

10 STRONGARM™ SURGICAL HOLDERS AND POSITIONERS**THE ULTIMATE IN ADJUSTABLE RIGIDITY**

In recent years two laparoscopic procedures that required retraction of the Liver became commonplace. Both Bariatric and GERD procedures necessitate keeping the liver elevated for virtually the entire procedure. Many methods were tried with varying degrees of success. But in late 2007 Mediflex coupled a new type of Liver Retractor with a newly designed Rigid Arm System. Introduced as the Nathanson StrongArm Liver Retraction System it took the laparoscopic community by

storm. Finally, surgeons could easily lift and hold the liver out of the way without the retractor sagging or a human retractor-holder fatiguing.

Now used for many tasks in both Laparoscopic and open surgical procedures, the StrongArm Holder and Positioner has proven to be the latest best-seller from the World Leader in Surgical Holding and Positioning Arms... Mediflex.

FEATURES AND ADVANTAGES OF THE STRONGARM HOLDER AND POSITIONER**HOLDS VIRTUALLY ANY INSTRUMENT, RETRACTOR OR SCOPE**

Can reduce or eliminate hand-held retraction in laparoscopy. Minimizes hand-held scope manipulation.

THE QUICK-DISCONNECT FEATURE accommodates a range of available liver retractors, instrument holders and endoscope holders.

ATTACHES TO OR TABLE RAIL IN A TRADITIONAL MANNER

Utilizes a heavy-duty OR Rail Clamp that permits height adjustability.

AVAILABLE IN A VARIETY OF CONFIGURATIONS

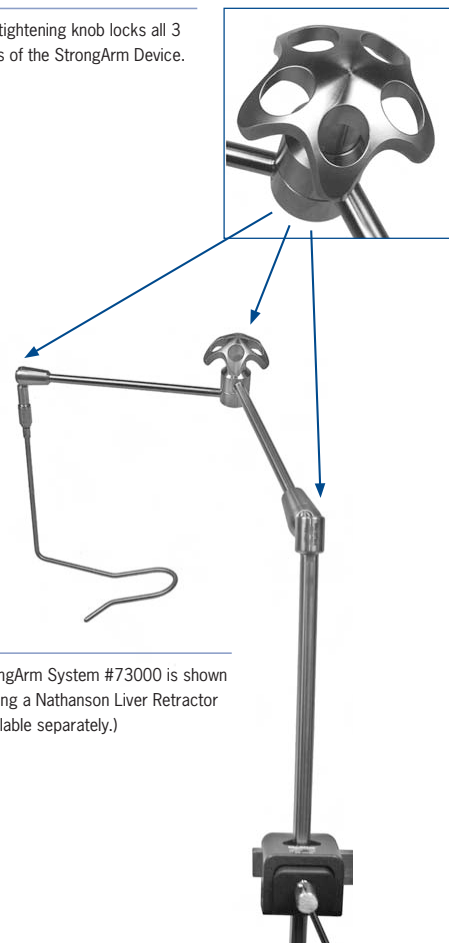
Single Arm Systems available to hold scope or instrument. Twin Arm Systems can hold scope and instrument.

EASILY CONFORMS TO ALMOST ANY POSITION

Completely versatile in placement capability.

MULTI-DIRECTIONAL ARMS LOCK TIGHT WITH A SINGLE KNOB**MADE IN U.S.A. FROM 100% SURGICAL GRADE STAINLESS STEEL**

The tightening knob locks all 3 joints of the StrongArm Device.

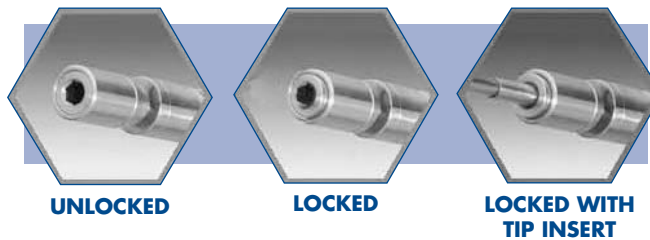


StrongArm System #73000 is shown holding a Nathanson Liver Retractor (available separately.)

STRONGARM™ SURGICAL HOLDERS AND POSITIONERS **11****THE ULTIMATE IN ADJUSTABLE RIGIDITY**

All Mediflex Holders and Positioners include a Quick Disconnect Distal End (shown below.) This feature allows any Mediflex Tip equipped with a Hexagonal End Fitting to attach to any arm. Tips are designed to hold Laparoscopes, other types of rigid endoscopes, instruments and retractors. They will hold devices with diameters ranging from 1.5mm to 12.5mm. The selection of tips available is found on page 15.

