


Hemostasis Solutions





Through innovation and expansion of our therapeutic portfolio, we are proud to offer endoscopy devices to address a variety of **hemostasis situations and improve patient care.**

Hemostasis Solutions

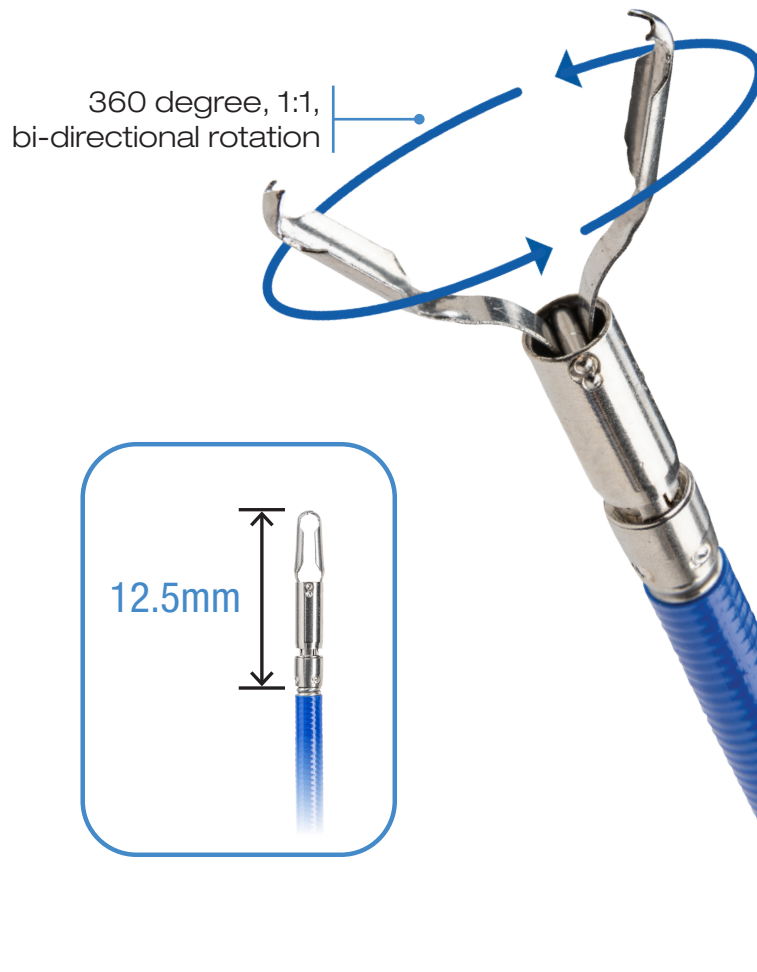
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Assurance[®] clip

features & benefits

The **Assurance clip** is designed for endoscopic clip placement within the gastrointestinal tract for the purpose of hemostasis, defect closure, endoscopic marking and anchoring.



The Assurance clip...

- offers a 12.5mm deployed length, allowing for maneuverability when deploying additional clips
- can be opened/closed multiple times for optimal positioning prior to deployment
- design allows for smooth passage through the working channel in tortuous endoscope positions
- provides audible and tactile feedback on handle to confirm deployment

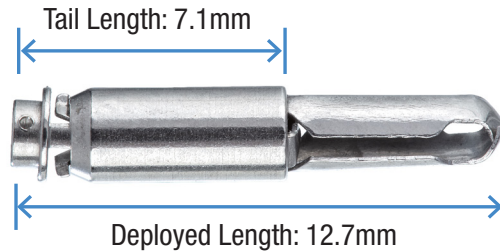
Assurance clip							
Product Number	Description	Minimum Working Channel (mm)	Catheter Length (cm)	Released Length (mm)	Opening Width (mm)	Sterile	Units/Box
BX00711881	Assurance clip - 9mm	2.8	230	12.5	9	yes	10
BX00711882	Assurance clip - 11mm	2.8	230	12.5	11	yes	10
BX00711883	Assurance clip - 13mm	2.8	230	12.5	13	yes	10
BX00711884	Assurance clip - 16mm	2.8	230	12.5	16	yes	10

The Assurance clip has a 7.0mm tail length for visibility and maneuverability

Comparison of 16 and 17mm clips*

STERIS ENDOSCOPY

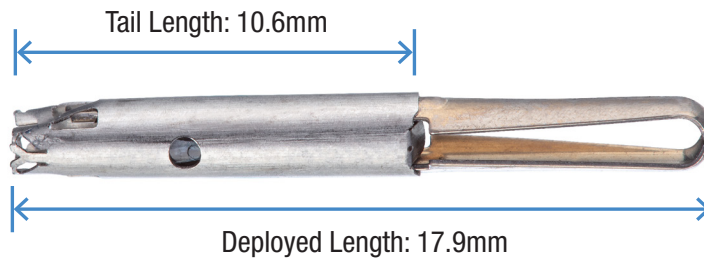
Assurance clip:



