



Mediflex®
SURGICAL PRODUCTS



Product Portfolio Overview

LAPAROSCOPIC & OPEN SURGERY



Corporate Timeline

1965

Flexbar est. by
David Adler



1970

David Adler meets Dr. Mel
Greenberg; co-develop
Greenberg System



1972

David Adler meets Dr. John
Bookwalter; co-develop
Bookwalter TMR System



1992

Mediflex est to reflect medical
business growth

2000 / 2005

Bookwalter patents expire - Mediflex
markets own BOOKLER system

2005

Mediflex Europe launched



1969

Flexible Arm used in
surgery for 1st time;
open heart procedure
@ Cleveland Clinic

1974

First Flex-Arm[™]
developed to hold
laparoscope for GYN

1986

Jon Adler joins Flexbar

1989

Flex-Arm[™] line expands due to
rapid growth in laparoscopy

2007

Dan Adler joins Mediflex

Current -

Global distribution with
expanding innovative
product portfolio

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Why Mediflex®

Mediflex® Surgical Products is a leader in the design, manufacturing, and distribution of surgical devices including Laparoscopic Holding & Positioning Devices, Laparoscopic & Table-Mounted Retractors, and Instruments for General Laparoscopic and Bariatric Surgery. Our innovative line of surgical devices ensures that you will have the instruments you need, when you need them.



Holding Arms & Positioners

The gold standard for Surgical Holders and Positioners in laparoscopic surgery



Laparoscopic Surgical Instruments

The industries most comprehensive source for durable, reliable and innovative instruments



Laparoscopic Disposable Products

Cost effective reusable and disposable Laparoscopic Devices for surgical professionals



Table Mounted Retractor Systems

Uniquely engineered Table Mounted Retractor Systems used by medical professionals worldwide

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Laparoscopic Products

PRODUCT LINE OVERVIEW

Surgical Holding & Positioning Arms

BENEFITS OVERVIEW



FlexArm™ PLUS

OR efficiency; saves time and labor

- Can be used to free up OR personnel for other tasks
- Stable image reduces procedure time

Superior viewing, precision and safety

- Gives surgeons precise control over the position of cameras, retractors etc.
- Eliminates movement and fatigue of 'human holders'
- May prevent work-related injuries (ie back aches)
- Easily conforms to virtually any necessary position
- Reduction in organ trauma associated with hand held retraction
- Reduced endoscope tip cleanings

Versatility

- Attaches easily and securely to OR Table, no tools required
- Can hold a wide variety of scopes and instruments
- Available in a variety of system/set-up configurations



StrongArm™

FlexArm™ PLUS

PRODUCT FEATURES / APPLICATIONS



Monolithic
FlexArm™

*One-piece
system with built
in Rail Clamp*

- Provides static image required by all surgeons
- Ability to make adjustments intra-operatively when arm is tensioned
- Low profile handle remains vertical to prevent field interference
- Easy, quick to set-up. Few handle turns to go from loose to rigid
- Holds virtually any instrument, retractor or scope
- Wear resistant, extended product life

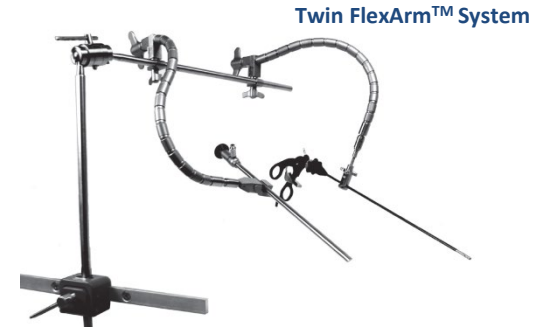


Ideal for holding devices that need to be occasionally moved or repositioned during surgery;

- Laparoscopes
- Fundus graspers in lap-chole
- Bowel Grasper in Urological cases
- Kidney Retraction
- Uterine Manipulators
- Fatty tissue or other retraction requirements



Single FlexArm™



Twin FlexArm™ System

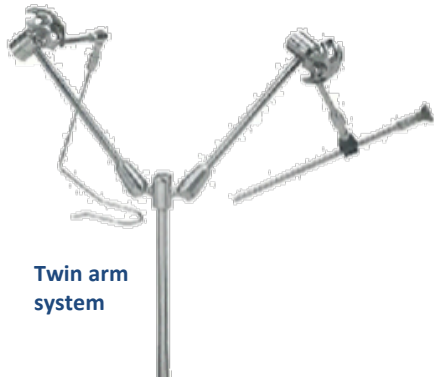


Combo StrongArm™
FlexArm™ System

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StrongArm™

PRODUCT FEATURES / APPLICATIONS



Twin arm system



Top mount with Bookler Clasper

- Holds virtually any instrument, retractor or endoscope
- Single tensioning, ergonomic knob locks/unlocks all three joints simultaneously
- Quick-Connect tip for versatility of adding various distal tips
- Wide variety of configurations; Top Mount, Front Mount, Short Arm and Goose Neck
- For use in both open and laparoscopic procedures

