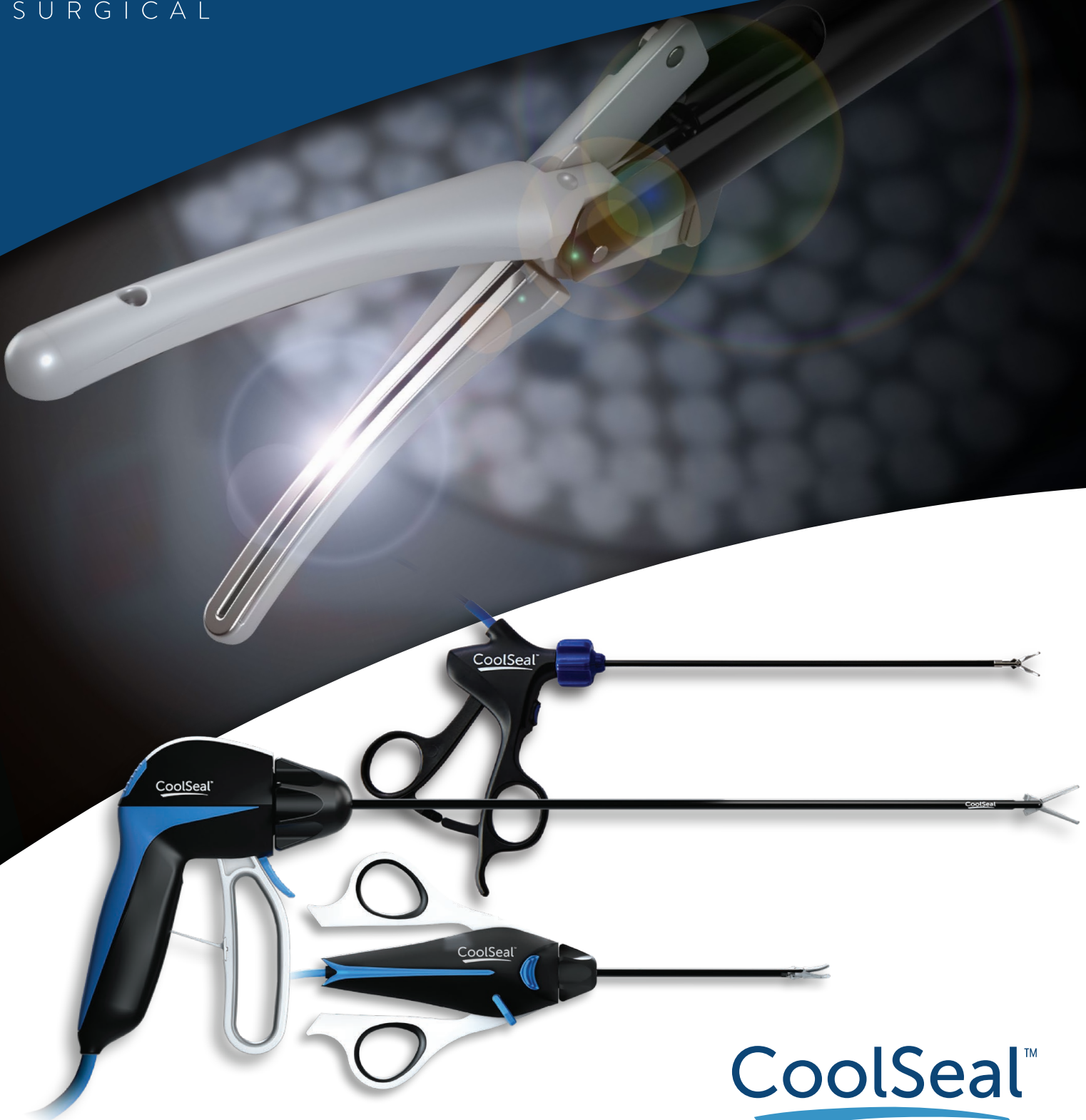


BOLDER[™]
SURGICAL



CoolSeal[™]

Vessel Sealing Reinvented.

