7mm / Bottom 30 x 7mm

No. 10090-17

\$ 165.00



\$ 145.50

## **Mirror Finish Micro Double-Ended** Micro Spatula Spatula Micro Spatula Mirror finished to provide a non-stick spatula. MOST POPULAR Straight Curved **Curved/Angled** 11 cm 12 cm 13 cm 17.5 x 1 x 0.25 mm 15 x 0.8 x 0.25 mm 25 x 2 x 0.3 mm No. 10087-12 No. 10089-11 No. 10091-12 \$ 116.00 \$ 170.50 \$ 158.50

#### Iris Spatula





Curved

12 cm 20 x 1.8 x 0.3 mm

No. 10092-12 \$ 77.50



Slightly curved

13 cm 23 x 1.7 x 0.3 mm

No. 10093-13 \$ 76.00



Straight

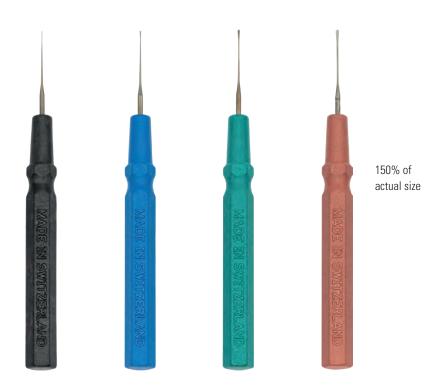
13 cm 33 x 3 x 0.4 mm

No. 10094-13 \$ 74.50



### Micro Spatula Kit

Kit with 4 pieces





Straight

\$ 6 cm Tip Ø: Black: 0.2 mm, Blue: 0.3 mm, Green: 0.5 mm, Red: 0.7 mm

No. 10098-06 \$ 34.00

#### **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.





No. 10099-12 \$ 199.00





No. 10099-15 \$ 99.50



**Mirror Finish Cutting Spoon** 

Non stick cutting

spoon.

# Spoon Moria

#### **Mini Perforated Spoon**

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



#### **Perforated Spoon**

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









Moria 1121B

12.5 cm Tip Ø: 8 mm Depth: 2 mm

No. 10321-08 \$ 245.50





#### Moria MC 17C

10 cm Tip Ø: 8 mm Depth: 1 mm Hole Ø: 0.8 mm

No. 10370-19 \$ 244.00



#### Moria MC 17 BIS

14.5 cm Tip Ø: 15 mm Depth: 3 mm Hole Ø: 0.9 mm

No. 10370-18 \$ 242.50



#### Moria MC 17

14.5 cm Tip Ø: 20 mm Depth: 5 mm Hole Ø: 0.9 mm

No. 10370-17 \$216.00



13 cm Tip Ø: 4.5 mm Depth: 0.15 mm

No. 10360-13 \$191.00

#### Pin Holder

Light weight





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

> No. 26018-17 \$ 43.50









#### Moria MC1

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

No. 26016-12

\$ 43.00

#### Insert Pins

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

5 cm Stainless Steel



#### Black Anodized Minutien Pins

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

Tip Ø: 0.0175 mm Rod Ø:0.15 mm 1.2 cm

Box of 500 pins

No. 26002-15

\$ 31.50





Stainless Steel Minutien Pins

The thinnest and finest pins available.



Tip Ø: 0.0125 mm
Rod Ø: 0.1 mm
1.2 cm
Box of 500 pins
No. 26002-10
\$ 31.00

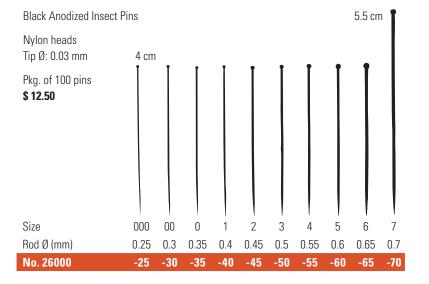
Tip Ø: 0.0175 mm Rod Ø: 0.15 mm 1.2 cm

Box of 500 pins

No. 26003-15 \$ 43.50 Tip Ø: 0.02 mm Rod Ø: 0.2 mm 1.2 cm

Box of 500 pins

No. 26002-20 \$ 31.00



#### Stainless Steel Insect Pins

Nylon heads Tip Ø: 0.03 mm

Pkg. of 100 pins

\$17.50

Size 000 00 0 2 3 5 6 7 Rod Ø (mm) 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 No. 26001 -30 -40 -25 -35 -45 -50 -55 -60 -65

#### Etched Tungsten Micro Needles

These tungsten micro needles are drawn to a 1 micron tip and three different rod diameters are offered. Each provides lateral stability as well as minimal spring action during manipulation. The micro needles can be used with our pin holders shown on page 140.



Tip Ø: 1 μm (0.001 mm) Box of 10 needles

Rod Ø	ltem f	Price
0.125	No. 10130-05	\$ 160.00
0.25	No. 10130-10	\$ 160.00
0.5	No. 10130-20	\$ 160.00

#### 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.







Never use a micro needle holder with needles that are too thick, as this can easily damage the fine jaws. Use only micro needles of less than 0.2 mm diameter (see page 148).





9 cm Lock: Yes

No. 12060-01

\$ 349.50

Lock: No

No. 12060-02 \$ 325.00



#### Curved

9 cm Lock: Yes

No. 12061-01

\$ 341.50

Lock: No

No. 12061-02 \$ 338.00



#### Straight

Serrated: Yes 13.5 cm Lock: Yes

No. 12080-14 \$419.50

#### Curved

Serrated: Yes 13.5 cm Lock: Yes

No. 12081-14

\$ 442.00



#### **Round Handled Needle Holder**

Round handles allow easy fingertip adjustments.

## Round Handled Needle Holder with Suture Cutter

Round handles allow easy fingertip adjustments.

#### Castroviejo with Tungsten Carbide Jaws









14 cm Tungsten Carbide jaws Lock: Yes

> No. 12565-14 \$ 400.50



Curved

12.5 cm

Lock: No

No. 12074-12

\$ 397.50

12.5 cm Lock: Yes

No. 12075-12 \$ 410.00

Lock: No

No. 12076-12 \$ 373.00



14 cm Cutting edge: 3.5 mm Lock: No

No. 12075-14 \$ 737.00

#### Halsey









13 cm Smooth Lock: Yes

No. 12001-13 \$ 51.00



13 cm Tungsten Carbide jaws Lock: Yes

> No. 12501-13 \$ 159.50







12.5 cm Tungsten Carbide jaws Lock: Yes

> No. 12500-12 \$ 200.50

#### Mathieu

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





14 cm Lock: Yes

No. 12010-14 \$ 121.50



14 cm Tungsten Carbide jaws Lock: Yes

> No. 12510-14 \$ 223.50

#### Olsen-Hegar with Suture Cutter





12102-12



12 cm Cutting edge: 10 mm Lock: Yes

> No. 12002-12 \$ 156.50

No. 12102-12 \$ 156.50



14 cm Cutting edge: 15 mm Lock: Yes

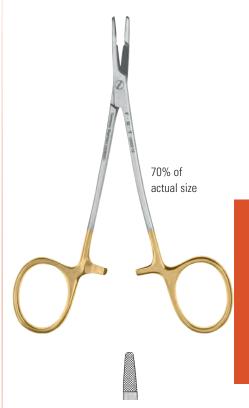
No. 12002-14 \$ 165.00

#### Olsen-Hegar with Suture Cutter and Tungsten Carbide Jaws





12512-12



12 cm Tungsten Carbide jaws Cutting edge: 10 mm Lock: Yes

> No. 12502-12 \$ 244.00

No. 12512-12 \$ 255.00



14 cm Tungsten Carbide jaws Cutting edge: 15 mm Lock: Yes

> No. 12502-14 \$ 261.00

#### Crile-Wood







12504-15



\$ 175.50

Lock: Yes No. 12003-15 \$ 57.50

15 cm

No. 12504-15 \$ 215.50



## Slim Elongated Needle Holder with Tungsten Carbide Jaws

# TUNGSTEN



15 cm Tungsten Carbide jaws Lock: Yes

> No. 12005-15 \$ 253.00

## Ryder Mini-Select Needle Holder

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







15 cm Tungsten Carbide jaws Lock: Yes

> No. 12505-15 \$ 272.00

#### **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.

#### 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.



400% of aktual size



No. 12052-10

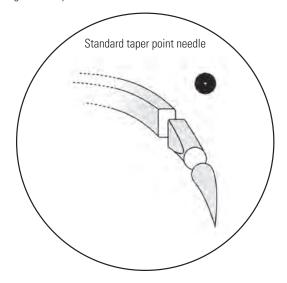


No. 12052-09



#### Sterile

Pkg. of 12 disposable units



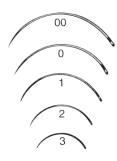
Suture size	Suture length (cm)	Needle Ø (micron)	Needle Ø	Needle chord length	Circle	Arch (mm)	Item	Price
11/0	10	50	0.05	3.8	3/8	3.8	No. 12052-11	\$ 273.00
10/0	10	70	0.07	3.8	3/8	3.8	No. 12052-10	\$ 209.50
9/0	15	100	0.1	5	3/8	5.1	No. 12052-09	\$ 133.00
8/0	15	140	0.14	5	3/8	6.4	No. 12052-08	\$ 100.50

#### **Suture Needles**

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

#### Sterile: No

Pkg. of 12 needles



Size	Item	Price
00	No. 12050-20	\$ 33.00
0	No. 12050-10	\$ 33.00
1	No. 12050-01	\$ 33.00
2	No. 12050-02	\$ 33.00
3	No. 12050-03	\$ 33.00

#### **Silk Suture**

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

Braided Silk **Sterile: No** 

Can be ETO sterilized



Size Suture Ø		Spool length	Item Price		
7/0	0.05	91	No. 18020-70	\$ 100.50	
6/0	0.08	23	No. 18020-60	\$ 50.00	
5/0	0.12	23	No. 18020-50	\$ 53.00	
4/0	0.17	23	No. 18020-40	\$ 53.00	
3/0	0.22	23	No. 18020-30	\$ 58.50	
2/0	0.32	23	No. 18020-20	\$ 64.00	
0	0.37	23	No. 18020-00	\$ 77.50	
1	0.45	23	No. 18020-01	\$ 77.50	
2	0.55	23	No. 18020-02	\$ 110.00	
3	0.65	23	No. 18020-03	\$ 111.50	