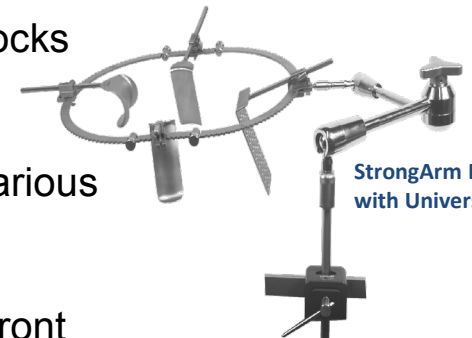


Maximum holding capability, ideal for;

- Liver Retraction for Bariatric patients including: *Sleeve Gastrectomy, Gastric Bypass, Lap banding*
- Liver Retraction
- Nissen Fundoplication
- Colectomy
- Bowel retraction
- Robotic procedures



Field Post mount for height adjustability



StrongArm PLUS with Universal TMR



Front mount

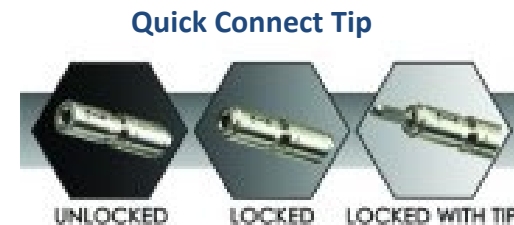
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SURGICAL PRODUCTS

Surgical Holding & Positioning Arms

TIPS AND RAIL CLAMP

Distal Tip Options

- Quick-Connect Hex Fitting
- Fixed or non-fixed; Arms can be ordered with fixed tips
- Various configurations to hold virtually any instrument, retractor or endoscope



Quick-Grip Tip
5mm



- Automatic holding
- Atraumatic grip, can prevent scope damage

Quick-Grip Tip
10mm



Stainless Steel Tip
3.5 -15mm



Delrin Tip
1.5-15mm



-Adjustable holding

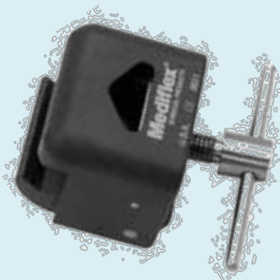
XL Tip
5-31.75mm



For oversized or odd shaped holding requirements

Rail Clamp

- Heavy Duty Rail Clamp
- Fits all standard OR tables
- Prevents rotation of arm post



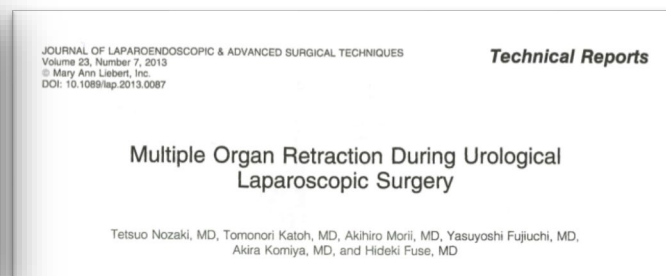
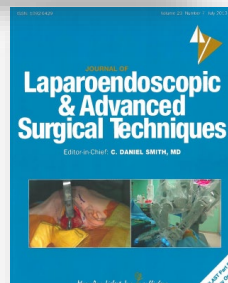
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Nathanson Retractor Systems

FEATURES / BENEFITS



- Widest variety on the market
- Used in Bariatric and GERD procedures
- Eliminates the need of assistant to hold the liver retractor
- Reduced trauma compared to hand-held
- Hexagonal lock virtually eliminates retractor slippage and rotation
- Versions with extended distal tips for thicker abdominal walls
- 3 different diameter options

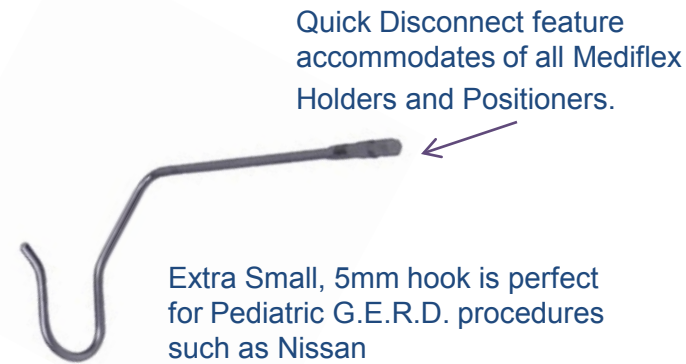
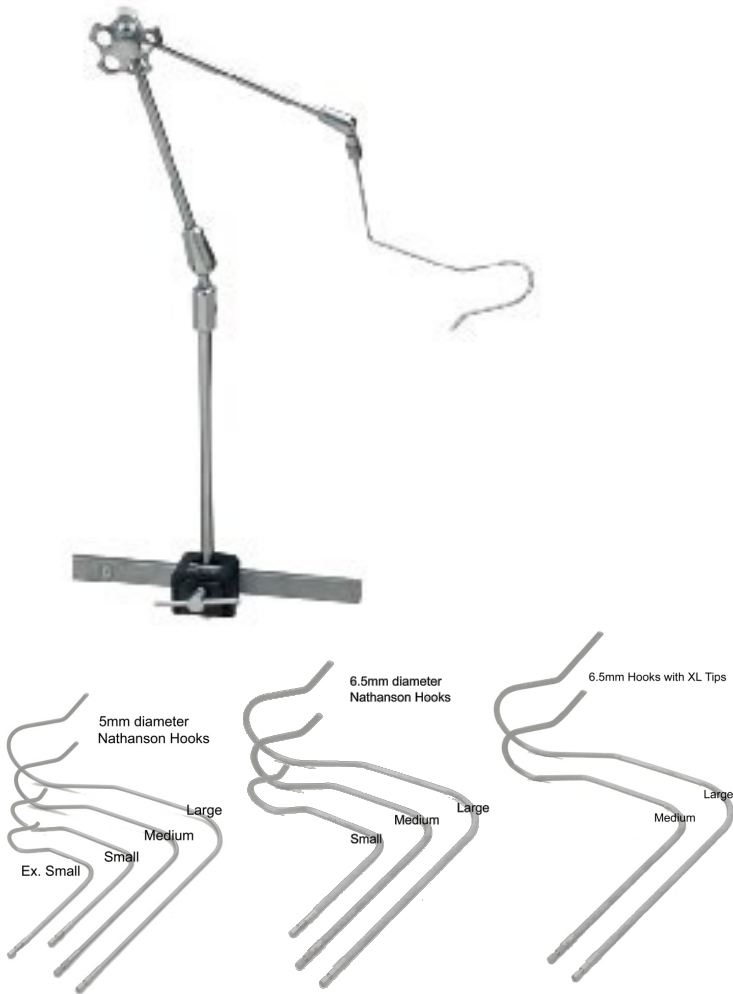