Opening Width:
16mm

BOSTON SCIENTIFIC

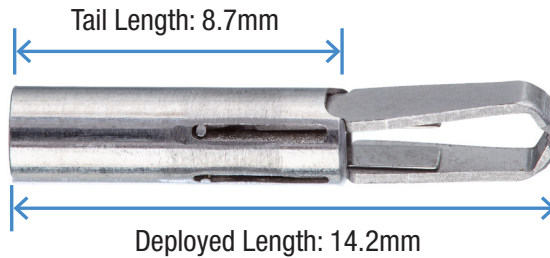
Boston Scientific Resolution 360™ ULTRA Clip:



Opening Width:
17mm

COOK MEDICAL

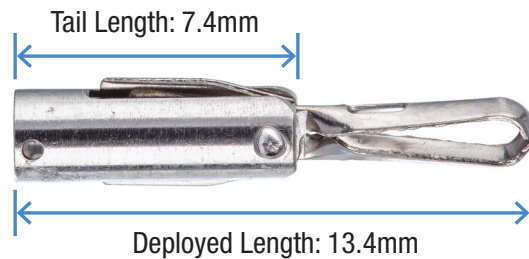
Cook Instinct® Endoscopic Clip:



Opening Width:
16mm

CONMED

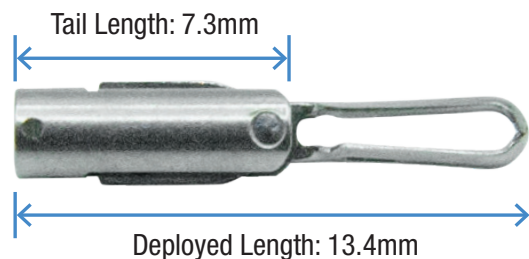
Conmed DuraClip® Repositionable Hemostasis Clip:



Opening Width:
16mm

MICRO-TECH

Micro-Tech SureClip™ Hemostasis Clip:



Opening Width:
16mm

SmartBand® multi-band ligation system features & benefits

The **SmartBand multi-band ligation system** is used to endoscopically ligate esophageal varices at or above the gastroesophageal junction and to ligate internal hemorrhoids.

The ligation bands are...

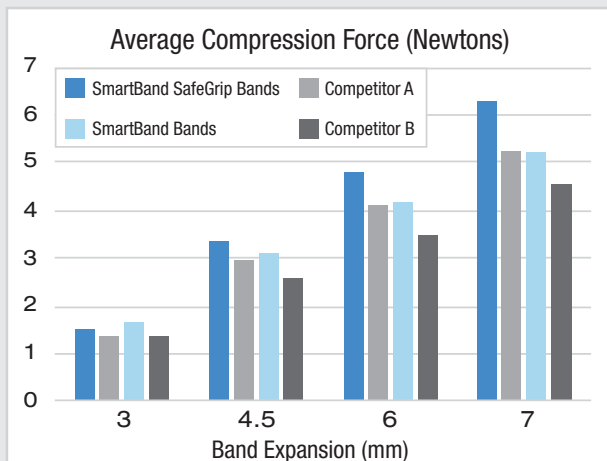
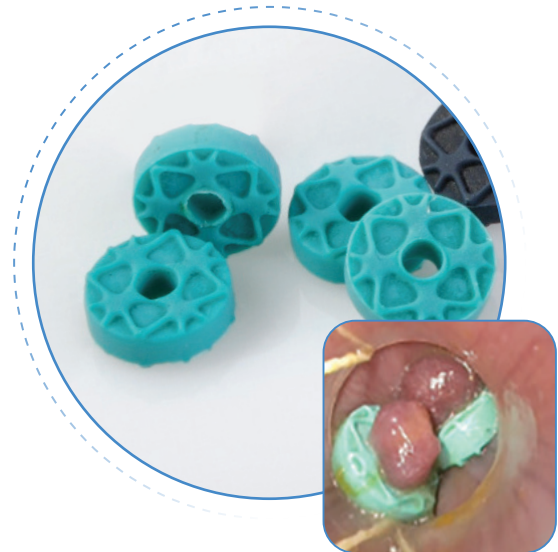
- Designed to deliver maximum tissue compression and gripping force
- Manufactured and packaged to enable a 24-month shelf life



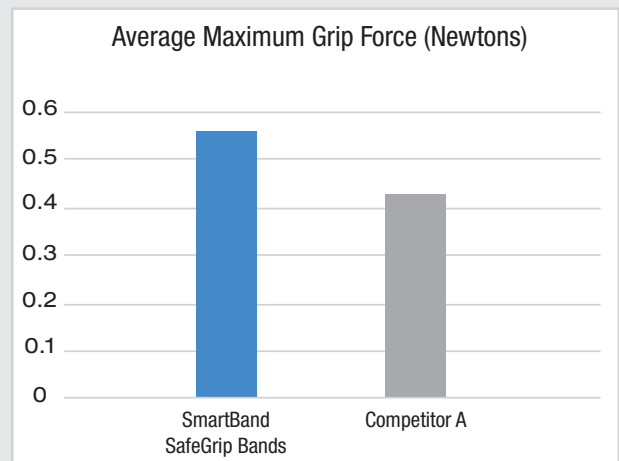
SmartBand Multi-Band Ligation Kit



SmartBand SafeGrip Multi-Band Ligation Kit



SmartBand Ligation bands delivered higher average compression forces than competition during third party testing¹