Precise, multifunctional devices that perform with the finesse of a surgical instrument and the gold-standard efficacy of advanced bipolar vessel sealing^{1,2,3}

Activation Button

- initiates sealing
- average seal time < 1.4 sec⁵
- energy delivery stops automatically when seal is complete

Rotation Knob

- continuous 360° rotation

Handle

- designed to optimize ergonomics

Cutting Trigger

- enables division of tissue

CoolSeal™ TRINITY

5 mm Laparoscopic Sealer/Divider/Dissector

A true all-in-one surgical instrument that keeps pace with the surgeon's procedural rhythm, creating fast, reliable seals in vessels up to 7 mm.⁴

Lever

- opens and closes jaws
- surgeon-controlled, no loading springs
- latching mechanism ensures correct sealing pressure

Cord

- connects to the CoolSeal Generator

Shaft Diameter	5 mm
Shaft Lengths	30 cm, 37 cm, 44 cm
Jaw Length	20 mm
Seal Length	19 mm
Cut Length	18 mm

CoolSeal™ TRINITY

5 mm shaft

- available in 3 lengths

Maryland Style Jaws

- thin, curved shape
- double-action movement

Cord

- connects to the CoolSeal Generator

CoolSeal™ REVEAL

Rotation Knob

- rotates 335°

Fine Jaws

- thin, curved shape
- double-action movement

Levers

- ergonomic, inline hemostat design

Cutting Trigger

- enables division of tissue

Activation Button

- initiates sealing
- average seal time < 1 sec⁷

10 cm shaft

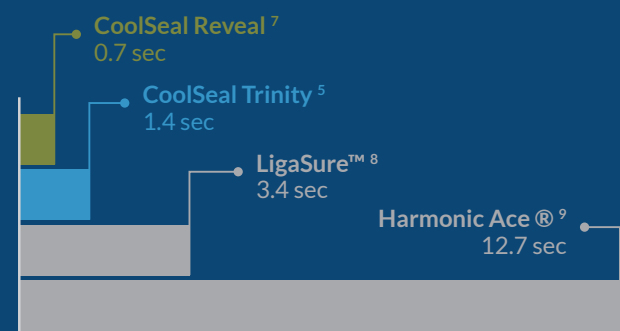
- designed for improved access and visibility

Open Sealer/Divider/Dissector

When space is limited and visibility of the surgical field is essential, Reveal is tailor-made to perform with precision, sealing vessels up to 6 mm while minimizing the thermal footprint.^{2,6}

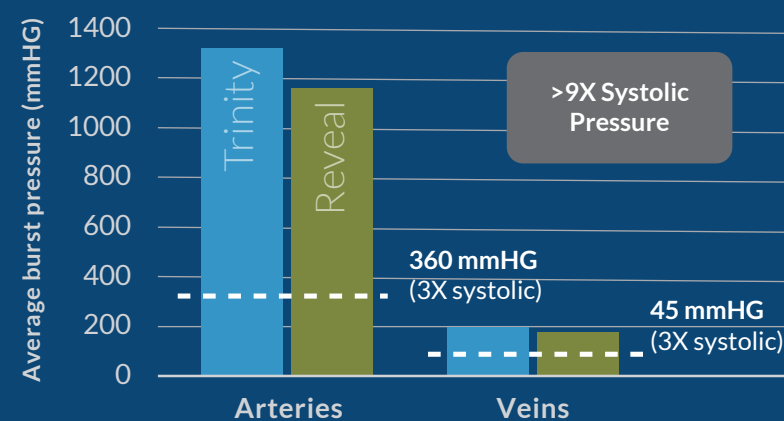
Shaft Diameter	5 mm
Shaft Length	10 cm
Jaw Length	12 mm
Seal Length	11 mm
Cut Length	10 mm