In addition to the tips found on page 15, Mediflex offers the largest selection of Nathanson Hooks available from any manufacturer. The Hooks also feature the Hexagonal End Fitting allowing them to be held by any Mediflex StrongArm Device. By holding the Hook in this manner, the axial slippage common with other types of holding systems is eliminated. Nathanson Hooks and Systems are shown on pages 16 and 17.



The Twin Arm StrongArm system illustrates the use of the Quick Disconnect System to hold both a laparoscope and a Nathanson Hook. Using a system like this often frees up a surgical tech and allows better utilization of human resources. See page 14 for twin arm systems.

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SINGLE ARM SERIES
SIMPLICITY AND RIGIDITY IN USE



■ **REF. NO. 73000**

Single Arm Strong Arm Device with Quick Disconnect Tip and Heavy Duty, Height Adjustable Rail Clamp.

This arm is "Front Mounted" with 360° rotation in the Vertical Plane.

Standard Dimensions:

Height Adjustable Post: 3.5 – 11.5" (9cm – 29cm)

Mid Segment: 10.5" (26.5cm)

End Segments: 13" (33cm)

Note: Tips can add about 3" (7.5cm) to the end segment length

■ **REF. NO. 73001**

Arm only, no Rail Clamp.



■ **REF. NO. 73000-TM**

A Top-Mounted Strong Arm Holder and Positioner. The Top-Mount Allows 360° rotation in the Horizontal Plane. Complete with Quick Disconnect Tip and Heavy Duty, Height Adjustable Rail Clamp.

Standard Dimensions:

Height Adjustable Post: 3.5 – 13.5" (9cm – 34cm)

Mid Segment: 10.5" (26.5cm)

End Segments: 13" (33cm)

Note: Tips can add about 3" (7.5cm) to the end segment length

■ **REF. NO. 73001-TM**

Arm only, no Rail Clamp.



■ **REF. NO. 73000-SA**

Short Distal Arm Strong Arm Device with Quick Disconnect Tip and Heavy Duty, Height Adjustable Rail Clamp. The shorter Distal Segment is useful in Pediatrics where there is not the need for an extended reach.

This arm is "Front Mounted" with 360° rotation in the Vertical Plane.

Standard Dimensions:

Height Adjustable Post 3.5 – 11.5" (9cm – 29cm)

Mid Segment: 10.5" (26.5cm)

End Segments: 8" (20.5cm)

Note: Tips can add about 3" (7.5cm) to the end segment length

■ **REF. NO. 73001-SA**

Arm only, no Rail Clamp.

See pages 15 and 16 for available tips and retractors to fit all Mediflex Holders and Positioners equipped with the Quick Disconnect Feature. See page 15 for available Sterilizing Trays.



ARM AND TIP SYSTEMS

Mediflex offers our popular StrongArm Holder and Positioner, pre-packaged with the instrument tip of your choice. Page 15 has additional information regarding the tips shown below.

Each System shown on this page consists of: The 73000 Strong Arm Device and Heavy Duty Rail Clamp shown below and the Tip shown with the Ref. No.



■ REF. NO. 73000-ST

Contains:

Qty.	Ref. No.	Description/Size
1 ea	73000	Single Arm/Clamp
1 ea	69706	Stainless Steel Tip



■ REF. NO. 73000-DT

Contains:

Qty.	Ref. No.	Description/Size
1 ea	73000	Single Arm/Clamp
1 ea	69707	Delrin Tip



■ REF. NO. 73000-QG10

Contains:

Qty.	Ref. No.	Description/Size
1 ea	73000	Single Arm/Clamp
1 ea	72162	10mm Quick Grip Tip



■ REF. NO. 73000-QG5

Contains:

Qty.	Ref. No.	Description/Size
1 ea	73000	Single Arm/Clamp
1 ea	72163	5mm Quick Grip Tip



■ REF. NO. 73000-RBA

Contains:

Qty.	Ref. No.	Description/Size
1 ea	73000	Single Arm/Clamp
1 ea	69708	Bookler Ratchet Tip



■ REF. NO. 73000-DT



■ REF. NO. 73000-QG10



■ REF. NO. 73000-RBA

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TWIN ARM SERIES
ONE DEVICE - TWO FUNCTIONS



■ **REF. NO. 73010**
Twin Arm StrongArm Holder and Positioner with Quick Disconnect feature on both arms and complete with a Heavy Duty Rail Clamp.