SmartBand SafeGrip Ligation bands delivered 33% higher gripping force than competition during third party testing¹

1. Third party testing data on file.

SmartBand® multi-band ligation system features & benefits

Features a universal connector that attaches the handle to the endoscope and is compatible with multiple endoscope styles

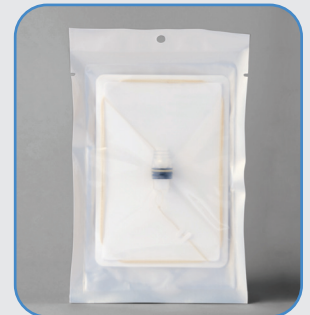


Offers a 10FR inner diameter handle stem that enables maximum suction capabilities

Includes 6 backloaded bands on a clear, smooth barrel for optimal visualization



Provides a dedicated flush port for clearing the working channel during the procedure



The SmartBand Packs offer a reloadable barrel of bands for procedures that require more than 6 bands – helping to reduce costs

SmartBand Multi-Band Ligation System			
Product Number	Description	Endoscope Diameter Compatibility (mm)	Unit of Measure
SLK6*	SmartBand multi-band ligation kit - Components: Ligation Handle with Universal Connector, Loading device, Flush Tube, Pentax Adaptor, and Barrel with 6 Bands	8.6 - 11.6	EA
SLK6LF**	SmartBand SafeGrip multi-band ligation kit - Components: Ligation Handle with Universal Connector, Loading device, Flush Tube, Pentax Adaptor, and Barrel with 6 Bands	8.6 - 11.6	EA
SLP6*	SmartBand multi-band ligation pack - Components: Deployment Cord with Barrel of 6 Bands	8.6 - 11.6	EA
SLP6LF**	SmartBand SafeGrip multi-band ligation pack - Components: Deployment Cord with Barrel of 6 Bands	8.6 - 11.6	EA

*This product is made with natural rubber latex.

**This product is not made with natural rubber latex.

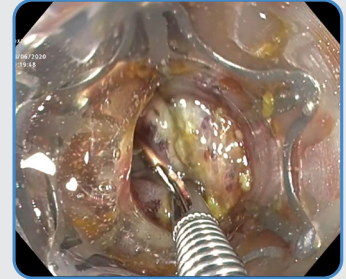
This device is supplied non-sterile and is disposable, single-use only.

Padlock Clip[®] defect closure system

features & benefits

The **Padlock Clip defect closure system** facilitates fast and effective full circumferential tissue closure.

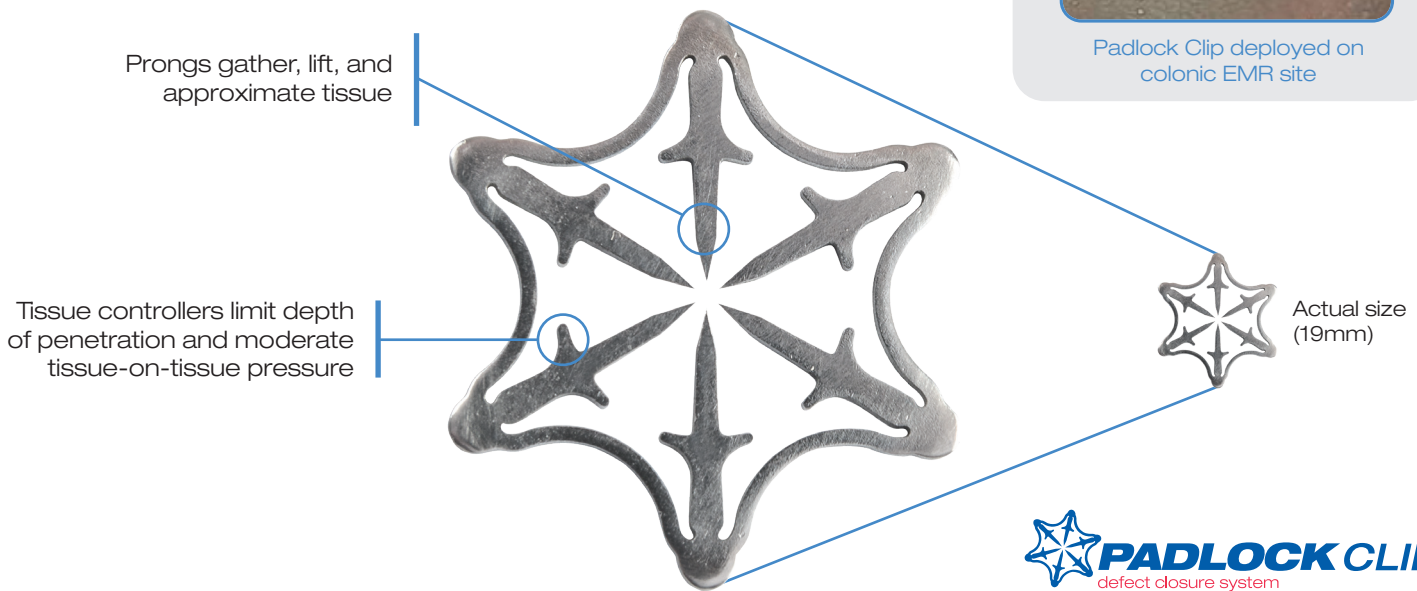
- A pre-loaded, self-grasping clip designed to encircle, lift, close, and potentiate the healing of tissue defects
- Attachment to the outside of the endoscope
- Open and free instrument channel for optimal endoscope suction
- “Push of the thumb” deployment
- May be used with the Raptor[®] grasping device to aid tissue recruitment.