CoolSeal produces consistently strong, secure seals in under 2 seconds



Average seal time per manufacturer

CoolSeal Burst Pressures^{4,6}



Proven in pediatric safety



CoolSeal™ Mini
3 mm Vessel Sealer

Bolder Surgical was founded with a mission to enable minimally invasive surgery in infants and neonates. We were the first and only company to develop a 3 mm vessel sealer with an FDA indication for pediatric surgery.¹⁷

Designed for precision and maneuverability in tight spaces, Mini is the only device of its kind, delivering safe, secure seals in vessels up to 5 mm in just 1.7 seconds.^{3,18}

Now we've leveraged our expertise in energy delivery to create CoolSeal: a portfolio of innovative vessel sealing instruments that minimize surgical impact, help optimize workflow and avoid potential damage to adjacent critical structures.^{10,11,12}

Shaft Diameter	3 mm
Shaft Length	20 cm
Jaw Length	10 mm



CoolSeal™ Energy Delivery

All CoolSeal devices are powered with the gold-standard efficacy of advanced bipolar RF vessel sealing technology. The 50W CoolSeal generator delivers precisely the power needed and automatically discontinues power when the seal is complete.

Experience vessel sealing reinvented with the CoolSeal™ Suite of surgical instruments

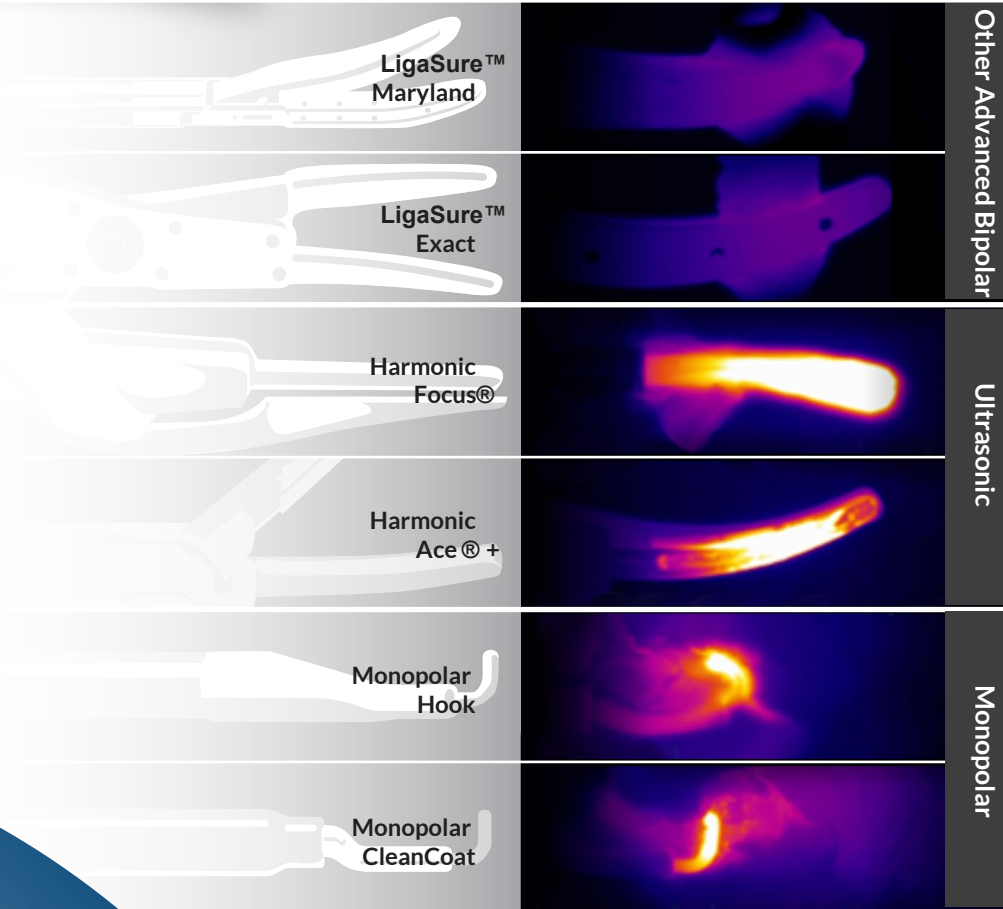
CoolSeal features a low thermal profile, with outer jaws that stay cool.^{10,11,12}



CoolSeal Advanced Bipolar

CoolSeal devices feature slim, dual-action jaws.