■ **REF. NO. 73012**
Twin Arm StrongArm Holder and Positioner with Quick Disconnect feature on both arms. (No Rail Clamp.)



■ **REF. NO. 73040**
StrongArm-Flex Arm Combo System with Quick Disconnect features on both arms and complete with a Heavy Duty Rail Clamp.

Dimensions for Twin Arm Units (73010 and 73012):

Post Height: (A to B) Adjustable from 3.5" – 11.5" (9cm – 29cm)
Mid Segment (Both Arms, B to C): 10.5" (26.5cm)
End Segments (Both Arms, C to D): 13" (33cm)

Note: Tips added to the Quick Disconnect Fitting Add about 3" (7.5cm) to the End Segment Length

Dimensions for Combo System:

Same as above except for FlexArm dimensions (See page 5):

THE STRONGARM-FLEX ARM COMBO SYSTEM IN USE.

The StrongArm Portion is holding an available Mediflex Nathanson Hook (See pg 16) while the Flex Arm Portion is Holding a 10 mm Laparoscope (page 27) with the available 10mm Quick Grip Scope Holder (page 15). This features the near absolute rigidity of a StrongArm Device with the flexible rigidity of a Flex Arm Holder and Positioner. This combination is ideal for procedures that require the liver to be retracted out of the way while also holding a scope. It can allow the surgery to be done with fewer employees... a true labor saving device.



See pages 15 and 16 for available tips and retractors to fit all Mediflex Holders and Positioners equipped with the Quick Disconnect Feature. See page 15 for available Sterilizing Trays.



ACCESSORIES FOR HOLDING AND POSITIONING ARMS **15**

QUICK DISCONNECT ACCESSORIES
SCOPE AND INSTRUMENT HOLDERS

QUICK-GRIP SCOPE HOLDERS

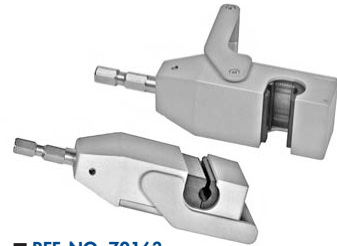
Safely and quickly secures 5mm and 10mm endoscopes. Atraumatic Delrin Jaws will not damage scopes. Can also be used to hold laparoscopic instruments.



The 10mm Quick Grip Scope Holder attached to #69045-QC and holding a Laparoscope. (Arm and scope sold separately)



■ REF. NO. 72162
10mm Quick Grip Scope Holder



■ REF. NO. 72163
5mm Quick Grip Scope Holder

ADJUSTABLE INSTRUMENT CLAMPING TIPS

These tips are adjustable and can hold instruments and endoscopes having diameters ranging from 1.5mm to 12.5mm



The Delrin Adjustable Scope Holder attached to #69702 and holding a Laparoscope. (Arm and scope sold separately)

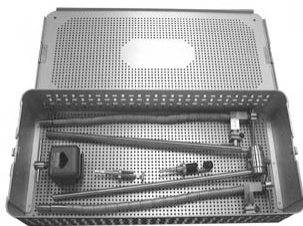


■ NO. 69706
Stainless Steel Tip for Instruments and Retractors, from 3.5mm to 12.5mm.



■ REF. NO. 69707
Delrin Tip for Rigid Endoscopes, from 1.5mm to 12.5mm.

STERILIZING PANS FOR MEDIFLEX HOLDERS AND POSITIONERS



This tray is REF. NO. 69760. It is shown with the 69055-QCLR which is available separately.

■ REF. NO. 69760
Standard Mediflex Tray for Arms, 22.7" x 10.6" x 4.7" (56 X 26.5 X 11.75cm)

■ REF. NO. 69761
Ex-Large Mediflex Tray for Arms, 26.7" x 11" x 6" (66 x 27.5 x 15cm) This tray is required for Medium and Large Nathanson Hooks.

BOOKLER® RATCHET BAR ATTACHMENTS

Ideal for use in Open Surgery or in Laparoscopic procedures that convert, this device allows any Bookler or Bookwalter-style retractor to be held in Mediflex Arms.

■ REF. NO. 69708
Bookler Ratchet Bar Attachment



Two Bookler Ratchet Bar Attachments inserted in #73010, holding Bookler retractor blades. (Arm and blades sold separately)

A list of available Bookler Retractor Blades can be seen in the MEDIFLEX Table Mounted Retractor Catalog RET-0709.