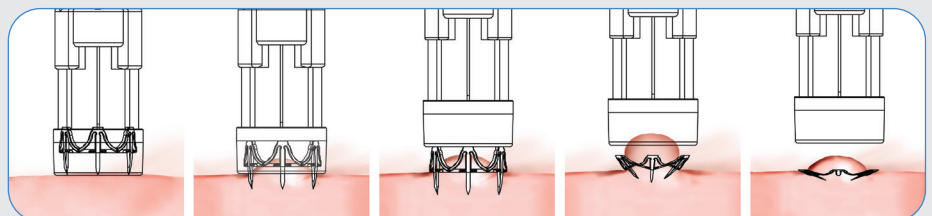
Padlock Clip system used with Raptor grasping device to recruit tissue into tissue chamber



Padlock Clip deployed on colonic EMR site



The Padlock Clip defect closure system is made of flexible, super elastic alloy and lays flat against the tissue, offering low profile radial compression.



Padlock Clip defect closure system

indications & case examples

The Padlock Clip defect closure system is indicated for clip placement within the gastrointestinal (GI) tract for the purpose of: Endoscopic marking of lesions, Closure of GI tract luminal perforations <20mm that can be treated conservatively, and Hemostasis for: Mucosal/Submucosal defects, Bleeding Ulcers, Arteries <2mm, Polyps <1.5cm in diameter, or Diverticula in the Colon. The over-the-scope-clip has successfully been used in the following clinical situations.

Hemostasis Cases:

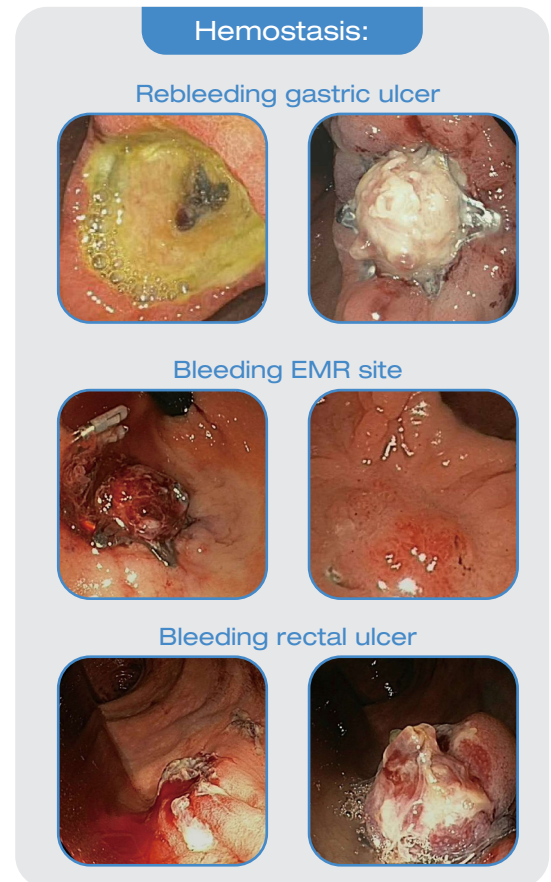
- **Rebleeding gastric ulcer** previously treated with epinephrine injection and bipolar cautery. Treated with Padlock Clip device with no further rebleeding²
- **Bleeding EMR site** successfully treated by the Padlock Clip device and showed persistence of the Padlock Clip at 3 months follow-up¹
- **Bleeding rectal ulcer** treated by the Padlock Clip device, resulting in durable hemostasis.¹ Previous unsuccessful treatments included endoclipping and injective therapy

Fistula and Leak Cases:

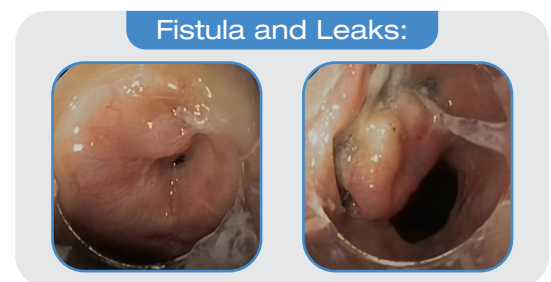
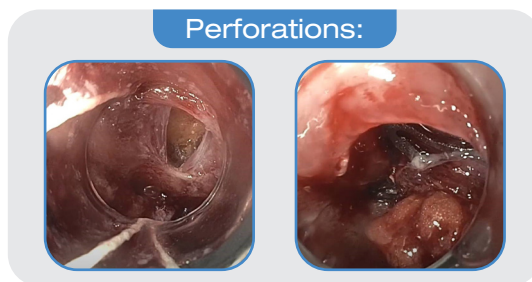
- **Tracheo-esophageal fistula** closure with the Padlock Clip device. Previous unsuccessful treatments included surgery, salivary bypass stenting, and endoscopic clipping¹

Perforation Cases:

- **Esophageal perforation closure.** Perforation occurred during band EMR procedure. Patient was in good condition following the procedure³



Scan to view Dr. Diehl case video



Padlock Clip Defect Closure System						
Product Number	Description	Endoscope Tip Diameter (mm)	Tissue Chamber Depth (cm)	Tissue Chamber Diameter (cm)	Sterile	Units/Box
C910001	Padlock Clip defect closure device	9.5-11	1.0	1.1	yes	1
C913131*	Padlock Clip Pro-Select [®] defect closure device	11.3, 12.0, 12.5, 13.0, 13.5, 14.0	0.4, 0.8, 1.1, 1.3, 1.5, 1.9	1.1	yes	1

* Ability to adjust tissue chamber depth based on scope diameter.

1. Armellini E, Crinò SF, Orsello M, Ballarè M, Tari R, Saettone S, Montino F, Occhipinti P. Novel endoscopic over-the-scope clip system. World J Gastroenterol 2015; 21(48): 13587-13592
 2. Images provided by Dr. Mark Prince
 3. Images proved by Dr. David Diehl

Padlock Clip defect closure system

clinical data

Study 1: “Novel endoscopic over-the-scope clip system”¹

No.	Age	Etiology	Clinical Condition	Previous Treatment	Treatment Outcome
1	61	Endoscopic mucosal resection	Delayed rectal bleeding	Endoclip, injective therapy	Persistent control of the bleeding
2	80	Solitary rectal ulcer	Rectal bleeding	Endoclip, injective therapy	Persistent control of the bleeding
3	85	Duodenal Dieulafoy lesion	Duodenal bleeding	Injective and thermal therapy	Persistent control of the bleeding
4	53	Mediastinal lymphoma	Broncho-esophageal fistula	Endoclip	New fistulas development
5	66	Post-laryngectomy radio-chemotherapy	Tracheo-esophageal fistula	Endoclip, salivary stent	Fistula healing

Conclusion: The new over-the-scope Padlock Clip defect closure system seems to be simple to use and effective in different clinical settings, particularly in “difficult” scenarios, like recurrent bleeding and respiratory-oesophageal fistulas.



Study 2: “First clinical experiences with a novel endoscopic over-the-scope clip system”²

No.	Age	Sex	Indication	Technical Success	Outcome	Previous Treatments	Follow-up Months
1	64	M	Rectovesical fistula	Yes	Complete sealing of the fistula. 30-day endoscopic follow-up: clip detached	Ovesco OTSC	7
2	64	M	Rectocutaneous fistula	Yes	Clinical resolution	Ovesco OTSC	8
3	63	M	Persistence of gastrocutaneous fistula after gastrostomy tube removal	Yes	Sealing of the fistula. 30-day endoscopic follow-up: clip detached	TTS clips	18
4	71	F	Closure of gastrocutaneous fistula after removal of infected gastrostomy tube	Yes	Resolution of infection: Sealing of the fistula. 30-day endoscopic follow-up: clip detached	-	5
5	75	F	Iatrogenic duodenal perforation following biliary stent migration	No	Technical failure of clip release. Gastrointestinal perforation was closed by two conventional TTS clips	-	2
6	86	F	Iatrogenic diverticular perforation during diagnostic colonoscopy after failure of conservative management	Yes	Closure of perforation at CT scan. Discharge 7 days after clip placement	Conservative management (6 days)	2
7	76	M	Post-polypectomy intraprocedural bleeding	Yes	Resolution of bleeding. No late rebleeding	Injection hemostasis	3
8	64	M	Post-polypectomy intraprocedural bleeding	Yes	Resolution of bleeding. No late rebleeding	-	10

Conclusion: The novel Padlock Clip defect closure system seems to be an effective and safe tool to treat gastrointestinal fistulas, perforations or post-polypectomy bleeding.