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

#### **Nylon Monofilament Suture**

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

Nylon monofilament

Non sterile

Can be ETO sterilized



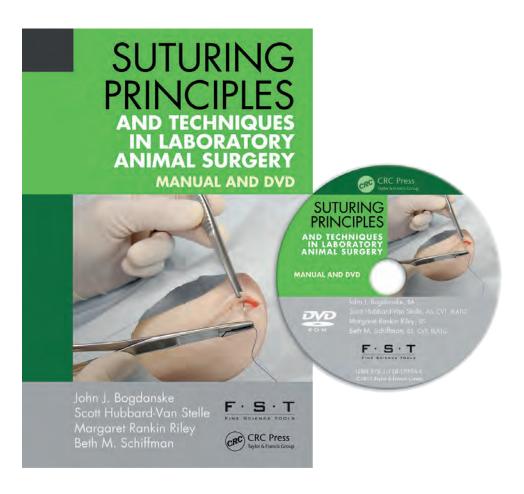
Size	Suture Ø	Spool length	Item	Price
8/0	0.04	91	No. 18030-80	\$ 162.50
7/0	0.05	91	No. 18030-70	\$ 97.50
6/0	0.07	91	No. 18030-60	\$ 155.00
5/0	0.1	91	No. 18030-50	\$ 155.00
4/0	0.15	91	No. 18030-40	\$ 136.50
3/0	0.2	91	No. 18030-30	\$ 115.00

#### **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



No. 23005-10 \$ 127.00

## **Michel Suture Clips**

- Anti-magnetic
- Acid-resistant stainless steel
- Pkg. of 1.000 clips

Size <sub>(mm)</sub>	Item	Price
7.5 x 1.75	No. 12040-01	\$ 116.50
11 x 2	No. 12040-02	\$ 105.50
12 x 2.5	No. 12040-03	\$ 105.50



#### **Applying Forceps**



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

> No. 12018-12 \$ 52.50

## **Applying and Removing Instruments**





13 cm For clip size 12040-01

> No. 12029-12 \$ 161.00



Curved

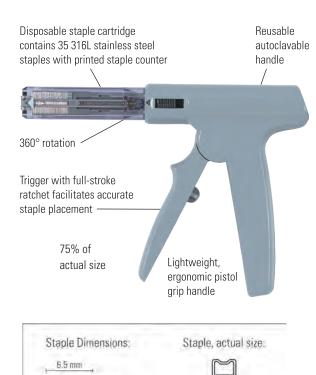
13 cm For clip sizes 12040-02 and 12040-03

> No. 12028-12 \$ 100.50

#### Reloadable Skin Stapler with Rotating Head

The 360° degree swivel nose and unique design offers maximum visibility at the delivery point. The stainless steel staples are non-sterile and feature a patented staple design which make for quick and easy removal. The disposable staple cartridge includes a printed staple counter.

The handle is reusable and autoclavable. Staples are non-sterile. Components sold separately or as a kit.



3.6

Surgical staple kit

- 1 Handle
- 1 Remover
- 12 Disposable staple cartridges

#### No. 12030-20

\$ 260.50

Single disposable cartridge 35 staples per cartridge

#### No. 12030-22

\$ 20.00

12 disposable cartridges 35 staples per cartridge

#### No. 12030-23

\$ 232.50

Handle

#### No. 12030-01

\$ 31.50

#### **Surgical Staple Remover**

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



#### Manipler® Skin Stapler

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

#### Disposable, sterile and not autoclavable.



#### AutoClip® System

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











Remover

## AutoClip® Kit

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

No. 12020-00 \$ 442.50 AutoClip® applier 11.5 cm

**Applier** 

No. 12020-09 \$ 282.50 AutoClip® clips 9 mm Pkg. of 100 clips

No. 12022-09 \$ 48.00 AutoClip® clips 9 mm Pkg. of 1000 clips

No. 12022-19 \$ 386.50 AutoClip® remover 12.5 cm

No. 12023-00 \$ 166.00



#### **Slide Retractor with Blades**





2 cm Max. spread: 1 cm

No. 17004-03 \$ 206.50

#### Mini-Goldstein





2 cm Max. spread: 0.5 cm 3 x 3 Sharp teeth

No. 17002-02 \$ 186.00

#### Mini-Colibri





2 cm Max. spread: 1 cm

No. 17000-01 \$ 45.50

#### Slide Retractor with Teeth





2 cm Max. spread: 1 cm 2 x 2 Blunt teeth

No. 17005-03 \$ 203.50

#### Goldstein





3 cm Max. spread: 1.8 cm 3 x 3 Sharp teeth

No. 17003-03 \$ 119.50

#### Colibri



17000-03



3 cm Max. spread: 1.5 cm

No. 17000-03 \$ 37.50

4 cm Max. spread: 1.5 cm

No. 17000-04 \$ 37.00



3 cm Max. spread: 1.2 cm

No. 17000-02 \$ 36.00

#### Speculum



#### **Moria 7699**

4.5 cm Max. spread: 3.5 cm Curved

No. 17370-53 \$ 121.50

#### Colibri



#### Moria 6346D

3.4 cm Max. spread: 1.5 cm

No. 17300-02 \$ 43.00



#### Moria 6346C

3.3 cm Max. spread: 1.5 cm

No. 17300-03 \$ 41.50



#### Moria 6346B

3.5 cm Max. spread: 2 cm

No. 17300-04 \$ 44.50

#### **Fine Adjustable Wire Retractor**



5 cm Max. spread: 3.5 cm Curved

No. 17004-05 \$ 191.00

## Agricola





4 cm Max. spread: 3.5 cm 3 x 3 Sharp teeth

No. 17005-04 \$ 144.00





**Alm Retractor with Blunt Teeth** 





7 cm Max. spread: 4 cm Slightly curved down

No. 17010-07

\$ 155.50



7 cm Max. spread: 4 cm Slightly curved 4 x 4 Blunt

No. 17008-07 \$ 136.50



7 cm Max. spread: 4 cm Slightly curved 4 x 4 Blunt

No. 17009-07 \$ 150.50



7.5 cm Max. spread: 4.5 cm Slightly bent

No. 17009-08

\$ 183.00

## **Spring-Loaded Retractor**

Curved atraumatic blades









5.5 cm Max. spread: 3 cm 14 x 10 mm

No. 17006-05 \$ 57.50



8 cm Max. spread: 4 cm 22 x 16 mm

No. 17007-08 \$ 59.00





8 cm Max. spread: 2.5 cm

No. 17001-07 \$ 31.50

Heiss









10 cm Max. spread: 2.3 cm 4 x 4 Blunt teeth

No. 17011-10

\$ 138.00



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

No. 17017-10

\$ 228.50







Straight

2 x 3 Blunt teeth 11 cm Max. spread: 4 cm

No. 17012-11 \$ 222.50 Straight

3 x 4 Blunt teeth 13 cm Max. spread: 4 cm

No. 17012-13

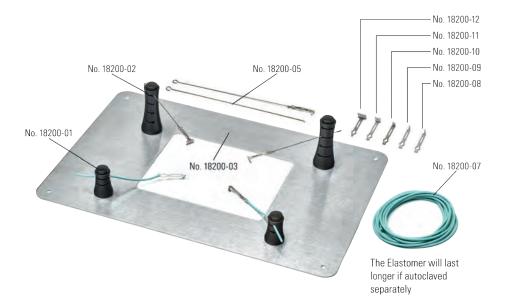
\$ 226.50



Angled down 3 x 3 Blunt teeth

11 cm Max. spread: 3 cm

No. 17018-11 \$ 276.00



#### **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  $10 \times 13 \text{ cm}$  for the small base plate and  $15 \times 25 \text{ cm}$  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

\$ 639.50

## 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

\$ 739.50

#### **Individual parts:**

Short fixator, 3 cm high Fach

No. 18200-01

\$ 91.50

Tall fixator, 6 cm high Each

No. 18200-02

\$ 96.00

Small base plate, (20 x 30 cm) Each

No. 18200-03

\$ 110.00

Large base plate, (25 x 35 cm) Each

No. 18200-04

\$ 121.00

Wire handles, 10 cm long Pkg. of 10

No. 18200-05

\$ 79.00

Wire handles, 14 cm long Pkg. of 10

No. 18200-06

\$82.00

Elastomer, 2 m roll

No. 18200-07

\$ 37.50

Sharp retractors, 1 mm wide Pkg. of 10

No. 18200-08

\$ 127.50

Blunt retractors, 1 mm wide Pkg. of 10

No. 18200-09

\$ 127.50

Blunt retractors, 2.5 mm wide Pkg. of 10

No. 18200-10

110. 1020

\$ 127.50

Blunt retractors, 5 mm wide Pkg. of 10

No. 18200-11

\$ 127.50

Blunt retractors, 7.5 mm wide Pkg. of 10

No. 18200-12

\$ 127.50

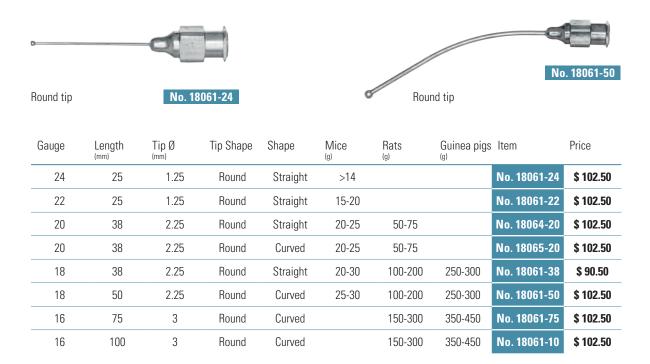
# ACCESSORIES & INSTRUMENT CARE

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.



These needles come with a barrel tip.