- Precisely dissect, grasp and seal with jaws that are between 42-46% narrower than comparable LigaSure™ devices.^{15,16}
- The multifunctional, dual-action jaws are designed to limit instrument exchanges and reduce procedure time.



Other Advanced Bipolar

Ultrasonic

Monopolar



Fast, reliable seals with < 1 mm thermal spread^{1,2,3}



Cool, outer jaws avoid irreversible damage to adjacent tissue.^{10,11,12} Inside of jaws cool quickly so the surgeon can move to the next task.^{13,14}

Specifications

	Catalogue No.	Shaft Length	Shaft Diameter	Jaw Length	Jaw Design
CoolSeal Reveal	CSL-RV105-10	10 cm	5 mm	12 mm	Maryland
CoolSeal Trinity	CSL-TR105-30	30 cm	5 mm	20 mm	Maryland
	CSL-TR105-37	37 cm	5 mm	20 mm	Maryland
	CSL-TR105-44	44 cm	5 mm	20 mm	Maryland
CoolSeal Mini	CSL-MN103-20	20 cm	3 mm	10 mm	Maryland
CoolSeal Generator	CSL-200-50	—	—	—	—

Elevate your expectations with the CoolSeal™ suite of products

At Bolder Surgical, our mission is to elevate expectations in surgery, with advanced instruments that take surgical energy delivery to the next level, translating to better patient outcomes, greater proficiency for surgeons and improved efficiency for hospitals.

We revolutionized minimal impact surgery with microsurgical devices that combine the safety of advanced bipolar RF sealing technology with the precision and versatility of true surgical instruments. The CoolSeal vessel sealing portfolio offers practical solutions for a range of surgical procedures that benefit from smaller incisions and minimal patient impact.

Contact your representative or visit us at www.boldersurgical.com for more information or to schedule a demonstration of CoolSeal.

References

- 1 Average thermal spread following a single activation. Internal Report NAR-VE-1735_2
- 2 Average thermal spread following a single activation. Internal Report 16375_2
- 3 "A simplified, low power system for effective vessel sealing. Lyle A, Kennedy J, Schmaltz D, Kennedy A. The International Society for Optic and Photonics(SPIC) 2015."
- 4 Internal report NAR-VE-17353 Rev 2, 510(k) K211579
- 5 Internal report NAR-EN-17455_1
- 6 Internal Report 16339_1, 510(k) K203640
- 7 Average seal time. Internal report 16451_1
- 8 Medtronic Brochure, Based on internal test report #R0032385 Rev A, Thermal profile comparison of Ethicon Harmonic™ HD1000i shears versus nano-coated LigaSure™ Maryland jaw device on the Valleylab™ FT10 energy platform. May 17-18, 2017, and June 14, 2017.
- 9 Timm, Richard, et al. Ethicon Inc. "Sealing vessels up to 7 mm in diameter solely with ultrasonic technology" Medical Devices: Evidence and Research. 30 July 2014.
- 10 Critical structures tested include bowel and vasculature. Internal report BOLD-1901
- 11 Critical structures tested include bowel and vasculature. Internal report BOLD-2001
- 12 Evaluation of Adjacent Tissue Thermal Damage When Using the JustRight Surgical Vessel Sealing System. Suzanne Yoder, MD; Jenifer Kennedy, PhD; Allison Lyle, MS; Allison Bendele, DVM, PhD. Society of Gastrointestinal and Endoscopic Surgeons (SAGES) 2015.
- 13 Average cooling time following a single activation. Internal Report NAR-EN-17449_1
- 14 Average cooling time following a single activation. Internal Report 16457_1
- 15 Internal report 16504_1
- 16 Internal report 17581_1
- 17 Internal Report 20087_1
- 18 510(k) K202114

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