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Nathanson Hook Retractors

FEATURES / CONFIGURATIONS

The unique shape makes the Mediflex® Nathanson Hooks the only device that can retract the entire liver.



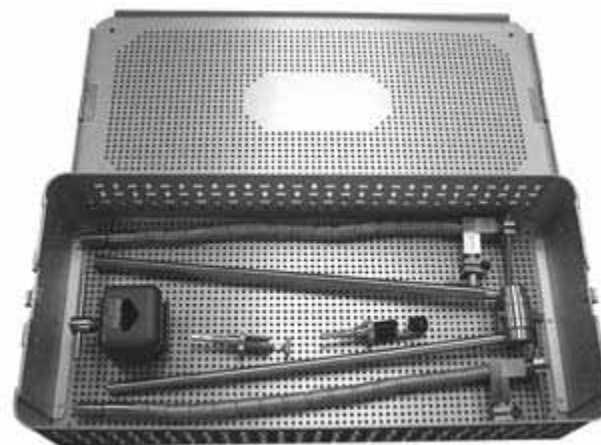
REF NO	DESCRIPTION	APPLICATION
69735-3	Small, 3.0mm	GERD
69738	Extra Small, 5.0mm	
69703	Small, 5.0mm	
69704	Medium, 5.0mm	
69705	Large, 5.0mm	
69709	Set of 5.0mm: S,M,L	
69736-C*	Medium, 6.3mm	GERD / Bariatric
69735	Small, 6.5mm	Bariatric procedures
69736	Medium, 6.5mm	
69737	Large, 6.5mm	
69710	Set of 6.5mm: S,M,L	
69736-XL	Med, 6.5mm wi/1.9cm longer tip	For thicker abdominal walls
69737-XL	Lg, 6.5mm w/ 1.9cm longer tip	
69710-XL	Set of 6.5mm: S, XL-M, XL-L	

* Original (Cook Medical) version

Surgical Holding & Positioning Arms

STERILIZATION TRAYS / CONTAINERS

- Wide variety of container systems to accommodate all Mediflex products
- Wrapable Sterilization Trays
- Components and accessories



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Laparoscopic Instrumentation

PRODUCT OVERVIEW

Lapro-Flex® Articulating Retractors

FEATURES / BENEFITS

- Reusable articulating technology used to retract organs and structures in laparoscopic procedures
- Innovative tip design ensures minimally space is required inside the abdomen to form the retractor shape
- Easy activation using actuating knob until shape forms completely
- Full range of tip configurations
- Atraumatic tip and shaft
- High precision machining to ensure flexible joints retain original integrity
- Very low incidence of cable breakages
- Validated cleaning / sterilization protocol