No. 18060-20



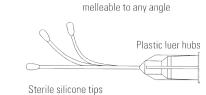
Barrel tip



		Editor up						
Gauge	Length (mm)	Tip Shape	Shape	Mice (g)	Rats	Guinea pigs	Item	Price
24	25	Barrel	Straight	>14			No. 18060-24	\$ 81.00
22	25	Barrel	Straight	15-20			No. 18060-22	\$ 81.00
20	30	Barrel	Straight	20-25	50-75		No. 18060-20	\$ 81.00
20	38	Barrel	Straight	20-25	50-75		No. 18063-20	\$ 81.00
20	38	Barrel	Curved	20-25	50-75		No. 18067-20	\$ 85.00
18	38	Barrel	Straight	20-30	100-200	250-300	No. 18060-18	\$ 81.00
18	50	Barrel	Curved	25-30	100-200	250-300	No. 18067-50	\$ 85.00
16	75	Barrel	Curved		150-300	350-450	No. 18067-75	\$ 85.00
16	100	Barrel	Curved		150-300	350-450	No. 18067-10	\$ 85.00

#### 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.** 





Price	Item	Guinea pigs	Rats (g)	Mice (g)	Tip Ø	Length (mm)	Gauge
\$ 59.00	No. 18061-20		50-75	20-25	1.75	38	20
\$ 59.00	No. 18061-18		100-200	25-30	2.5	50	18
\$ 59.00	No. 18061-15	400-600	200-350		3	75	15

#### **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.** 

#### Pkg. of 5 needles



Price	Item	Guinea pigs	Rats (g)	Mice (g)	Tip Ø	Length (mm)	Gauge
\$ 58.50	No. 18961-20		50-75	20-25	1.8	38	20
\$ 58.50	No. 18961-18	250-300	100-200	20-30	2	38	18
\$ 58.50	No. 18961-17	250-300	100-200	25-30	2.4	52	17
\$ 58.50	No. 18961-15	400-600	200-350		2.6	78	15
\$ 58.50	No. 18961-75	250-300	150-250	25-30	2	75	18
\$ 34.50	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.







**Microtubes** not included.

#### GenoPunch includes

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

FST does not supply microtubes.



11.5 cm Stainless Steel and Anodized Aluminum Punch Ø: 2 mm

No. 24215-02 \$161.00

#### **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.





Punch Ø: 1 mm

No. 24916-01

14 cm Punch Ø: 2 mm

No. 24916-02 \$ 339.50

14 cm

\$ 376.00

#### **Ear Punch with Replaceable Tip**

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



#### **Handle and Tip**

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

> No. 24213-02 \$131.50

**Replacement Tip** 

Punch Ø: 2 mm

No. 24213-12 \$ 72.50

#### **Ear Punch**

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



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

No. 24214-02 \$113.50

#### **Finger Loop Ear Punch**

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



10.5 cm Punch Ø: 2 mm

No. 24212-02 \$53.00

Punch Ø: 1 mm

No. 24212-01

\$61.00



#### **Marking Pen**

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

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



Fine Tip 4.5 x 7.5 mm Black 10 ml

No. 24202-06 \$84.00

Fine Tip 4.5 x 7.5 mm Blue 10 ml

No. 24202-02 \$84.00

Fine Tip 4.5 x 7.5 mm

Green

10 ml No. 24202-01 \$84.00

Fine Tip 4.5 x 7.5 mm

Red

10 ml

No. 24202-04 \$84.00

Fine Tip 4.5 x 7.5 mm Yellow

No. 24202-03 \$84.00

10 ml

Fine Tip 4.5 x 7.5 mm Orange 10 ml

No. 24202-05

\$84.00



Standard Tip 15 x 10 x 10 mm Black 15 ml

No. 24202-16 \$81.00

Standard Tip 15 x 10 x 10 mm Blue 15 ml

No. 24202-12

\$ 81.00

Standard Tip 15 x 10 x 10 mm Green 15 ml

No. 24202-11 \$81.00

Standard Tip

15 x 10 x 10 mm Red 15 ml

No. 24202-14 \$81.00

Standard Tip

15 x 10 x 10 mm Yellow 15 ml

No. 24202-13 \$81.00

Standard Tip 15 x 10 x 10 mm Orange 15 ml

No. 24202-15 \$81.00

#### **Surgical Skin Marker**

This marker features a versatile tip for precise fine (0.2 mm) line marking, or when held at an angle, a broad (2 mm) line marking. The marker's violet ink is nontoxic, non-tattooing and surgical prep-resistant.

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





50% of actual size

No. 18000-30 \$ 6.50



#### **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.





## 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.





Picture similar

Alloy: Monel 0.8 cm No. 1-100 Far tags - #s 1 to

Ear tags - #s 1 to 100

No. 24221-10 \$ 46.50 Alloy: Monel 0.8 cm No. 1-500 Ear tags - #s 1 to 500

No. 24221-50 \$ 186.00 Alloy: Monel 0.8 cm No. 501-1000

Ear tags - #s 501 to 1000

No. 24221-90 \$ 186.00

#### **Animal Microtattoo System**

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

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

Use of the microtattoo system is humane and in compliance with regulatory agencies for the care and use of laboratory animals. Detailed instructions are included.

#### Both the microtattoo forceps and green tattoo paste are autoclavable.

Animal microtattoo system (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



Animal microtattoo system 13 cm

No. 24201-00 \$ 627.50



No. 24201-01 \$ 16.00



#### **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.



#### **O-Rings for Forceps**

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

Pkg. of 10

No. 11200-00 \$ 3.00

#### Instrument Oil

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

50 ml bottle

No. 29055-00 \$17.00

#### **Sharpening Stone for Fine Forceps**

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

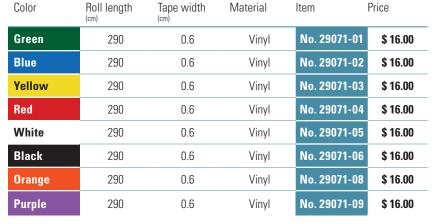
12.5 x 6.5 x 3 cm

No. 29008-22

#### **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.** 

107

0.6

Vinyl

No. 29080-01

\$ 16.00



#### **Instrument Marking Tape**

Organize instruments quickly and easily with this economical, non-toxic, pressure sensitive tape. Color is unaffected by boiling, cold sterilization or autoclaving. 9 colors available. **Autoclavable.** 



Color	Roll length	Tape width	Material	Item	Price
Green	510	0.6	Vinyl	No. 29070-01	\$ 16.00
Blue	510	0.6	Vinyl	No. 29070-02	\$ 16.00
Yellow	510	0.6	Vinyl	No. 29070-03	\$ 16.00
Red	510	0.6	Vinyl	No. 29070-04	\$ 16.00
White	510	0.6	Vinyl	No. 29070-05	\$ 16.00
Black	510	0.6	Vinyl	No. 29070-06	\$ 16.00
Brown	510	0.6	Vinyl	No. 29070-07	\$ 16.00
Orange	510	0.6	Vinyl	No. 29070-08	\$ 16.00
Purple	510	0.6	Vinyl	No. 29070-09	\$ 16.00

#### **Self Sealing Sterilization Pouches**

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

#### **Material properties:**

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



 $$10\ x\ 18\ cm$$  For instruments up to 13 cm long

Pkg. of 100 pouches

No. 28000-07 \$ 75.00  $$13\ x\ 26\ cm$$  For instruments up to 23 cm long

Pkg. of 100 pouches

No. 28000-10 \$ 93.50  $$18\,x\,30\mbox{ cm}$$  For instruments up to 26 cm long

Pkg. of 100 pouches

No. 28000-12 \$ 116.50



#### **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.

60 % of actual size

Instruments not included.

#### **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

\$ 692.00

Replacement glass beads for FST 250

Weight: 150 g

No. 18000-46 \$ 48.00

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

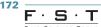
\$ 866.50

Replacement glass beads for FST 350

Weight: 300 g

No. 18000-51

\$ 51.50



#### Micro Bead Sterilizer with Glass Beads

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

#### **Small Sterilizer 110V**

Well Ø: 4 cm Well depth: 8 cm Well volume: 100 ml Total unit size: 14.5 x 15.5 cm

No. 18090-45

\$ 736.00

#### **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

\$ 736.00

#### Replacement glass beads for small sterilizer

Weight: 150 g

No. 18000-47

\$ 33.00



#### **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

\$ 839.50

#### Replacement glass beads for tall sterilizer

Weight: 300 g

No. 18000-52

\$ 40.00

#### **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

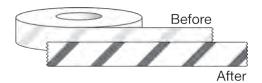
No. 18090-50

\$ 839.50

#### **Autoclave Tape**

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



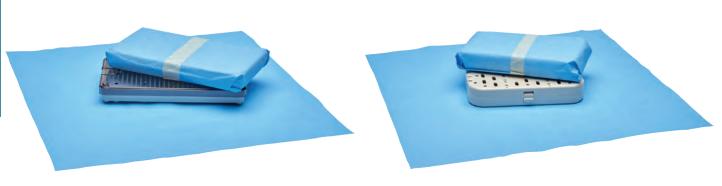


2 cm x 55 m

No. 28001-02 \$ 15.00

#### **Disposable Sterilization Wraps**

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



Cases not included.

38 x 38 cm Pkg. of 25 wraps

No. 28015-15 \$ 9.00 51 x 51 cm Pkg. of 25 wraps

No. 28020-20

\$ 13.50

F·S·T

#### Silicone Mat

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



30 x 20 cm

No. 20325-00 \$ 167.50

#### **Magnetic Sterilization Mat**

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



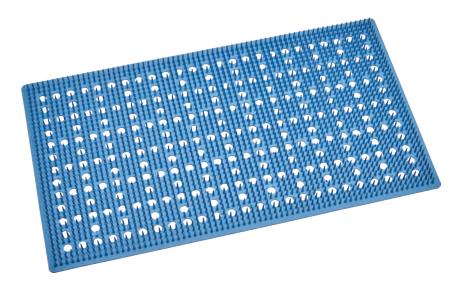
Instruments not included.

30 x 20 cm

No. 20350-00 \$ 183.00

#### **Silicone Mat**

Large, economical silicone mat. Autoclavable.