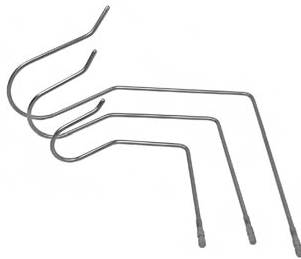
16 NATHANSON LIVER RETRACTORS AND SYSTEMS**NATHANSON HOOKS****THE FIRST LAPAROSCOPIC RETRACTOR THAT HOLDS THE ENTIRE LIVER**

Nathanson Hooks have proven to be ideal for Laparoscopic Liver Retraction. The 5mm Hooks are generally used in GERD Surgery while the 6.5mm Hooks are ideal for Bariatric Procedures. The Extra Long Tips available on the Medium and Large 6.5mm Hooks may facilitate entry in larger patients.

SETS OF HOOKS■ **REF. NO. 69709**

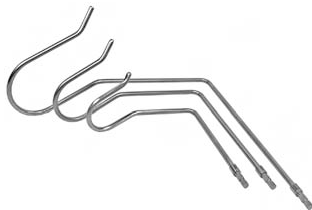
5mm Hook Set Contains 1 each of:

Ref. No. 69703, Small
Ref. No. 69704, Medium
Ref. No. 69705, Large

■ **REF. NO. 69710**

6.5mm Hook Set Contains 1 each of:

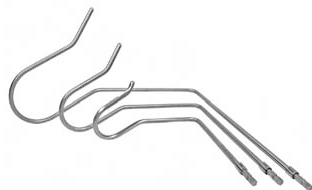
Ref. No. 69735, Small
Ref. No. 69736, Medium
Ref. No. 69737, Large

■ **REF. NO. 69710-XL**

6.5mm Extra Long Hook Set.

Contains 1 each of:

Ref. No. 69735, Small
Ref. No. 69736-XL, Medium, X-Long
Ref. No. 69737-XL, Large, X-Long

**INDIVIDUAL HOOKS****STANDARD, 5mm DIAMETER**

- **REF. NO. 69738** | Extra Small
- **REF. NO. 69703** | Small
- **REF. NO. 69704** | Medium
- **REF. NO. 69705** | Large

HEAVY, 6.5mm DIAMETER

- **REF. NO. 69735** | Small
- **REF. NO. 69736** | Medium
- **REF. NO. 69737** | Large

HEAVY, 6.5mm DIAMETER WITH LONGER TIP

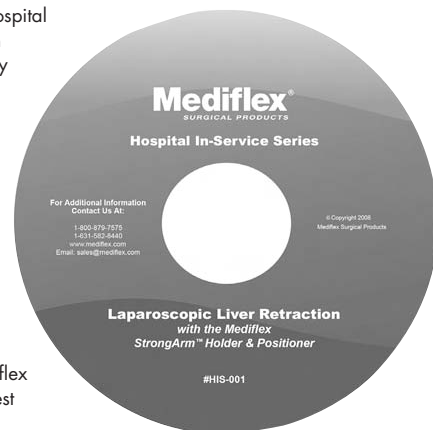
- **REF. NO. 69736-XL** | Medium
- **REF. NO. 69737-XL** | Large



Shown here is the small, 6.5mm Nathanson Hook

Mediflex has an informative Hospital Inservice program available on DVD. It reviews how to correctly set-up, position and care for your StrongArm Surgical Holder and Positioner. It also discusses the use of the Nathanson Liver Retractor in Laparoscopic Surgery. This DVD is valuable for the entire OR Team including surgeons who may not have had previous experience with Nathanson Hooks.

Contact Mediflex or your Mediflex Sales Representative and request Inservice Program HIS-001.



NATHANSON STRONGARM™ SYSTEMS

Each of the Systems below features Ref. No. 73000 Single Arm StrongArm Holder and Positioner along with 3 Nathanson Hooks and 2 Instruments Tips. The Hooks and Tips each feature The Mediflex Hexagonal Fitting that allows them to be easily attached to and removed from any Mediflex Surgical Holder and Positioner that has the Quick Disconnect Feature. These Systems are best for Bariatric Procedures.