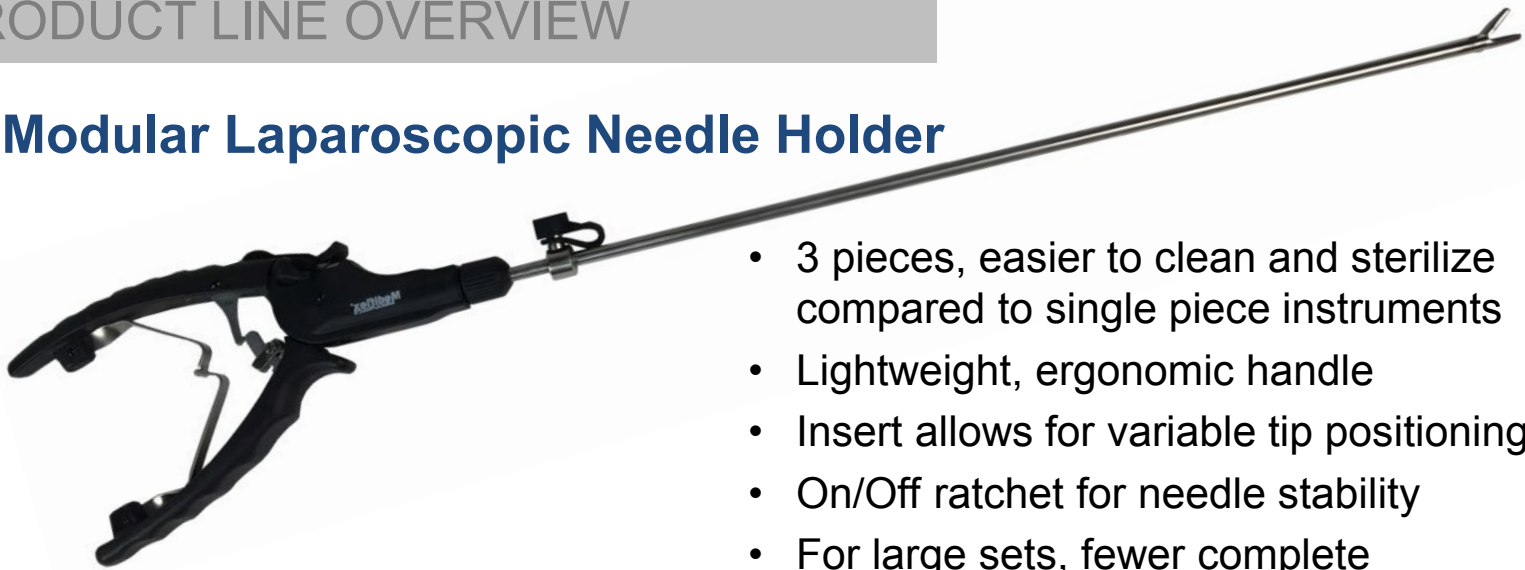


REF. NO.	DESCRIPTION
91680	Finger Style 90 degrees, 38cm
91682	60mm Triangle Base, 32cm
91682-A	60mm Triangle Base, Angled, 32cm
91683	80mm Triangle Base, 32cm
91683-A	80mm Triangle Base, Angled 32cm

Needle Holders

PRODUCT LINE OVERVIEW

Modular Laparoscopic Needle Holder



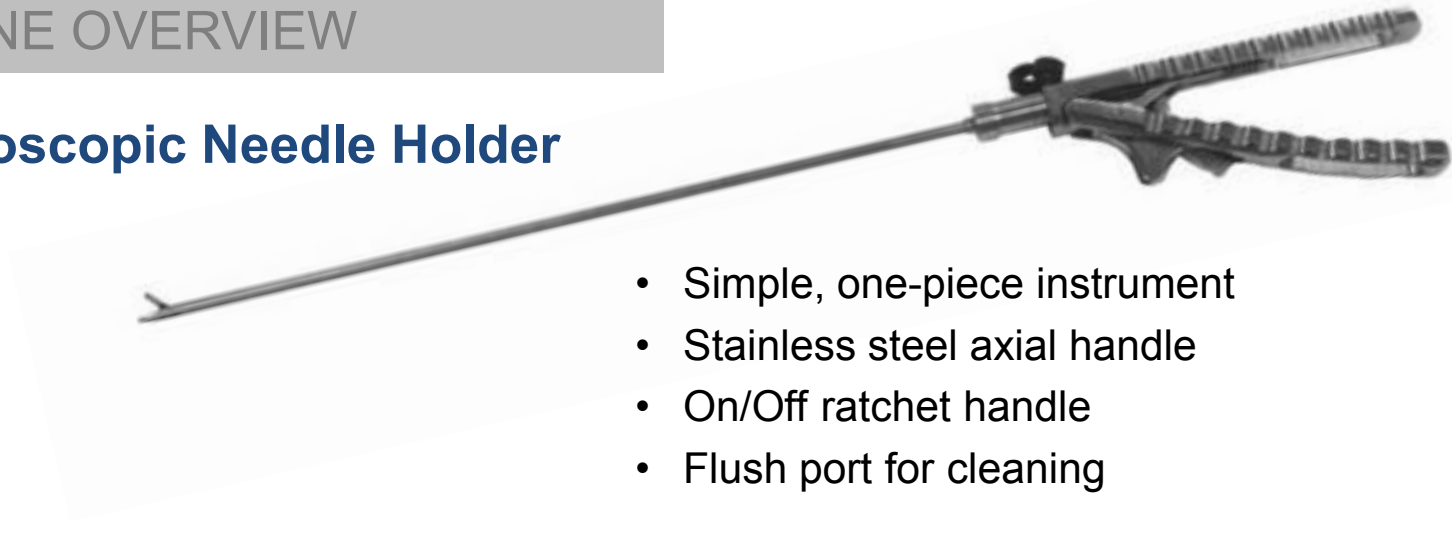
- 3 pieces, easier to clean and sterilize compared to single piece instruments
- Lightweight, ergonomic handle
- Insert allows for variable tip positioning
- On/Off ratchet for needle stability
- For large sets, fewer complete instruments; dramatic cost savings
- Cost-effective compared to disposable instruments