46 x 25 cm

No. 20325-10

\$ 119.50

#### **Sterilization Container**

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





19 x 10 x 2 cm

No. 20810-01 \$ 186.00

27 x 16 x 4 cm

No. 20810-02 \$ 287.00

#### **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.

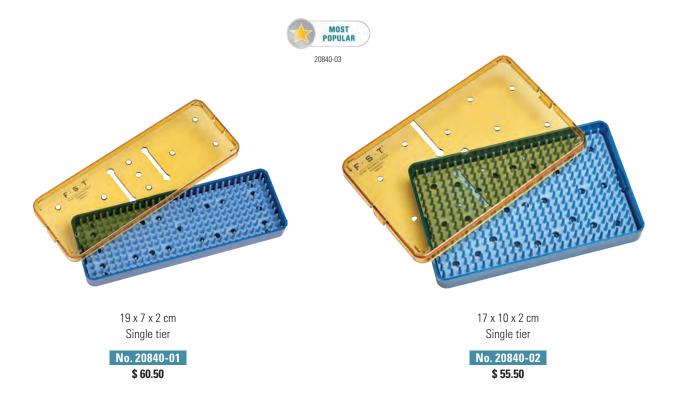


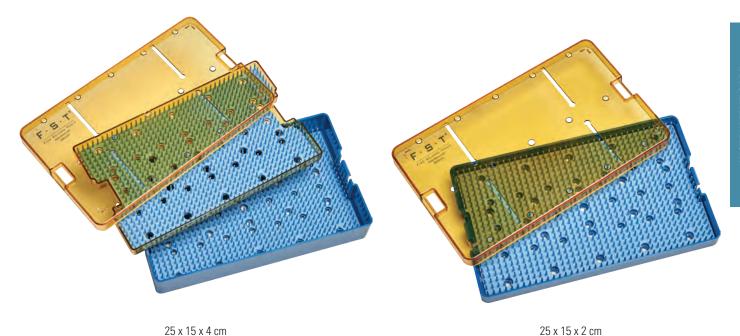
No. 20820-00

\$ 243.50

#### **Sterilization Container**

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





Single tier

No. 20840-03

\$ 113.50

Double tier

No. 20842-03

\$ 208.00

#### **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.



30 x 14 x 4 cm

No. 20850-00 \$ 322.50

5 Long-term textile filters

No. 20850-10 \$ 51.00

One Long-term textile filter

No. 20850-11 \$ 11.00

#### **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.** 



#### **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

\$ 18.50



# **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.** 





1.6 x 19.1 mm Pkg. of 25 Material: Plastisol

No. 29060-01 \$ 23.00



4.8 x 25.4 mm Pkg. of 25 Material: Plastisol

No. 29060-05 \$ 23.00



2 x 19 mm Pkg. of 25 Material: Plastisol

No. 29060-02 \$ 23.00



9.5 x 25.4 mm Pkg. of 25 Material: Plastisol

No. 29060-06 \$ 23.00



2.8 x 19.1 mm Pkg. of 25 Material: Plastisol

No. 29060-03 \$ 23.00



3.2 x 25.4 mm Pkg. of 25 Material: Plastisol

No. 29060-04 \$ 23.00









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

> No. 29060-00 \$ 28.00

#### **Double Tip Protectors**

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



12.7 x 2 mm Pkg. of 10 Material: Plastisol

No. 29066-01 \$ 14.00



9 x 25.5 mm Pkg. of 10 Material: Plastisol

No. 29066-02 \$ 14.00



15 x 25 mm Pkg. of 10 Material: Plastisol

No. 29066-03 \$ 14.00



25 x 26 mm Pkg. of 10 Material: Plastisol

No. 29066-04 \$ 14.00



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

No. 29066-00 \$ 17.50



#### **Stainless Steel Burrs**

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

Tip Ø	Item	Price	
0.7 *	No. 19008-07	\$ 30.00	
0.9 **	No. 19008-09	\$ 30.00	
1.4	No. 19008-14	\$ 30.00	

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

#### **Carbon Steel Burrs**

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

NOT AUTOCLA		MOST
Гір Ø <sub>mm)</sub>	19007 Item	-07 Price
0.5	No. 19007-05	\$ 20.50
0.7 *	No. 19007-07	\$ 20.50
0.9 **	No. 19007-09	\$ 22.00
1.4	No. 19007-14	\$ 23.50
2.1	No. 19007-21	\$ 25.00

No. 19007-29

\$ 32.50

2.9

# **Tungsten Carbide Burrs**

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



Tip Ø	Item	Price	
0.5	No. 19009-05	\$ 23.00	
0.7 *	No. 19009-07	\$ 23.00	
0.9 **	No. 19009-09	\$ 23.00	

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

# **Stainless Steel Trephines**

Side opening for clearing of material.



### **Stainless Steel Circular Saw**

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



Ø: 1.6 cm Thickness: 0.1 mm Pkg. of 10 saws

No. 18000-20 \$40.00

# 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

\$ 7.50

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

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

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

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

#### **High Temperature Cautery Kit**

This high temperature cauterizer is a great alternative to disposable cautery units. Temperature at tips is approximately 1000°C (1832°F). Replacement cautery tips are available. Not autoclavable.







Plastic body

Stainless steel tips: 0.2 mm Ø

Operation temperature: 1000°C (1832°F)

Total weight: 70 g

Length: 16 cm (without tip)

# Cautery kit includes:

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

65% of actual size



Replacement tips

Single use

Straight / Standard Sterile: Yes

Box of 10 tips



Replacement tips Single use

Straight / Fine Sterile: Yes

Box of 10 tips

No. 18010-02

#### **Low Temperature Cautery Kit**

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





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



Replacement tips Single use

Straight / Fine Sterile: Yes

Box of 10 tips

No. 18019-01 \$ 106.00



Replacement tips Single use Elongated Straight / Fine

> Sterile: Yes Box of 10 tips

No. 18019-02 \$ 109.00

Cautery Kit

No. 18010-00

\$ 114.50

No. 18010-01 \$ 109.00

\$ 117.50

Cautery Kit

#### **Small Vessel Cauterizer**

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



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

Cautery kit includes:

- 1 Cautery handle
- 2 AA Batteries
- 1 Straight fine tip
- 1 Storage case
- 1 Angled fine tip



Remove batteries before autoclaving.

80% of actual size



Replacement tip Reusable Straight / Fine

No. 18000-01 \$88.00



Replacement tip Reusable Angled / Fine

No. 18000-02 \$88.00



Replacement tip Reusable Straight / Fine

No. 18000-03 \$88.00



Replacement tip Reusable Straight knob

No. 18000-04 \$ 88.00

Cautery Kit

No. 18000-00

\$ 506.50



#### **Neuro Punches**

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



Price	ltem I	Length (cm)	Gauge	OD (mm)	ID (mm)
\$ 47.00	No. 18036-24	4.2	24	0.61	0.31
\$ 47.00	No. 18036-22	4.5	22	0.7	0.41
\$ 47.00	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	Item	Price
0.35	0.8	21	No. 18035-35	\$ 103.50
0.5	1	19	No. 18035-50	\$ 97.50
0.8	1.45	17	No. 18035-80	\$ 99.50
1	1.8	15	No. 18035-01	\$ 85.00
2	3	11	No. 18035-02	\$ 82.50
3	4	8	No. 18035-03	\$ 86.50
5	6	4	No. 18035-05	\$ 90.00

#### **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.





#### **Miniature File Set**

Comes with 8 different file profiles in a vinyl pouch.





10 cm Carbon Steel

No. 30076-14 \$ 154.00

#### **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 \$ 29.00

6 mm x 9 cm Triangular stone

No. 29008-12 \$ 27.50

#### 4-in-1 Screwdriver

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





Handle 9.5 cm, with attachment 11.5 cm Nickel handle

No. 30051-10 \$ 28.00

#### **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

13 cm Cutting Edge: 58 mm

No. 10025-70 \$ 27.50 Straight

Cutting Edge: 58 mm

No. 10025-71 \$ 18.50

RESEARCH ONLY

# **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.





21 cm Stainless steel with plastic handle

No. 37500-00 \$ 37.50

# **Universal Scissors**

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





13 cm Stainless steel with plastic handle

No. 37500-05

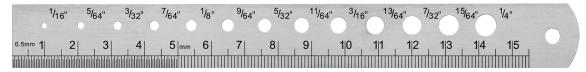
\$ 32.50

50% of actual size

# **Ruler with Gauge Measurements**







Stainless Steel 15.5 cm / 6"

No. 30085-15 \$ 12.50

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

#### Front



#### Back



Stainless Steel 30 cm / 12"

No. 30085-30 \$ 17.50

#### Ruler Label

Used for stable measurements in all surgical platforms.





6 cm Pkg. of 25 labels

No. 29027-00 \$ 9.00

# **Plastic Vernier Caliper**

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

Maximum measurement: 153 mm.



# Plastic 21 cm

No. 30087-20 \$ 34.50

# **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.



Stainless steel 23.5 cm

No. 30087-00 \$ 51.00

# 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

No. 18000-35 \$ 397.50



# **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.



38 x 38 x 40 mm

No. 29026-10 \$ 161.00



# **Stage Micrometers**

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

76 x 26 mm 10 mm with 100 divisions (0.1 mm)

> No. 29025-01 \$ 220.00

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

> No. 29025-02 \$ 230.00



# **Electronic Clock/Triple Timer**

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

LCD display: 4.5 x 4.5 cm 7 x 8.5 x 1.5 cm AA battery (not included)

> No. 27000-01 \$ 35.50



#### **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 \$ 125.50

Pkg. of 50 Female contacts

No. 19003-01 \$ 211.00



# **Headband Magnifier**

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



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

No. 28030-02

\$ 123.00

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

No. 28030-03

\$ 128.50

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

No. 28030-04

\$ 132.00



AA battery (not included)

No. 28030-10

\$ 78.00

# **Interchangeable Magnifier Headset with LED**

Economical and fully interchangeable headband magnifier with LED light.

