

CRYOTHERAPY AN EFFECTIVE CHOICE FOR CARDIAC ARRHYTHMIAS

- SurgiFrost 7 and 10 use new Argon technology to rapidly achieve temperatures as cold as -160°C in 30 to 60 seconds
- Short ablation times allow you to perform procedures in a timely manner¹
- Transmural linear lesions can be produced in an open heart, or on a closed beating heart, giving you more flexibility to meet your patients' needs²
- Completes all lesion lines efficiently
- Transmural in 1 minute in open heart and 3 minutes in beating heart
- CryoAdhesion allows lesion placement certainty and ability to manipulate heart tissue
- Adjustable insulation sheath allows ablation zone between 0 to 70 mm (SurgiFrost 7) or 25 to 100 mm (SurgiFrost 10)
- Malleable cryoablation segment easily shapes to heart structures

SURGIFROST® COOL CONFIDENCE TO STOP ARRHYTHMIAS COLD



REDESIGNED TO BETTER MEET YOUR NEEDS

- 7 cm or 10 cm freezing segment can be configured to desired lengths and shapes for tailoring ablation lines; malleable probe shaft with adjustable insulation sleeve
- Longer, more flexible hose stays clear of your line of vision
- More ergonomic handle improves instrument performance
- Improved connector simplifies set-up procedure

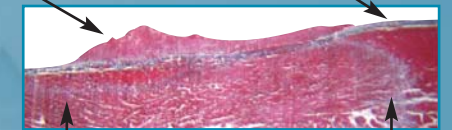
THE SURGIFROST SURGICAL CRYOABLATION SYSTEM IS INDICATED FOR USE IN THE CRYOSURGICAL TREATMENT OF CARDIAC ARRHYTHMIAS

CRYOABLATION THE COLD STANDARD FOR SAFETY

- CryoAblation preserves tissue and collagen matrix integrity^{3,4}
 - Virtually no risk of PV stenosis⁵
 - Intact endothelium minimizes risks of endocardial thrombus associated with heat-based energy sources³
 - “Cryothermal tissue injury is distinguished from hyperthermic injury by the preservation of basic underlying tissue architecture and minimal thrombus formation.”⁴
- No burning or charring

RF lesion at 1 week (Canine model)³

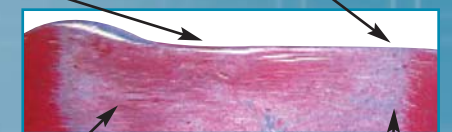
Thrombus present Disrupted endothelial boundary



Hemorrhage still present Fibrosis started

Cryo lesion at 1 week (Canine model)³

Minimal thrombus Endothelial boundary maintained



Fibrosis complete Well demarcated

“CRYOABLATION INDUCES NECROSIS OF MYOCARDIAL FIBERS BUT SPARES THE COLLAGENOUS FRAMEWORK. THE CHRONIC SCAR IS MADE OF DENSE FIBROTIC TISSUE THAT HAS NO TENDENCY TO RUPTURE OR DILATE.”⁶

ARRHYTHMIAS COLD

ELEGANT SIMPLICITY.

7 AND 10 CRYOSURGICAL PROBES

COMPLETE YOUR CARDIAC ARRHYTHMIA SURGERY OPTIONS WITH THE NEW COLD STANDARD

- Completes all lesion lines efficiently
- Versatility for all approaches; open and closed heart, beating and stopped heart
- Transmural in 1 minute in open heart and 3 minutes in beating heart
- Adjustable temperature and dosing for maximum flexibility and precision down to -160°C
- CryoAdhesion allows lesion placement certainty and ability to manipulate heart tissue
- Adjustable insulation sheath allows ablation zone between 0 to 70 mm (SurgiFrost 7) or 25 to 100 mm (SurgiFrost 10)
- Malleable CryoAblation segment easily shapes to heart structures

PRODUCT LISTING

REF NO.	DESCRIPTION
60SF2	SurgiFrost CryoSurgical Probe, 100 mm
60SF7	SurgiFrost CryoSurgical Probe, 70 mm
65CS1	CryoSurgical Console Control Unit (North America)
65CSE	CryoSurgical Console Control Unit (Europe)
65TC1	Tank / Console Carrier
67RAXNA	Regulator Assembly (North America)
67RAXE	Regulator Assembly (Europe)
671PC(X)	Power Cord (country-specific)
67H08	Gas Hose, 2.4 m (8 ft)
67H25	Gas Hose, 7.6 m (25 ft)

SurgiFrost Surgical CryoAblation System is intended for use:



In the USA for minimally invasive cardiac surgical procedures, including the treatment of cardiac arrhythmias. 510(k) cleared



In Europe for surgical procedures, including surgical treatment of cardiac arrhythmias. CE Mark



The CryoSurgical Console Control Unit features intuitive touch-screen operation and a multi-feature, fail-safe safety system



References

1. Berglin EW-O. Epicardial Cryoablation of Atrial Fibrillation in Patients Undergoing Mitral Valve Surgery. Operative Techniques in Thoracic and Cardiovascular Surgery, Vol.9, No.1, 2004:59-71.
2. SurgiFrost Dosing Study: Summary Report. CryoCath Technologies Inc. Montreal, Canada. Data on file.
3. Khairy, et al. Thrombus Formation with RF and Cryoenergy Ablation. Circulation 2003;107:2045-50.
4. Lustgarten D, et al. Cryothermal Ablation: Mechanism of Tissue Injury and Current Experience in the Treatment of Tachyarrhythmias. Progress in Cardiovascular Diseases, Vol. 41, No. 6, May/June 1999:481-98.
5. Cole C, et al. Atrial Fibrillation; Which Approach Is Best - Linear, Focal, Segmental or Circumferential? Heart Forum, Nov. 10, 2000.
6. Giraudon GM, et al. Encircling endocardial cryoablation for ventricular tachycardia after myocardial infarction: Experience with 33 patients. American Heart Journal, November 1994:982-89.



CryoCath Technologies Inc.

www.cryocath.com

North America t. 877 GO4 CRYO (464 2796) f. 866 755 6279

Europe t. +1 514 694 2775 f. +1 514 694 6279

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ATS Medical Inc.

www.atemedical.com

t. 800 399 1381 or 763 553 7736

Customer Service: 866 287 6331 f. 763 557 2244

For further information visit: HSForum.com, CTSnet.org or theheart.org



STOP ARRHYTHMIAS

OPTIMAL OUTCOMES.

INTRODUCING THE SURGIFROST®