1. Armellini E, Crinò SF, Orsello M, Ballarè M, Tari R, Saettone S, Montino F, Occhipinti P. Novel endoscopic over-the-scope clip system. *World J Gastroenterol* 2015; 21(48): 13587-13592
2. Marco Dinelli, Barbara Omazzi, Paolo Andreozzi, Nicola Zucchini, Alessandro Redalli, Gianpiero Manes. First clinical experiences with a novel endoscopic over-the-scope-clip system. *Endoscopy* 2017; 49(04): 407-408

Padlock Clip defect closure system

GI Association guidance on the use of over-the-scope clips

BLEEDS:

AGA

- **AGA Clinical Practice Update on Endoscopic Therapies for Non-Variceal Upper Gastrointestinal Bleeding: Expert Review**

“

Hemostasis using an over-the-scope clip should be considered in select patients with NVUGIB, in whom conventional electrosurgical coagulation and hemostatic clips are unsuccessful or predicted to be ineffective.

”

ESGE

- **Endoscopic Diagnosis and Management of Nonvariceal Upper Gastrointestinal Hemorrhage (NVUGIH): European Society of Gastrointestinal Endoscopy (ESGE) Guideline - Update 2021**

“

ESGE recommends that for patients with clinical evidence of recurrent peptic ulcer hemorrhage, use of a cap-mounted clip should be considered.

”

ACG

- **ACG Clinical Guideline: Upper Gastrointestinal and Ulcer Bleeding**

“

We suggest over-the-scope clips as a hemostatic therapy for patients who develop recurrent bleeding due to ulcers after previous successful endoscopic hemostasis (conditional recommendation, low-quality evidence)

”

PERFORATIONS:

ESGE

- **Diagnosis and Management of Iatrogenic Endoscopic Perforations: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement**

“

ESGE recommends the use of TTS (through-the-scope) endo clips for small holes and OTSCs (over-the-scope clips) for larger ones.

”

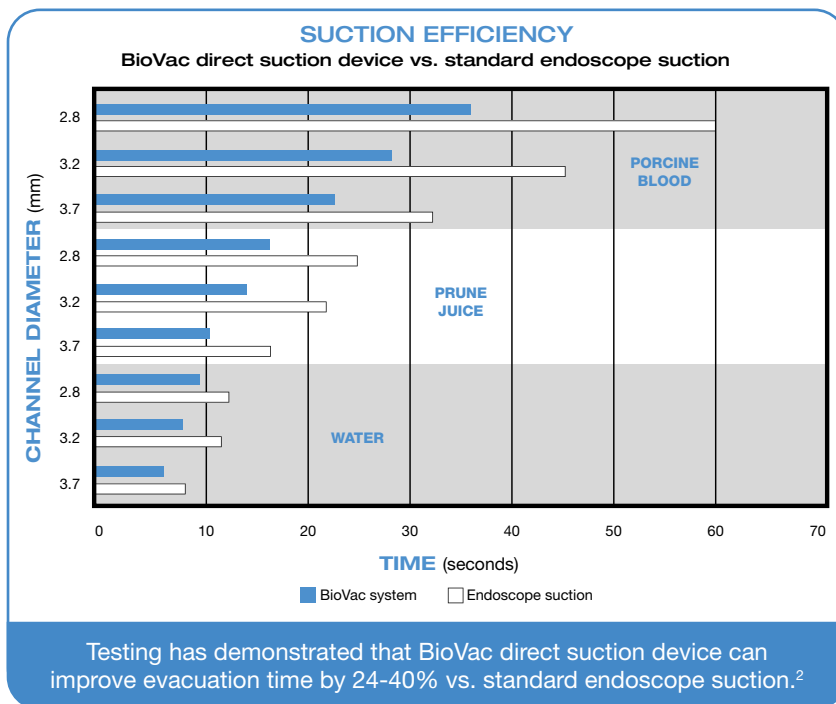
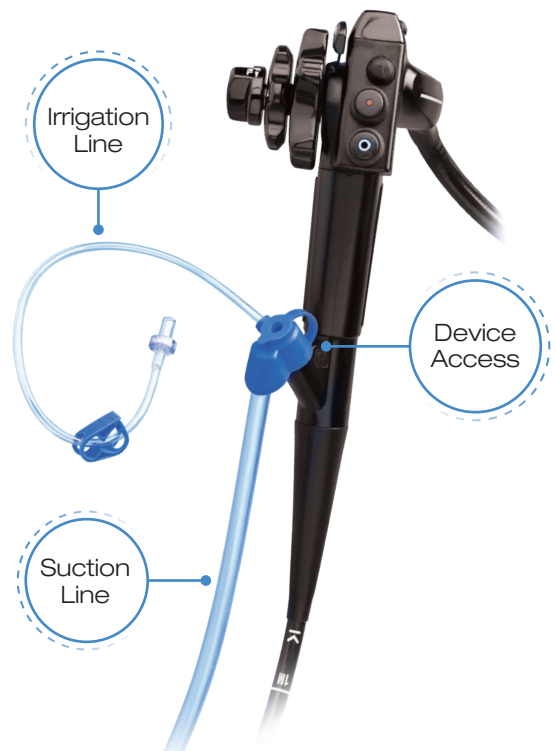
BioVac® direct suction device

features & benefits

The **BioVac direct suction device** is designed to suction hard-to-remove, viscous materials, like gelatinous blood and stringy clots¹, which may otherwise clog the control head of the endoscope. The BioVac direct suction device allows for direct visualization during cleansing and evacuation by empowering the endoscope's own suction capabilities.