MOST

#### Includes:

- Multiple Lens Magnifications (1.0x, 1.5x, 2.0x, 2.5x, 3.5x)
- LED Light Source
- Tilting Functionality
- Adjustable Headband
- Interchangeable Lens Frames





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

Field of view: Variable Working distance: Variable

No. 28080-10

\$ 44.50

#### **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.



Magnification: 3x Working distance: 40 cm (16") Weight: 72 g

> No. 28050-30 \$ 294.50

Magnification: 3.5x Working distance: 30 cm (12") Weight: 77 g

> No. 28050-35 \$ 309.00

# **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.



Working distance: 35 cm (14")
Weight: 70 g
Plastic frame reinforced with fiberglass

No. 28040-30 \$ 488.00

# **Spectacles Headband**

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



Material: Neoprene

No. 28080-90

\$ 9.50

#### **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 \$ 157.00

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

#### **Eschenbach Clip-On LED Light**

\$ 168.00



#### **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

\$ 739.00

#### **Eschenbach Scribolux Magnifier**

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

Magnification: 2.8x Diopter: 7/11D Lens size: 100 x 75 mm Lens shape: Aspheric Working distance: 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)

#### No. 28020-28

\$179.00



# **Optical Cleaning Kit**

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

#### Kit includes:

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



No. 29000-10 \$ 54.50

# **Lens Paper**

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



15 x 10 cm Book of 50 sheets

No. 29015-50

\$ 9.00



#### Eschenbach mobilux® DIGITAL inspection

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

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

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

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



#### No. 28070-50

\$ 759.50

#### Eschenbach laboCOMFORT

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



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

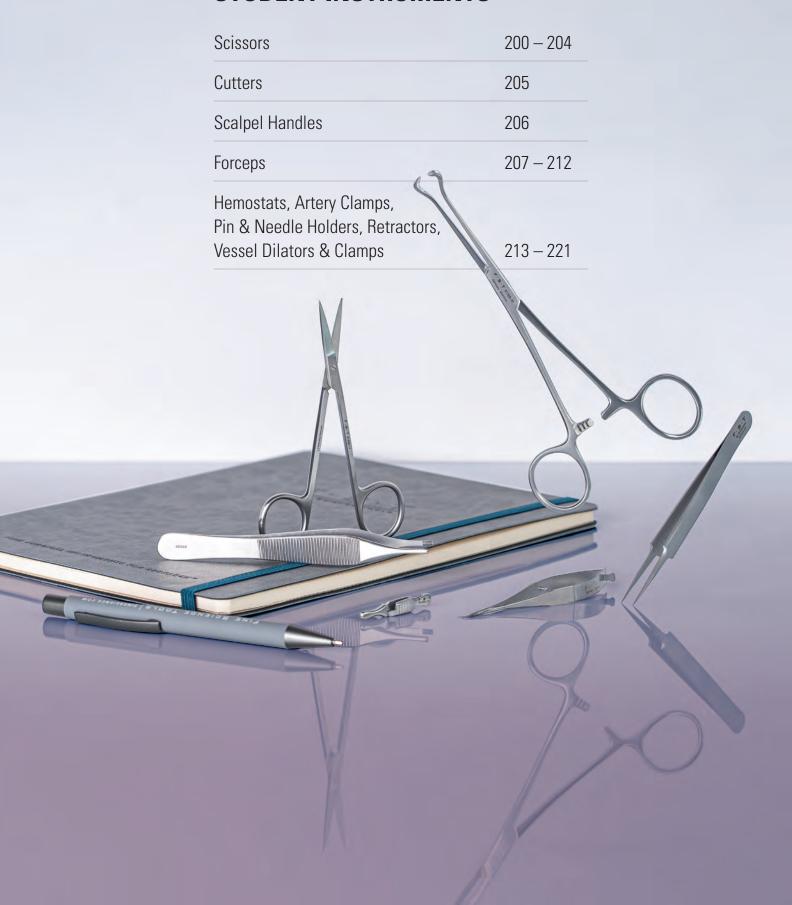
Magnification: 3x

Working distance: 13 cm (5")

No. 28030-13

\$ 140.00

# **STUDENT INSTRUMENTS**



# **FST STUDENT QUALITY INSTRUMENTS**



# **FEATURES**:

- 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.



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

for discount.



91500-09







Quantity discount for student 5-9=**5%** 

10 + = **10 %** Per item, selection cannot be assorted for discount.



 $9\,\mathrm{cm}$ Cutting edge: 5 mm Tip Ø: 0.35 mm

No. 91500-09 \$ 93.00



Sharp/Sharp

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

No. 91501-09 \$ 102.50





91460-11





Sharp/Sharp

11.5 cm Cutting edge: 16 mm

No. 91460-11 \$ 40.00



Curved Sharp/Sharp

11.5 cm Cutting edge: 16 mm

No. 91461-11 \$ 48.00







14.5 cm Cutting edge: 22 mm

No. 91408-14 \$ 31.50



# **Surgical Scissors**

		co					
Length (cm)	Cutting edge	Straight Sharp/Sharp	Price	Straight Sharp / Blunt	Price	Straight Blunt / Blunt	Price
10.5	20	No. 91402-10	\$ 37.50	No. 91401-10	\$ 31.00	No. 91400-10	\$ 34.50
12	26	No. 91402-12	\$ 33.00	No. 91401-12	\$ 31.50	No. 91400-12	\$ 29.00
13	28	No. 91402-13	\$ 34.50	No. 91401-13	\$ 31.00		
14.5	30	No. 91402-14	\$ 36.00	No. 91401-14	\$ 33.00	No. 91400-14	\$ 31.00
Length (cm)	Cutting edge	Curved Sharp / Sharp	Price	Curved Sharp / Blunt	Price	_	
12	26	No. 91405-11	\$ 32.50	No. 91404-12	\$ 32.50	_	
13	28	No. 91405-13	\$ 31.50	No. 91404-13	\$ 32.50	_	
14.5	30	No. 91405-14	\$ 33.00	No. 91404-14	\$ 33.00		
						(	

Ouantity discount for student









11.5 cm Cutting edge: 20 mm

No. 91468-12

\$ 40.50



9 cm Cutting edge: 16 mm

No. 91476-09 \$ 26.50

80% of actual size

Mayo

DISCOUNT (

17 cm Cutting edge: 32 mm

> No. 91411-17 \$ 31.50

#### **Lister Scissors**

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





14 cm Cutting edge: 26 mm

No. 91413-14 \$ 29.50

RESEARCH



Angled to side **Blunt/Blunt** 

18 cm Cutting edge: 30 mm





Angled to side **Blunt/Blunt** 

Cutting edge: 34 mm



20 cm

No. 91413-20 \$ 31.00



14.5 cm Cutting edge: 28 mm

No. 91409-15 \$ 30.00



17 cm Cutting edge: 32 mm

No. 91410-17 \$ 30.00







O/O DISCOUNT

Quantity discount for student

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



No. 91419-14

\$ 33.00



204





Heavy Blades  $10.5\,\mathrm{cm}$ Cutting edge: 20 mm

No. 91405-10 \$ 27.50

# **Bone Scissors**

For cutting fine bone.



# **Bone Cutter**





Quantity discount for student 5 - 9 = 5%

10+=**10%** Per item, selection cannot be assorted for discount.

O/O DISCOUNT



13 cm

#4

No. 91004-13

\$ 17.50



For scalpel blades, see page 74.

#3

12 cm

No. 91003-12

\$ 17.00



For scalpel blades, see page 73.

MOST POPULAR





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

Standard Curved

11 cm Inox 0.17 x 0.1 mm

No. 91197-00 \$ 48.50



Standard Straight

11 cm Inox 0.1 x 0.06 mm

No. 91150-20

\$ 45.00

**Fine Forceps Straight Fine Forceps Broad Shanks Fine Forceps Curved Fine Forceps Angled** F-S-T 91110-10 F-S-T 91115-10 F-S-T 91117-10 F · S · T 91113-10 CE CE CE O/O DISCOUNT Quantity discount Per item, selection cannot be assorted for discount. Straight Straight / Broad shanks Curved **Angled** 11 cm 12 cm 12 cm 11 cm 0.2 x 0.2 mm 0.2 x 0.1 mm 0.2 x 0.2 mm 0.2 x 0.2 mm No. 91115-10 No. 91117-10 No. 91113-10 No. 91110-10 \$ 42.00 \$ 43.00 \$ 45.00 \$ 45.50

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



Quantity discount for student 5 - 9 = 5%10+=**10%** 

Per item, selection cannot be assorted for discount.



**Feilchenfeld** 



9 cm Tip Ø: 0.75 mm

Straight

No. 91139-09 \$ 25.00



Serrated/Sharp Straight

11.5 cm Tip Ø: 1 mm

No. 91139-12 \$ 25.00



Straight

10.5 cm Tip Ø: 0.3 mm

No. 91156-11 \$ 28.00

Ouantity discount

for student

5-9 = 5%10 + = 10%

Per item, selection cannot be assorted for discount.

No. 91119-12

\$ 32.50

No. 91162-12

\$ 26.50

No. 91427-12

\$ 28.00

No. 91127-12

\$ 27.50

# **Anatomical and Surgical Forceps**

Broad pattern with strong spring action.

#### **Anatomical Standard Pattern**



Straight Serrated

Tip width	Length (cm)	Item	Price
2.5	11.5	No. 91100-12	\$ 19.00
2.7	13	No. 91100-13	\$ 20.00
3	14.5	No. 91100-14	\$ 20.50
3.5	16	No. 91100-16	\$ 20.50
4	17	No. 91100-17	\$ 21.50

# **Anatomical Narrow Pattern**



Tip width	Length (cm)	Item	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	\$ 18.50
2.3	16	No. 91102-16	\$ 20.00



91100-12



# Surgical Standard Pattern



Straight 1x2 Teeth

Tip width	Length (cm)	Item	Price
2.2	12	No. 91121-12	\$ 18.50
2.4	13	No. 91121-13	\$ 19.00
2.6	14.5	No. 91121-14	\$ 17.00
2.8	15.5	No. 91121-15	\$ 17.50
3	16	No. 91121-16	\$ 22.00
3.5	18	No. 91121-18	\$ 19.00
4	20	No. 91121-20	\$ 19.00
4.5	25	No. 91121-25	\$ 20.50

# Surgical Narrow Pattern



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

Tip width	Length (cm)	Item	Price
2	11.5	No. 91123-12	\$ 17.00
2.2	14.5	No. 91123-14	\$ 17.00
2.4	16	No. 91123-16	\$ 18.50

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







Quantity discount for student 5-9=**5%** 

10+=**10%** Per item, selection cannot be assorted for discount.

Curved Serrated

10 cm Tip width: 1.5 mm

No. 91303-10 \$ 34.00

**Straight Serrated** 

12.5 cm Tip width: 1.4 mm

No. 91308-12 \$ 30.00



Curved Serrated

12.5 cm Tip width: 1.4 mm

No. 91309-12 \$ 34.00



Curved 1x2 Teeth and **Serrations** 

12 cm Tip width: 2 mm

No. 91331-12 \$ 34.00



10+=10% Per item, selection cannot be assorted for discount.