Ref.	Description	Jaw
92021	Modular Needle Holder with Lightweight Ergonomic Handle, 5mm x 36cm, Straight Jaw	
92021-I	Insert for Modular Needle Holder, 5mm x 36cm, Straight Jaw	
92022	Modular Needle Holder with Lightweight Ergonomic Handle, 5mm x 36cm, Jaw Curves Left	
92022-I	Insert for Modular Needle Holder, 5mm x 36cm, Jaw Curves Left	
92023	Modular Needle Holder with Lightweight Ergonomic Handle, 5mm x 36cm, Jaw Curves Right	
92023-I	Insert for Modular Needle Holder, 5mm x 36cm, Jaw Curves Right	
92020-H	Lightweight, Ergonomic Axial Handle with on/off ratchet for Modular Needle Holder	
92020-S	Outer Shaft for Modular Needle Holder, 5mm x 36cm	

Needle Holders

PRODUCT LINE OVERVIEW

Laparoscopic Needle Holder

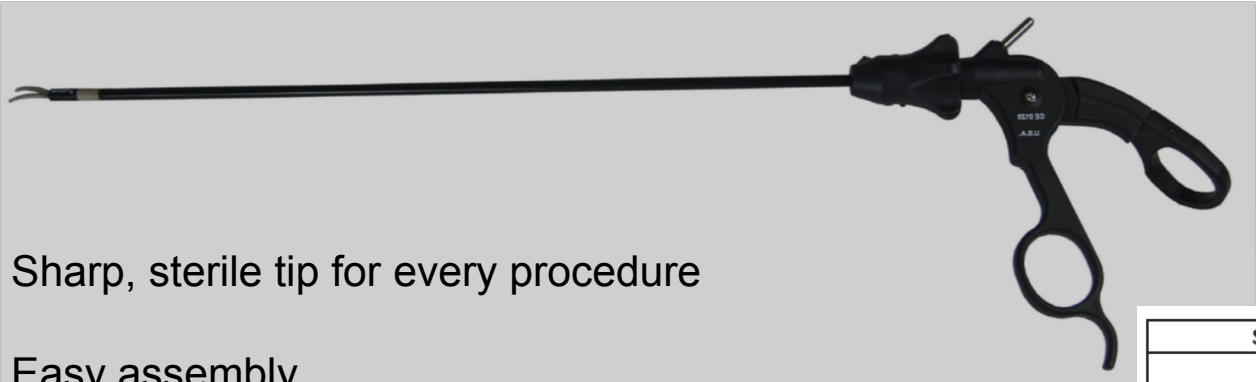


- Simple, one-piece instrument
- Stainless steel axial handle
- On/Off ratchet handle
- Flush port for cleaning

Ref.	Description	Jaw
92001	Needle Holder with SS Axial Handle and Flush Port, 5mm x 33cm, Straight Jaw	
92001-45	Needle Holder with SS Axial Handle and Flush Port, 5mm x 45cm, Straight Jaw	
92002	Needle Holder with SS Axial Handle and Flush Port, 5mm x 33cm, Jaw Curves Left	
92002-45	Needle Holder with SS Axial Handle and Flush Port, 5mm x 45cm, Jaw Curves Left	
92003	Needle Holder with SS Axial Handle and Flush Port, 5mm x 33cm, Jaw Curves Right	
92003-45	Needle Holder with SS Axial Handle and Flush Port, 5mm x 45cm, Jaw Curves Right	

Cutting Edge Disposable Tip Instruments

FEATURES / BENEFITS



- Sharp, sterile tip for every procedure
- Easy assembly
- Reusable, Lightweight Handle and Shaft
- Superior Shaft and Tip insulation
- Assortment of tip configurations; Scissors, Dissector, Grasper
- Ratcheted and non-ratcheted Handles with Cautery Post
- Shafts available in 26cm, 33cm and 45cm lengths



Single-use Tips, Sterile, Box of 10 each		
91710-10		Curved 3/4" Metzenbaum
91715-10		Curved 3/4" Metzenbaum, Wide
91720-10		Straight Metzenbaum
91730-10		Mini Curved 1/2" Metzenbaum
91740-10		Hook Scissor
91750-10		Maryland Dissector
91770-10		Medi-Clinch Grasper

Deluxe Modular Instruments

FEATURES / BENEFITS



Interchangeable Handles, Shafts and Inserts

- Ratcheted/non-ratcheted Handles
- Shafts available in 36 and 45cm lengths; 5mm avail in 26cm
- 40 different configurations of inserts/tips

Easy to clean, assemble and sterilize

- Three simple steps securely assembles the system
- Can be pre-assembled prior to sterilization

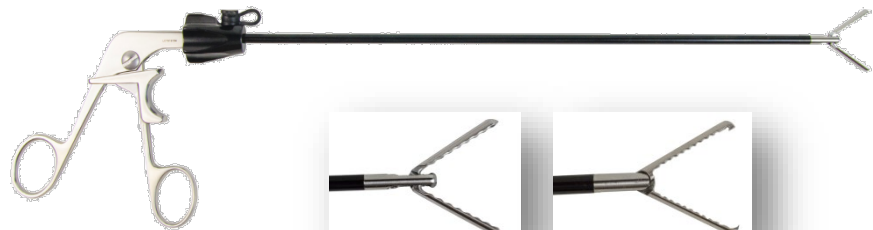
Instruments can be color coded

- Five color coded nose cone bands available
- Can identify type of instrument, procedure set or surgeon