The BioVac direct suction device offers...

- Enhanced suction, facilitating increased volume¹ and quick, powerful evacuation
- Instrument access, enabling the clinician to utilize suction capabilities as well as provide therapeutic treatment via the accessory channel
- Assistance in dealing with GI bleeds, colonic decompression, poor prep or retained residual food cases



BioVac direct suction device					
Product Number	Description	Scope Compatibility	Device Access	Y-Port	Units/Box
BX00711511	BioVac direct suction device	Pentax	yes	no	5
BX00711512	BioVac direct suction device	Olympus/ Fujifilm*	yes	no	5
BX00711513	BioVac direct suction device	Olympus/ Fujifilm*	yes	yes	5

* G5 Series or newer.



White paper, "Can Endoscopic Suctioning Capabilities Be Improved?" states that there is a 24-40% reduction in evacuation time when using the BioVac device. Scan QR code to view complete white paper.

1. The size of particles and volume of liquid suctioned is limited to the endoscope's channel size.
2. Data on file at STERIS Endoscopy

Injection Therapy Solutions

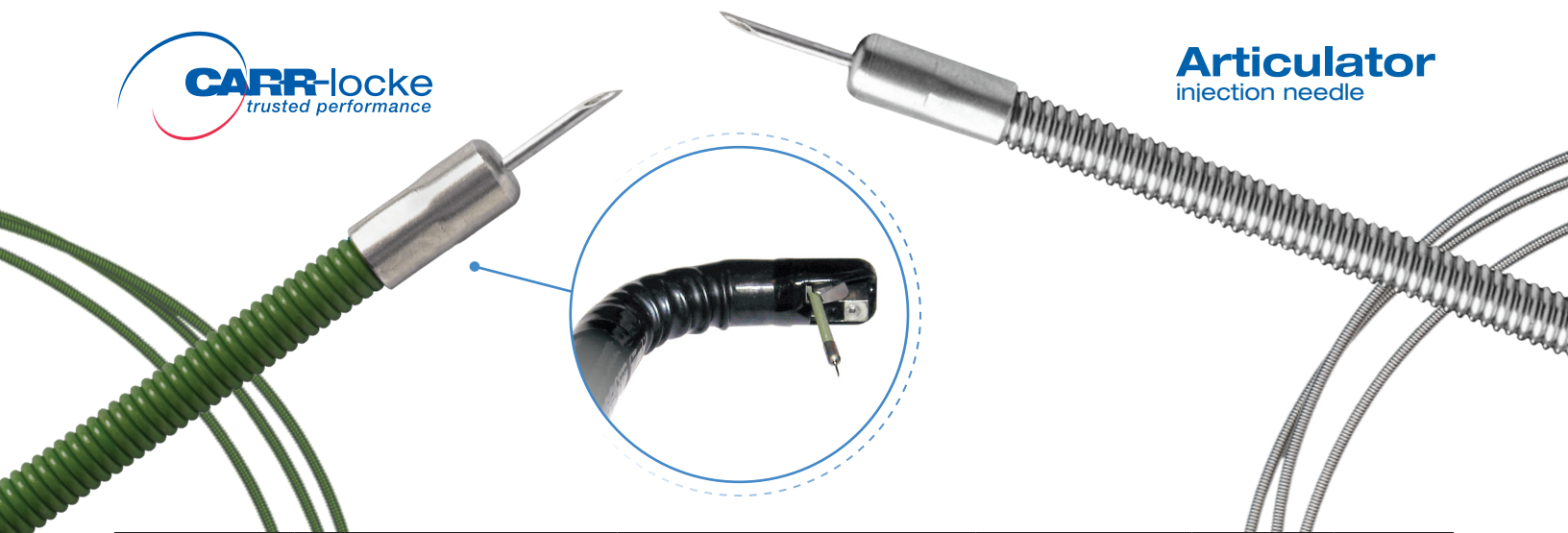
portfolio overview

STERIS Endoscopy offers the world-renowned **Carr-Locke injection needle** and the **Articulator™ injection needle** – both dependable solutions for your injection therapy needs including saline assisted polypectomy, esophageal varices and tattooing.