Quantity discount for student instruments: 5-9=5%













14 cm Tip width: 2.2 mm

No. 91328-14 \$ 29.00

Straight
1x2 Teeth and Serrations

16 cm Tip width: 3 mm

No. 91328-16 \$ 29.50



14 cm Tip width: 2.2 mm

No. 91329-14 \$ 29.00

Curved 1x2 Teeth and Serrations

16 cm Tip width: 3 mm

No. 91329-16 \$ 29.50



14 cm

Tip width: 2.2 mm

No. 91330-14

\$ 28.00

14 cm

Tip width: 2.2 mm

No. 91331-14

\$ 29.00







Quantity discount for student instruments: 5-9=5%

10+= 10% Per item, selection cannot be assorted for discount.



Round and sharp tips

9 cm

No. 91195-09 \$ 24.50



Round and sharp tips

11 cm

No. 91195-11 \$ 25.00



Round and sharp tips

13 cm

No. 91195-13 \$ 26.00



Round and serrated tips

10 cm Tip width: 2.5 mm

No. 91194-10 \$ 29.50



Round and serrated tips

13 cm Tip width: 3 mm

No. 91194-13 \$ 30.00



13 cm Tip width: 7 mm

No. 91196-13 \$ 27.50



F

# **Allis Clamp** 60% of actual size 5x6 Teeth 15 cm Tip width: 6 mm No. 91191-15



**Hose Clamp** 



**Lister Sine Clamp** 



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

No. 91191-15 \$ 32.50

#### Cross-Serrated

15 cm Tip width: 4 mm

No. 91198-15 \$ 29.50

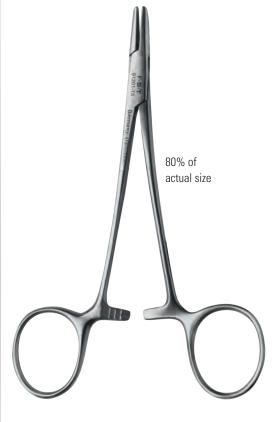
#### Serrated

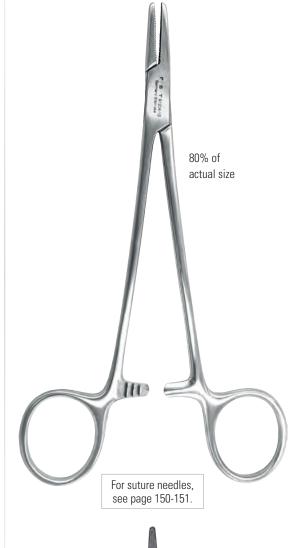
16 cm Tip width: 3 mm

No. 91199-16 \$ 29.50









Straight

16 cm

Tip width: 2.6 mm

Clamping length: 21 mm

Lockable: Yes

Scissors: No

No. 91204-16

\$ 47.00



Quantity discount for student 5-9=**5%** 10 + = **10 %** 

Per item, selection cannot be assorted for discount.

page 115.

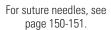
For pins, see



7.5 cm Jaw opening: 0-1 mm

No. 91606-07

\$ 15.50





# Straight

13 cm Tip width: 1.5 mm

Clamping length: 18 mm Lockable: Yes Scissors: No

No. 91201-13

\$ 49.50



# Senn-Miller 16 cm 3 sharp teeth 7 x 8 mm and 1 blunt tooth 18 x 6 mm No. 91790-16 \$ 33.00 16 cm 3 sharp teeth 7 x 8 mm and 1 blunt tooth 18 x 6 mm No. 91791-16





No. 91815-11 \$ 147.00

#### **Spring-Loaded Retractor**



Atraumatic blades 8.5 cm Maximum spread: 3 cm

> No. 91706-05 \$ 45.50

#### Barraquer





3 cm Maximum spread: 1.1 cm

> No. 91700-03 \$ 22.00



for student 5-9 = 5%10 + = **10 %** Per item, selection cannot be assorted

for discount.

#### Dieffenbach



# Straight

35 mm Strong pressure

No. 91850-35

\$ 40.50

\$ 32.50

# **NUMERICAL INDEX**

00071-14	119	10035-00	72	10110-05	69	11003-12	105	11042-08	98	11200-14	88
00072-14	119	10035-05	72	10110-07	69	11003-13	105	11043-08	98	11200-33	87
00108-11	94	10035-10	72	10130-05	141	11003-14	105	11049-10	99	11203-23	87
00109-11	94	10035-12	72	10130-10	141	11003-16	105	11050-10	99	11203-25	87
00125-11	124	10035-15	72	10130-20	141	11003-18	105	11051-10	99	11210-10	87
00126-11	124	10035-20	72	10140-01	131	11003-20	105	11052-10	99	11210-20	87
00272-13	96	10035-25	72	10140-02	131	11006-12	103	11053-10	99	11215-01	57
00276-13	124	10035-30	72	10140-03	131	11006-15	97	11054-10	99	11215-02	57
00325-00	118	10050-00	71	10140-04	131	11008-13	106	11055-10	99	11220-21	86
00396-01	118	10052-11	71	10152-30	68	11008-15	106	11062-10	100	11223-20	86
00398-02	118	10053-09	71	10157-13	68	11009-13	106	11063-07	96	11229-08	88
00400-03	118	10053-13	71	10157-15	68	11009-15	106	11064-07	98	11229-10	88
00574-11	127	10055-12	66	10157-18	68	11010-17	111	11065-07	98	11231-20	84
00608-11	127	10056-12	66	10160-13	133	11011-17	111	11066-07	98	11231-30	84
00632-11	94	10058-15	67	10162-12	129	11012-18	111	11067-07	98	11241-30	86
00649-11	94	10059-13	66	10165-11	132	11012-21	111	11069-08	98	11242-40	86
10000-10	76	10059-15	67	10166-11	132	11012-25	111	11070-08	98	11251-10	81
10000-11	76	10060-00	76	10167-11	132	11013-18	111	11071-10	100	11251-20	81
10000-15	76	10060-13	76	10290-13	133	11013-21	111	11072-11	102	11251-21	82
10002-00	75	10061-12	131	10315-12	72	11014-18	110	11073-10	101	11251-23	81
10002-50	75	10062-12	131	10316-14	72	11015-18	110	11074-02	101	11251-30	81
10003-12	74	10063-15	130	10317-14	72	11016-17	111	11075-00	101	11251-33	83
10003-13	74	10064-14	131	10318-14	72	11017-17	111	11076-15	106	11251-35	83
10004-13	73	10065-15	130	10321-08	139	11018-12	103	11080-02	110	11252-00	79
10006-12	77	10066-15	130	10360-13	139	11019-12	103	11083-07	95	11252-20	81
10007-12	75	10073-14	66	10370-13	67	11020-12	103	11084-07	95	11252-21	82
10007-16	75	10075-16	65	10370-17	139	11021-12	108	11090-09	95	11252-23	81
10009-13	73	10080-05	65	10370-18	139	11021-14	108	11090-10	95	11252-30	81
10010-00	74	10081-10	65	10370-19	139	11021-15	108	11091-15	117	11252-40	81
10010-10	77	10082-15	65	11000-12	105	11022-12	103	11092-12	117	11252-50	79
10011-00	74	10083-20	65	11000-13	105	11022-14	108	11093-10	95	11253-10	82
10011-10	77	10087-12	135	11000-14	105	11022-15	108	11095-09	116	11253-20	80
10012-00	74	10087-12	133	11000-16	105	11023-10	108	11095-13	116	11253-21	80
10015-00	74	10089-11	135	11000-10	105	11023-10	108	11096-10	117	11253-21	80
10015-00	77	10090-13	134	11000-10	105	11023-12	108	11096-13	117	11253-27	83
10013-10	73	10090-17	134	11000-25	105	11023-14	108	11101-09	102	11253-27	80
10020-00	73	10090-17	135	11000-23	105	11023-13	106	11103-09	102	11253-29	79
10021-00	73				105			11105-09	102		81
10022-00	73	10092-12	136	11001-12		11024-18	111			11255-20	
		10093-13	136	11001-13	105	11025-18	111	11150-10	99	11258-20	88
10025-23	70	10094-13	136	11001-14	105	11026-15	109	11151-10	99	11260-20	84
10025-43	70	10095-12	65	11001-16	105	11027-12	103	11152-10	99	11270-20	85
10025-44	70	10096-16	65	11001-18	105	11028-15	109	11153-10	99	11271-30	85
10025-45	70	10097-16	65	11001-20	105	11029-14	108	11154-10	99	11272-30	85
10025-50	70	10098-06	137	11002-12	105	11030-12	104	11155-10	99	11272-40	85
10025-70	185	10099-12	138	11002-13	105	11031-15	109	11158-10	99	11272-50	85
10025-71	185	10099-15	138	11002-14	105	11032-12	103	11159-10	99	11273-20	80
10030-13	130	10100-30	70	11002-16	105	11036-20	111	11160-10	99	11273-22	80
10031-13	130	10100-45	70	11002-18	105	11036-90	111	11200-00	169	11274-20	85
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

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

# **NUMERICAL INDEX**

45000.00	4.0	45000.00	0.4		0.0	40000 50	470	10051.05		10000 10	470
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
15070-08	21	16120-14	52	18000-18	181	18040-00	123	18067-50	163	18961-20	164
15110-08	28	16121-14	52	18000-10	181	18040-11	118	18067-30	163	18961-75	164
15111-08	28	16130-15		18000-20	167	18040-11	119	18070-00	122	18961-85	164
	22		61								
15123-12		16140-11	59	18000-35	188	18040-22	118	18070-10	122	19003-00	190
15124-12	22	16141-11	59 50	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