Low cost per procedure

Specialty Instruments

FEATURES / BENEFITS



Wave Grasper

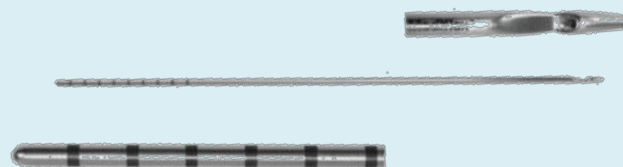
Retraction Grasper

Slide-Lock Graspers

- Atraumatic tissue grasping and retraction
- Reliable and durable jaw control
- Finger tip rotation for optimal one-hand operation
- Multiple configurations;
Single/Double Action Jaws

Knot Pushers

- Multi-purpose, also used as palpation probe
- 5mm dia, 26cm or 33cm lengths
- Depth markings



Anvil Grasper

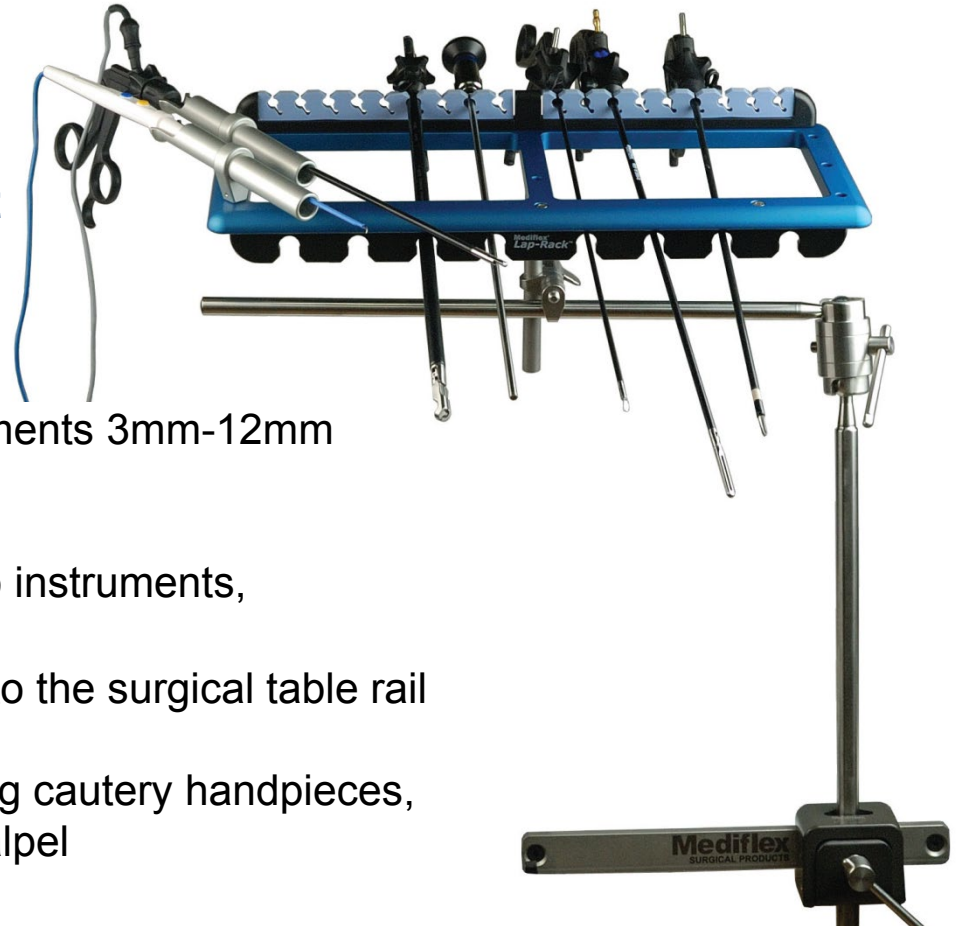
- One-piece Instrument with flush port
- 360° rotation knob
- Ratcheted handle to lock jaws in place

Lap-Rack™

FEATURES / BENEFITS

Convenient laparoscopic instrument and accessory holding system

- Holds all standard laparoscopic instruments 3mm-12mm dia
- Provides surgeon immediate access to instruments,
- Cantilever-style rack attaches directly to the surgical table rail
- Enhances cord management by holding cautery handpieces, suction/irrigators and the harmonic scalpel



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Laparoscopic/Perc Closure Device