Feature	Benefit	Carr-Locke Injection Needle	Articulator Injection Needle
Teflon coated spring sheath and pre-loaded with stop at distal end	<ul style="list-style-type: none"> Helps to ensure consistent and full length needle projection over time Allows for smooth insertion down endoscope diameter 	✓	
Stainless steel spring sheath	<ul style="list-style-type: none"> Minimizes sheath kinking especially during challenging procedures 	✓	✓
Ultra smooth distal metal hub	<ul style="list-style-type: none"> Controls depth of needle insertion; prevents needle perforations 	✓	✓
Luer lock, spring loaded handle	<ul style="list-style-type: none"> Automatically retracts needle to reduce risk of inadvertent needle sticks and/or scope damage 	✓	✓
Requires less than 1cc of fluid to prime	<ul style="list-style-type: none"> Less expensive, particularly when using costly injection agents 	✓	✓



Articulator
injection needle



Injection Needles						
Product Number	Description	Sheath Diameter (mm)	Length (cm)	Needle Projection (mm)	needle gauge	Units/Box
BX00711803	Articulator injection needle	2.5	160	4	25	5
BX00711807	Articulator injection needle	2.5	230	5	25	5
BX00711808*	Articulator injection needle	2.5	350	5	25	5
BX00711810	Articulator injection needle	2.5	230	5	25	10
BX00711811	Carr-Locke injection needle	2.5	230	5	25	5
BX00711812	Carr-Locke injection needle	2.5	230	5	23	5
BX00711813	Carr-Locke injection needle (Pentax compatible)	2.5	230	5	25	5
BX00711814	Carr-Locke injection needle	2.5	230	4	23	5
BX00711822	Carr-Locke injection needle	1.8	230	5	25	5

* BX00711808 does not have the spring-loaded handle

gi4000 electroscopy unit & accessories

features & benefits

Our full line of electroscopy offerings includes the gi4000 electroscopy unit (ESU) and compatible accessories including argon and monopolar probes. Our electroscurgical equipment creates high-frequency, alternating electric current that's used for both cutting and coagulation during endoscopy procedures.

Designed specifically for flexible endoscopy, the gi4000 electroscopy unit...

- Has Argon, Monopolar, Bipolar and Lavage functions all built into one, compact unit
- Includes a touchscreen user interface that facilitates set-up
- Helps with standardization – each compact unit fits on a boom, travel cart and endo cart
- Outputs are all microprocessor controlled, allowing the ability to monitor tissue resistance

gi 4000



Disposable miniature argon gas canister that fits into unit.



Electrosurgery

Product Number	Description	Sheath Diameter (mm)	Length (cm)	Units/Box
G1110001	gi4000 electroscopy unit	-	-	1
G1120010	argon gas canister – 49 liters	-	-	2
G1140001	ArC Smart™ argon probe - straight fire	2.3	220	10
G1140002	ArC Smart argon probe - straight fire	2.3	330	10
G1140003	ArC Smart argon probe - straight fire	3.2	220	10
G1140004	ArC Smart argon probe (sterile) - straight fire AND ArConnect argon probe connector	2.3	220	10 of each item
G1140005	ArC Smart argon probe (sterile) - straight fire AND ArConnect argon probe connector	2.3	330	10 of each item
G1140006	ArC Smart argon probe (sterile) - straight fire AND ArConnect argon probe connector	3.2	220	10 of each item
G1120020	ArConnect® argon probe connector	-	-	10
G1120040	TouchSoft Coagulator® monopolar probe	-	-	5
BX00711005	Reusable monopolar active cord	-	-	1

gi4000 electrosurgery complementary accessories

features & benefits

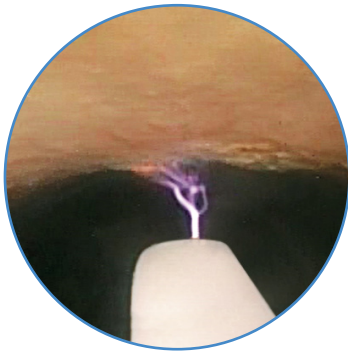
The **TouchSoft Coagulator monopolar probe** is an endoscopic accessory for contact coagulation or tissue ablation throughout the upper and lower GI tract that...

- Offers limited depth coagulation with self-limiting results when paired with TouchSoft output on the gi4000 unit or soft coagulation low voltage modes¹
- Can be used with any standard coagulation modes
- Is a cost effective alternative for contact hemostasis and ablation



Anastomotic Bleed treated with the TouchSoft Coagulator monopolar probe²

The **Arc Smart argon coagulation probe** is the perfect companion to the performance of the gi4000 Arc Smart argon linear beam and offers...



- Quick ignition and a stable beam
- Stiffness for flexible endoscopic maneuvers, including side viewing scopes
- Available in straight fire and in multiple sizes and lengths



One single-use, ArConnect probe connector is required for each argon coagulation procedure in order to attach standard connect argon probes.

1. "White Paper: Technology and Clinical Overview of the Genii TouchSoft Coagulator." Prepared by Genii, Inc. St. Paul, MN. January 2012. (Updated 2017)
2. STERIS Endoscopy, Touchsoft Coagulator monopolar probe Anastomotic Bleed.. YouTube Video: <https://www.youtube.com/watch?v=6kYHcD089vM>



Endoscopy



Endoscopy

STERIS
5960 Heisley Road
Mentor, OH 44060-1834 – USA
Customer Service: 800-548-4873
Fax: 440-639-4495
www.steris.com

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