# **NUMERICAL INDEX**

10007.01	404	04000 40	407	00000 07	474	00070 07	470	04400.45	04.0	0440444	004
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
20830-00	179	26000-65	141	29008-12	185	91100-16	211	91305-14	214	91461-11	200
20830-01	179	26000-70	141	29008-22	169	91100-17	211	91305-16	214	91468-12	202
20830-02	179	26001-25	141	29015-50	196	91102-12	211	91308-12	213	91476-09	202
20830-03	179	26001-30	141	29025-01	189	91102-13	211	91309-12	213	91500-09	200
20830-04	179	26001-35	141	29025-02	189	91102-14	211	91316-14	215	91501-09	200
20830-05	179	26001-40	141	29026-10	189	91102-16	211	91316-16	215	91601-11	205
20830-06	179	26001-45	141	29027-00	187	91106-12	210	91317-14	215	91604-09	205
20831-10	180	26001-50	141	29055-00	169	91108-12	212	91317-16	215	91606-07	220
20840-01	177	26001-55	141	29060-00	180	91108-14	212	91318-14	214	91700-03	221
20840-02	177	26001-60	141	29060-01	180	91110-10	208	91319-14	214	91706-05	221
20840-03	177	26001-65	141	29060-02	180	91113-10	208	91322-14	215	91790-16	221
20842-03	177	26001-70	141	29060-03	180	91115-10	208	91323-14	215	91791-16	221
20850-00	178	26002-10	141	29060-04	180	91117-10	208	91328-14	216	91815-11	221
20850-10	178	26002-15	141	29060-05	180	91118-12	210	91328-16	216	91850-35	221
20850-11	178	26002-20	141	29060-06	180	91119-12	210	91329-14	216		
23005-10	150	26003-15	141	29066-00	180	91121-12	211	91329-16	216		
24201-00	168	26007-01	141	29066-01	180	91121-13	211	91330-14	216		
24201-01	168	26007-02	141	29066-02	180	91121-14	211	91331-12	213		
24202-01	167	26007-03	141	29066-03	180	91121-15	211	91331-14	216		
24202-02	167	26007-04	141	29066-04	180	91121-16	211	91393-16	218		
24202-03	167	26007-05	141	29070-01	170	91121-18	211	91400-10	201		
24202-04	167	26016-12	140	29070-02	170	91121-20	211	91400-12	201		
24202-05	167	26018-17	140	29070-03	170	91121-25	211	91400-14	201		
24202-06	167	26029-10	102	29070-04	170	91123-12	211	91401-10	201		
24202-11	167	26030-10	102	29070-05	170	91123-14	211	91401-12	201		
24202-12	167	27000-01	190	29070-06	170	91123-16	211	91401-13	201		

A	
Absorption swabs	184
Adson DeBakey Forceps	104
Adson Forceps	103, 210
Adson-Brown Forceps	104, 210
Adson-Graefe Forceps	104
Agricola Retractor	156
Allis Clamp Forceps	117, 219
Alm Retractors	157
Animal Identification	
Ear Punch	165 – 166
Ear Tags	168
Markers	167
Tattoo System	168
Autoclave Tape	174
<b>B</b>	046
Babcock Clamp	218
Baby-Beyer Rongeurs	54
Baby-Mixter Hemostat	115
Backhaus Towel Clamp	116, 217
Barraquer Retractors	221
BeeBee Bone Scissors	60
Beyer Rongeur	54
Biemer	100
Clip Applicator	120
Clips	121
Spring Scissors	30
Bishop-Harman	98
Blair Retractor	154
Boehler Bone Cutter	61
Bone	
Austin Chisel	65
Dissecting Chisel	65
Forceps	64
Nipper	58
Scissors	205
Scraper	65
Screws	64
Spring Scissors	59
Wax	64
Bonn	
Forceps	95
Micro Probe	130
Scissors	31, 43
Bonn-Strabismus Scissors	31
Bowman Retractor	158
Breakable Scalpels	71
Bulldog Clamps	121
С	
Calipers	188
Cannulation System	126
Carbon Steel Blades	72
ournour oteer piades	12

C	
Calipers	188
Cannulation System	126
Carbon Steel Blades	72
Castroviejo	
Needle Holder	142 - 143
Spring Scissors	24 - 27
Surgical Caliper	188
Cataract Knife	66
Cauterizer	182 – 183

Ceramic	
Scalpel Handle	70
Scalpels	70, 185
Ceramic Coated	
Forceps	79, 85
Iris Scissors	37
Spring Scissors	23, 27
Circular Saw	181
Cleaning Brush	184
Cleveland Bone Cutter	62
Clipper II Spring Scissors	30
Clips (Vascular)	
Biemer	121
Bulldog Artery Spring Clamp	121
Bulldog Type Serrefines	121
Dieffenbach	221
Dietrich Bulldog	121
Double Clamps	118
Micro Serrefines	120
Mini Serrefines	121
S&T Micro	118
Schwartz Micro Serrefines	121
Titanium	120
Clock (Electronic Timer)	190
Cohan-Vannas Spring Scissors	22
Colibri Retractors	155 – 156
Combination Spatula and Probe	134
Combination Spatula and Spoon	134
Cover Glass Forceps	101
Crile Hemostats	114, 214
Crile-Wood Needle Holders	146
Cross-Action Forceps	101
Curettes	65
Cutters	h / 20h
D 1 D 0:	57, 205
Beebee Bone Scissors	60
Boehler Bone Cutter	60 61
Boehler Bone Cutter Bone Nipper	60 61 58
Boehler Bone Cutter Bone Nipper Bone Pliers	60 61 58 63
Boehler Bone Cutter Bone Nipper Bone Pliers Bone Scissors	60 61 58 63 60
Boehler Bone Cutter Bone Nipper Bone Pliers Bone Scissors Bone Shears	60 61 58 63 60 63
Boehler Bone Cutter Bone Nipper Bone Pliers Bone Scissors Bone Shears Bone Trimmers	60 61 58 63 60 63 56
Boehler Bone Cutter Bone Nipper Bone Pliers Bone Scissors Bone Shears Bone Trimmers Cartilage	60 61 58 63 60 63 56
Boehler Bone Cutter Bone Nipper Bone Pliers Bone Scissors Bone Shears Bone Trimmers Cartilage Cleveland	60 61 58 63 60 63 56 56
Boehler Bone Cutter Bone Nipper Bone Pliers Bone Scissors Bone Shears Bone Trimmers Cartilage Cleveland Dumont	60 61 58 63 60 63 56 56 62 57
Boehler Bone Cutter Bone Nipper Bone Pliers Bone Scissors Bone Shears Bone Trimmers Cartilage Cleveland Dumont Liston Bone	60 61 58 63 60 63 56 56 62 57
Boehler Bone Cutter Bone Nipper Bone Pliers Bone Scissors Bone Shears Bone Trimmers Cartilage Cleveland Dumont Liston Bone Littauer Bone	60 61 58 63 60 63 56 56 62 57 62
Boehler Bone Cutter Bone Nipper Bone Pliers Bone Scissors Bone Shears Bone Trimmers Cartilage Cleveland Dumont Liston Bone	60 61 58 63 60 63 56 56 62 57

D	
DeBakey Forceps	106
Decapitation Scissors	51
Diamond Coated Forceps	89
Diamond Knives	70
Dieffenbach Clamp	221
Dietrich Bulldog Clamps	121
Double Micro Clamp Applying Forceps	119
Double Micro Clamps	118
Dowell Spring Scissors	25

Drill Accessories	
Burrs	181
Circular Saw	181
Mandrel	181
Trephines	181
Dumont	57, 79 – 88, 127, 207

E	
Ear Punchs	165 – 166
Ear Tags	168
Episcleral Forceps	100
Eschenbach Magnifier	193 – 195, 197
Clip-on LED light	194

F	
Feeding Needles	
Reusable	163
Single Use	164
Feilchenfeld Forceps	209
File Set	185
Fomon Retractor	154
Forceps	90 - 91
Adson	103
Adson (Student)	210
Adson DeBakey	104
Adson-Brown	104
Adson-Brown (Student)	210
Adson-Graefe	104
Allis Clamp Forceps	117
Allis Clamp Forceps (Student)	219
Balanced	107
Biemer Clip Applicator	120
Bishop-Harman	98
Bone	64
Bonn	95
Bonn Micro	95
Ceramic Coated	79, 85
Circle	102
Components	88
Cover Glass	101
Cover Slip	83
Cross Action	101
DeBakey Round Handled	106
Diamond Coated	89
Double Micro Clamp Applying	119
	79 – 88, 127
Dumont (Student)	207
Episcleral	100
Epoxy Coated	86 – 87
Feilchenfeld (Student)	209
Forceps Style Clip Applicator	120
Gerald	110
Gillies	109
Gillies (Student)	212
Gold Plated	89
Graefe	98 – 99
Insect Handling	102
Laminectomy	86
London	110

114, 214

McIndoe (Student)	212
Micro Adson	103
Micro Adson (Student)	210
Micro-Blunted Tips	80
Mirror Finish	81, 90 – 91
Moria Bonn	93
Moria Iris	92
Moria Paufique	93
Moria Suture Tying	96
Moria Ultra Fine	92
Mouse Handling	111
Narrow Pattern	105
O-Rings	169
Octagon	98
Organ Holding	109
Pierse Fixation	100
Plastic	101
Potts-Smith	111
Repair Kit	169
Replaceable Tips	90
Ring	102
Russian	109
Russian (Student)	212
S&T	94
S&T Micro Clamp Applying	119
S&T SuperGrip	94
S&T Suture Tying	96
S&T Vessel Cannulation	127
Self-Closing	91
Semken	106
Semken (Student)	212
Sliding Lock	83, 100
Sorensen	107
Splinter (Student)	209
Standard Pattern	105
Standard Pattern (Student)	211
Student	208
Suture Tying	95 – 97
Taylor	111
Tissue	108
Titanium	110
Vessel Cannulation	127
Vessel Dilators	124
Vessel Dilators (Student)	221
Vial	97
Vitro Grasping	97
Forceps Style Clip Applicator	120
Forceps with Replaceable Tips	90
Friedmann Rongeurs	55
Friedmann-Pearson Rongeurs	52
G	

G	
Galilean Loupes	193
Gavage Feeding Needles	163 - 164
Gelpi Retractor	159
GenoPunch	165
Gerald Forceps	110
Gillies Forceps	109, 212
Gold Plated Forceps	89
Gold Wire Contacts	190

Goldstein Retractors	155
Graefe Forceps	98 – 99
Graefe Scissors	44
Grooved Director	133
Gross Anatomy Blade and Handle	76
Gross Anatomy Knives	68
Gross Anatomy Probe	133
Guthrie Retractor	154