PRODUCT FEATURES & BENEFITS

Suture Grasper Guide

To be used with needle-type closure devices



Top views
2 Guide Holes



4 Guide Holes

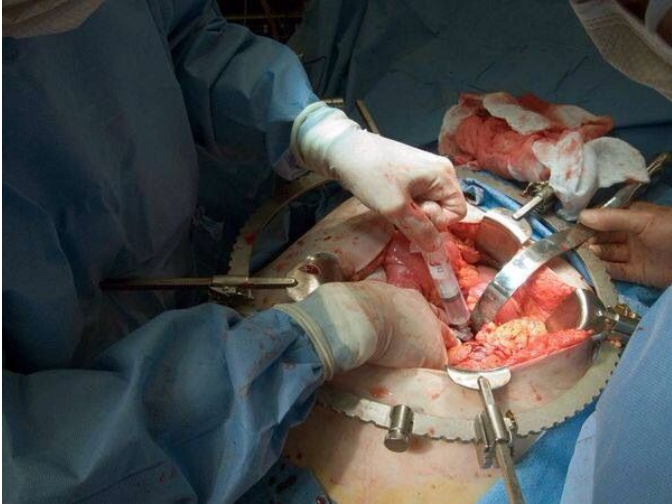


- Cone shaped guide for closure of laparoscopic port sites
- Stainless Steel, reusable
- 3 configurations for different port diameters; 10mm, 10/12mm, 15mm
- Accurately angles the Suture Grasper Closure Device to capture all tissue layers for full closure of fascia and peritoneum
- Prevents loss of pneumoperitoneum during port site closure

Suture Grasper Guides	
94415	Suture Passer Guide, 10mm x 11.6cm
94420	Suture Passer Guide, 10mm x 9.2cm
94425	Suture Passer Guide , 15mm x 9.6cm

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Open Surgery Products

PRODUCT LINE OVERVIEW

Table Mounted Retractor Systems

PRODUCT LINE OVERVIEW

Bookler® Systems

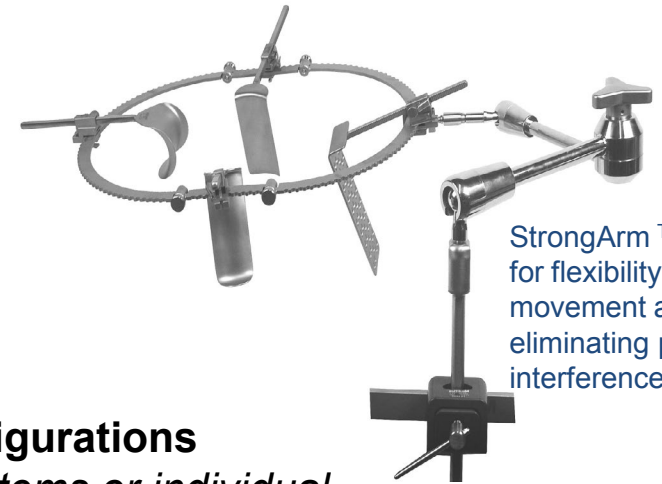
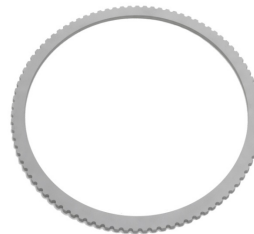


Field Post mount



Tilt Ratchet

Segmented Oval and Solid Round Rings



StrongArm™
for flexibility of
movement and
eliminating post
interference

- **Multiple system configurations**
Procedure specific systems or individual components for custom system, add-on or replacement
- **Multiple mounting options**
Field / Table Post (standard or Elevator) or StrongArm PLUS
- **Assorted frame options**
Solid, Segmented, Split Rings, Segment components
- **Various Ratchet Mechanisms**

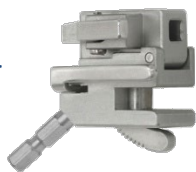
Table Mounted Retractor Systems

PRODUCT LINE OVERVIEW

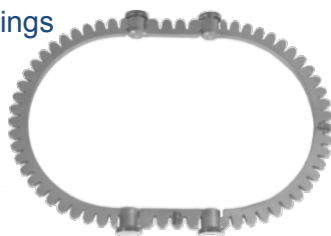


Mini-Bookler System on StrongArm™

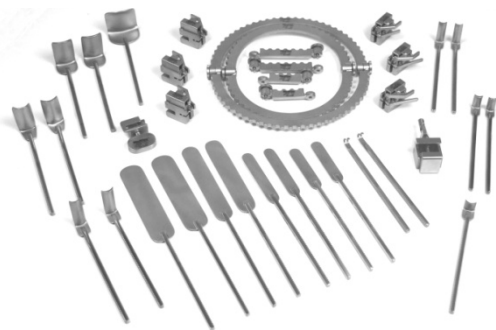
Mini-Ratchet Bar



Mini-Segmented Rings



Procedural Systems



Mini-Bookler® Systems

- For Pediatric/adolescent and minimally invasive procedures
- Used in virtually the same way as its full-sized predecessor so set-up and use will be intuitive
- Quick and easy set-up. Fewer components than other table-mounted systems
- Table “posts” are height adjustable allowing unobstructed access to entire area above the patient
- Ratchets slide onto rings; blades are held where positioned. No separate levers need to be adjusted to hold them in position