■ SYSTEM NO. 73000-NLR

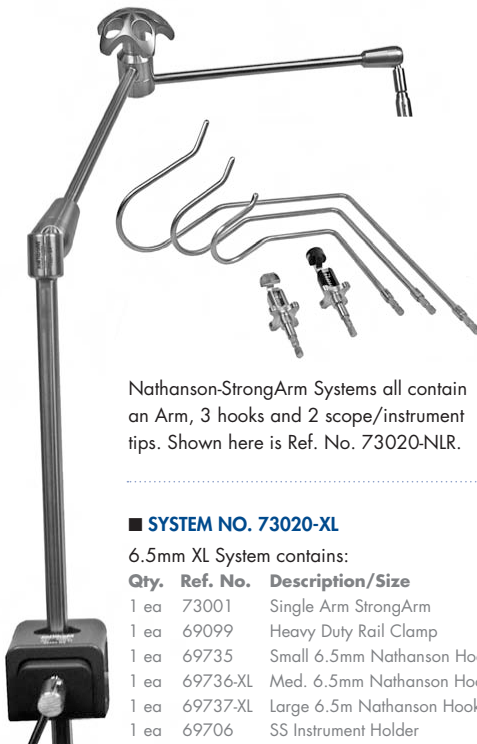
5mm System contains:

Qty.	Ref. No.	Description/Size
1 ea	73001	Single Arm StrongArm
1 ea	69099	Heavy Duty Rail Clamp
1 ea	69703	Small 5mm Nathanson Hook
1 ea	69704	Med. 5mm Nathanson Hook
1 ea	69705	Large 5mm Nathanson Hook
1 ea	69706	SS Instrument Holder
1 ea	69707	Delrin Scope Holder

■ SYSTEM NO. 73020-NLR

5mm System contains:

Qty.	Ref. No.	Description/Size
1 ea	73001	Single Arm StrongArm
1 ea	69099	Heavy Duty Rail Clamp
1 ea	69735	Small 6.5mm Nathanson Hook
1 ea	69736	Med. 6.5mm Nathanson Hook
1 ea	69737	Large 6.5mm Nathanson Hook
1 ea	69706	SS Instrument Holder
1 ea	69707	Delrin Scope Holder



Nathanson-StrongArm Systems all contain an Arm, 3 hooks and 2 scope/instrument tips. Shown here is Ref. No. 73020-NLR.

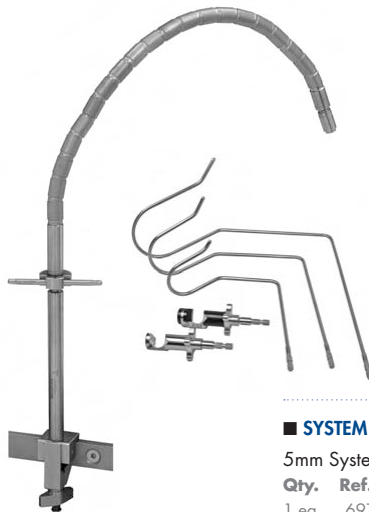
■ SYSTEM NO. 73020-XL

6.5mm XL System contains:

Qty.	Ref. No.	Description/Size
1 ea	73001	Single Arm StrongArm
1 ea	69099	Heavy Duty Rail Clamp
1 ea	69735	Small 6.5mm Nathanson Hook
1 ea	69736-XL	Med. 6.5mm Nathanson Hook XL
1 ea	69737-XL	Large 6.5mm Nathanson Hook XL
1 ea	69706	SS Instrument Holder
1 ea	69707	Delrin Scope Holder

NATHANSON FLEX ARM™ SYSTEMS

The Systems below features Ref. No. 69702 Long Reach Flex Arm Holder and Positioner along with 3 Nathanson Hooks and 2 Instruments Tips. The Hooks and Tips each feature The Mediflex Hexagonal Fitting that allows them to be easily attached to and removed from any Mediflex Surgical Holder and Positioner that has the Quick Disconnect Feature. These Systems are suggested for G.E.R.D Procedures such as Nissan Fundoplication.



Nathanson-Flex Arm Systems all contain an Arm, 3 hooks and 2 scope/instrument tips. Shown here is Ref. No. 69701.

■ SYSTEM NO. 69701

5mm System contains:

Qty.	Ref. No.	Description/Size
1 ea	69702	Long Reach Flex Arm
1 ea	69703	Small 5mm Nathanson Hook
1 ea	69704	Med. 5mm Nathanson Hook
1 ea	69705	Large 5mm Nathanson Hook
1 ea	69706	SS Instrument Holder
1 ea	69707	Delrin Scope Holder

■ SYSTEM NO. 69720

6.5mm System contains:

Qty.	Ref. No.	Description/Size
1 ea	69702	Long Reach Flex Arm
1 ea	69735	Small 6.5mm Nathanson Hook
1 ea	69736	Med. 6.5mm Nathanson Hook
1 ea	69737	Large 6.5mm Nathanson Hook
1 ea	69706	SS Instrument Holder
1 ea	69707	Delrin Scope Holder