Н	
Halsey Needle Holder	144, 220
Halsted-Mosquito Hemostats	113, 213
Hartmann Hemostats	116, 213
Heavy Scissors	205
Heiss Retractor	159
Hemostats	112
Baby-Mixter	115
Crile	114
Crile (Student)	214
Halsted-Mosquito	113
Halsted-Mosquito (Student)	213
Hartmann	116
Hartmann (Student)	213
Kelly	114
Kelly (Student)	214
Kocher (Student)	216
Mosquito	113
Ochsner-Kocher (Student)	216
Pean (Student)	215
Providence-Hospital	115
Rochester-Pean (Student)	215
Ultra-fine	112
Hippocampal Dissecting Tool	138
Holders and Breakers	71
Hooks	130 - 131
Horizon™ Metal Ligation System	122
Hose Clamp	219
Hot Bead Sterilizer	172 – 173

Insect Handling Forceps	102
Insect Pins	141
Insert Pins	141
Instrument Care	
Double Tip Protectors	180
Forceps Repair Kit	169
Instrument Oil	169
Marking Tape	170
Sharpening Stones	169, 185
Tip Protectors	180
Instrument Cases	
Aluminum (Storage)	178 – 179
Plastic (Storage)	179
Sterilization	176 – 178
Instrument Oil	169
Iris Scissors	32 - 38,200
Iris Spatula	136

#### K Kalt Needle Holders Kaye Scissors

Kelly Hemostats

Kocher Hemostats

L	
LaGrange Scissors	41
Large Loops Scissors	44
Lempert Rongeurs	55
Lens Paper	196
Lexer-Baby Scissors	38
Ligation Aids	125
Ligation Systems	122
Lister	
Scissors	47, 203
Sine Clamp	219
Liston Bone Cutter	62
Littauer Bone Cutter	60
London Forceps	110
Lorna Towel Clamp	117, 218
Luer Rongeurs	53

M	
Magnifiers / Loupes 18	9, 191 – 195, 197
Cleaning Kit	196
Headband	193
Malleus Nipper	59
Mandrel	181
Markers	167
Marking Tape	170
Mathieu Needle Holder	145
Mayo Scissors	50, 203
Mayo-Hegar Needle Holder	146, 220
Mayo-Noble Scissors	51
Mayo-Stille Scissors	51
McIndoe Forceps	212
McPherson Forceps	96
Metzenbaum Baby Scissors	48, 204
Metzenbaum Scissors	48 – 49, 204
Michel Suture Clips & Applica	ators 151
Micro Clip Applicator	120
Micro Serrefines	120
Microsurgical Needles with S	uture Thread
Attached	148
Mini Serrefines	121
Minutien Pins	141
Moria	
Bonn Forceps	93
Bulldog Clamp	121

Forceps

Iris Scissors

Retractors Spoons

Paufique Forceps

Spring Scissors

Vessel Clamp

Suture Tying Forceps

Pascheff-Wolff Spring Scissors

Vannas-Wolff Spring Scissors

# **ALPHABETICAL INDEX**

Mosquito Hemostats Micro	113	Retractors 154	<b>–</b> 156, 158, 221	Scissors	
Mouse Handling Forceps	111	Agricola	156	Bone	60
Multipurpose Forceps	107	Alm	157	Bone (Student)	205
		Barraquer (Student)	221	Bonn	31
		Blair	154	Bonn Artery	43
N		Bowman	158	Bonn-Strabismus	31
Narrow Pattern Forceps	105	Colibri	155 – 156	Decapitation	51
Needle Holders		Fomon	154	Dissector	42
Castroviejo	142 – 143	Gelpi	159	Graefe	44
Crile-Wood	146	Goldstein	155	Heavy (Student)	205
Halsey	144	Guthrie	154	Iris	32 – 38
Halsey (Student)	220	Heiss	159	Iris (Student)	200
Kalt	142	Senn-Miller (Student)	221	Kaye	44
Mathieu	145	Weitlaner-Locktite	160	LaGrange	41
Mayo-Hegar	146	Wullstein	160	Large Loops	44
Mayo-Hegar (Student)	220	Reusable Feeding Needles	163	Lexer-Baby	38
Olsen-Hegar	145	Ring Forceps	102	Ligature	42
Ryder Mini	147	Rochester-Pean Hemostats	215	Lister	47
	143 – 145, 147	Rongeurs		Lister (Student)	203
Needles		Baby-Beyer	54	Mayo (2: - L - r)	50
Etched Tungsten Micro Nee		Beyer	54_	Mayo (Student)	203
Holders	140	Friedmann	55	Mayo-Noble	51
Holders (Student)	220	Friedmann-Pearson	52	Mayo-Stille	51
Insect	141	Lempert	55	Metzenbaum	48 – 49
Insert	141	Luer	53	Metzenbaum (Student)	204
Minutien	141_	Pearson	53	Metzenbaum Baby	48
Suture Needles	149_	Round Handled Needle Holders		Metzenbaum Baby (Student)	204
Neuro Punches	184	Rulers	187	Micro	29
Noyes Spring Scissors	26	Russian Forceps	109, 212	Moria Iris	34
Nylon Suture	149	Ryder Mini Needle Holder	147	Sanvenero (Student)	200
				Shea	41
0		S		Spencer	42
U		3		Spencer (Student)	202
O-Rings for Forceps	169	S&T		Stevens Tenotomy	40
Obsidian Stone Age Scalpels	69	Clamp Applying Forceps	119	Strabismus	39
Ochsner-Kocher Hemostats	216	Forceps	94	Tissue Separating	43
Octagon Forceps	98	Micro Clamps	118	Universal Scissors	186
Olsen-Hegar Needle Holder	145	SuperGrip Forceps	94	Utility Scissors	186
Optical Cleaning Kit	196	Suture Tying Forceps	96	Wagner	35
Organ Holding Forceps	109	Vessel Cannulation Forceps		Wagner (Student)	202
organ rioranig rerecpt		Vessel Dilators	124	Walton	40
_		Sample Corers	184	Screwdriver	185
P		Sanvenero Scissors	200	Semken Forceps	106, 212
Pean Hemostats	215	Scalpels	200	Senn-Miller Retractors	221
Pearson Rongeurs	53	Breakable	71	Sharpening Stones	169, 185
Pick	129	Cataract Knife	66	Shea Scissors	41
Pierse Fixation Forceps	100	Ceramic Blade Cutter	185	Sichel Knife	66
Pin Holders	140, 220	Ceramic Blades	70	Silicone Mat	175
		Circle Knife		Silk Sutures	
Plastic Forceps	101		67	Silver Neuro Clips	149
Potts-Smith Forceps	111	Diamond Knives	70		123
Probes	131	Disposable Safety Scalpels		Single Use Feeding Needles	164
Bonn Micro Probes	130	Holders and Breakers	71	Skin Staplers & Applicators	152 – 153
Double Pronged Pick	129	Micro	72	Sliding Lock Forceps	100
Providence-Hospital Hemostats	115	Micro Knives	67, 72	Spatula	135, 137
PTFE Feeding Needles	164_	Safety Scalpel Blade Cartri		Combination Probe and Spat	
		Scalpel Blade Remover	75	Combination Spoon and Spa	
R		Scalpel Blades	73 – 74	Spencer Ligature Scissors	42, 202
		Scalpel Handles	73 – 75, 77	Spinal Cord Hook	129
Repair Kit	169	Scalpel Handles (Student)	206	Splinter Forceps	209
Retraction System	161	Schwartz Micro Serrefines	121	Spoons	139



# V

		<u>V</u>	
ring Scissors	23, 25, 27 – 28	Vannas Spring Scissors	19 – 24, 200
Biemer	30	Vannas-Tübingen Spring Scissors	20
Bone Cutting	59	Vascular Occluders	123
Castroviejo	24 – 27	Vessel Cannulation Forceps	127
Clipper II	30	Vessel Dilating Probe	133
Cohan-Vannas	22	Vessel Dilators	124, 221
Dowell	25	Vial Forceps	97
Micro	29	VisorLIGHT™	191
Moria	21, 24, 28	Vitro Grasping Forceps	97
Noyes	26	Von Graefe Knife	66
Pascheff-Wolff	28		
Titanium	22	W	
ToughCut	22		
Trident II	28	Wagner Scissors	35, 202
Tungsten Carbide	26	Walton Scissors	40
Vannas	19 – 24	Weitlaner-Locktite Retractor	160
Vannas (Student)	200	Westcott Spring Scissors	27
Vannas-Tübingen	20	Wraps	174

Wullstein Retractor

24

27

189

174 171

174

40

39

201

176 - 178

178 – 179

45 - 47

148 - 149

95 - 97

150

160

#### Suturing Principles and Techniques in Laboratory Animals

Т

Spring Scissors Biemer

Vannas-Wolff

Westcott

Stage Micrometers

Containers Disposable Wraps

Pouches Tape

Storage Cases

Strabismus Scissors

Surgical Scissors

Student

Suture Needles

Suture Tying Forceps

Stevens Tenotomy Scissors

Sterilization

<u> </u>	
Tattoo System	168
Taylor Forceps	111
Timer (Electronic)	190
Tip Protectors	180
Tissue Forceps	108
Tissue Separating Scissors	43
Titanium Forceps	110
Titanium Micro Point, Y-Hook, and Spatula	132
Tohoku Towel Clamp	217
Towel Clamps	
Backhaus	116
Backhaus (Student)	217
Lorna	117
Lorna (Student)	218
Tohoku (Student)	217
Travel Case for instruments	180
Trephines	181
Trident II Spring Scissors	28
·	

Tungsten Carbide 36 – 37, 39, 46 – 48, 50

YOUR NOTES	



Scissors, Bone Instruments, Knives & Scalpels pages 19 – 77



Forceps/Tweezers, Hemostats & Vascular Instruments pages 79 – 127



Probes, Needle Holders, Thread, Retractors & Clamps pages 129 – 161



Surgical & Laboratory Accessories pages 163 – 197



Student Quality Instruments pages 199 – 121



### Fine Science Tools (USA) Inc.

4000 East 3<sup>rd</sup> Avenue, Suite 100 Foster City, CA 94404-4824 USA

Telephone +1 800-521-2109 / +1 650-349-1636 Fax +1 800-523-2109 / +1 650-349-3729 E-Mail info@finescience.com

Web finescience.com



#### **Fine Science Tools GmbH**

Vangerowstraße 14 69115 Heidelberg Germany

Germany
Telephone +49 62 21 - 90 50 50
Fax +49 62 21 - 90 50 590
E-Mail europe@finescience.de
Web finescience.de



F · S · T