Table Mounted Retractor Systems

PRODUCT LINE OVERVIEW

Universal Round Bar™ Systems



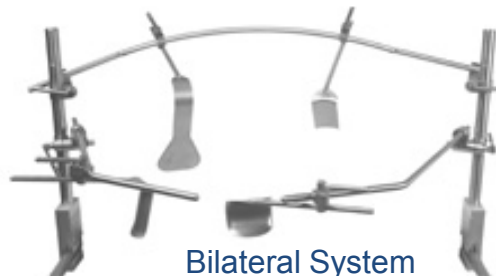
Field Post, Horizontal Arm
and Coupler



Easy Snap Clamp



StrongArm™ PLUS



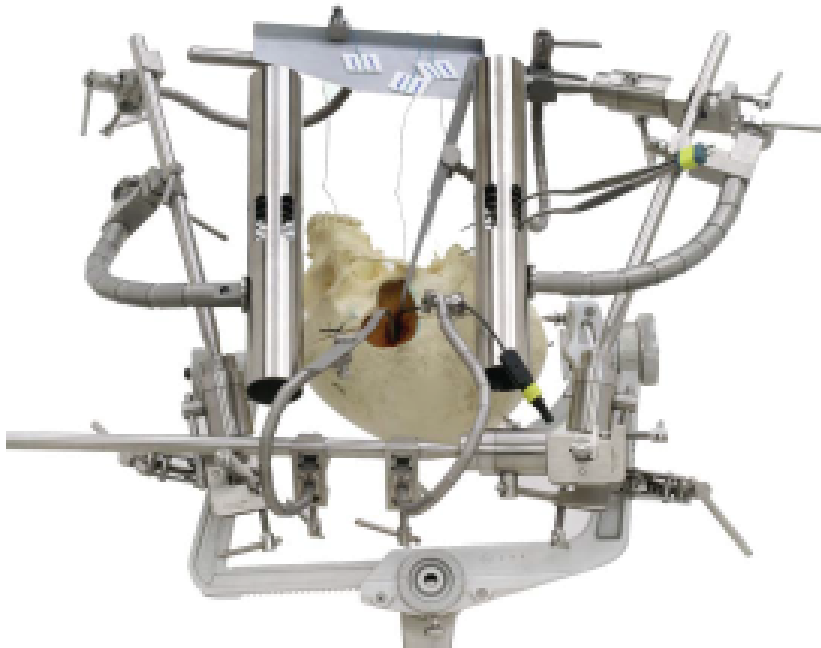
Bilateral System

- **Multiple mounting options**
Field/Table Post (standard or Elevator) or StrongArm /StrongArmPLUS
- **Various frame configurations**
One-piece with integrated Horizontal Bar, Hinged Cross Bar, Angled Arms, Flexible Bridge
- **Quick & easy Snap Clamps**
- **Bilateral System** for liver transplant, upper abdominal and bariatric surgery

Table Mounted Retractor Systems

PRODUCT LINE OVERVIEW

Davida™ Neurosurgery Systems



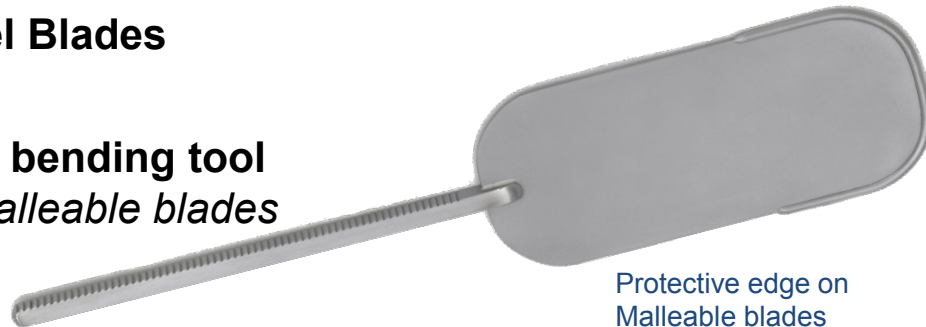
- Designed for retraction and hand stabilization in neurosurgery
- Ergonomic hand rests to reduce fatigue and tremor
- Highly adjustable flexible arms securely hold and position retractor blades and other instruments
- Quick and easy set-up for most microsurgical procedures
- Available in Stainless Steel or MRI compatible Titanium

Retractor Blades

PRODUCT LINE OVERVIEW



- **Extensive line of blade configurations**
Standard and custom blades available for Mediflex Bookler, Universal Round Bar as well as other industry retractor systems such as Thompson, Omni-Tract and Bookwalter.
- **Malleable blades with protected, atraumatic edge**
- **Swivel Blades**
- **Blade bending tool**
For Malleable blades



Blade Bender



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Accessories

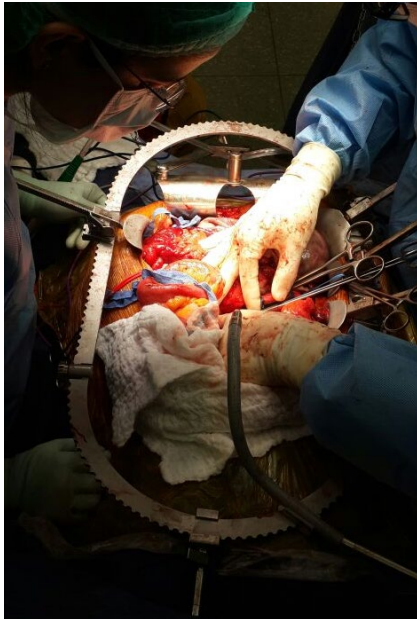
PRODUCT LINE OVERVIEW



Flex-Light™

Malleable Fiber Optic Light Pipe

- Attaches to Table Mounted Retractor Systems to provide light into surgical field
- Supplied with adaptors for Storz/Olympus, ACMI fiberoptic cables





THANK YOU