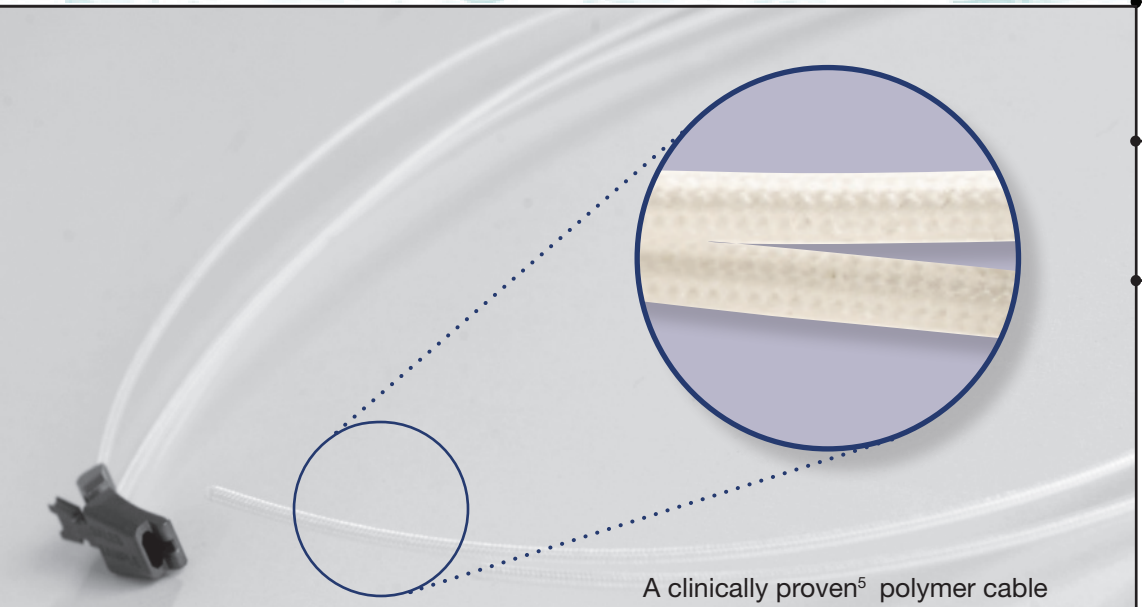
SuperCable®

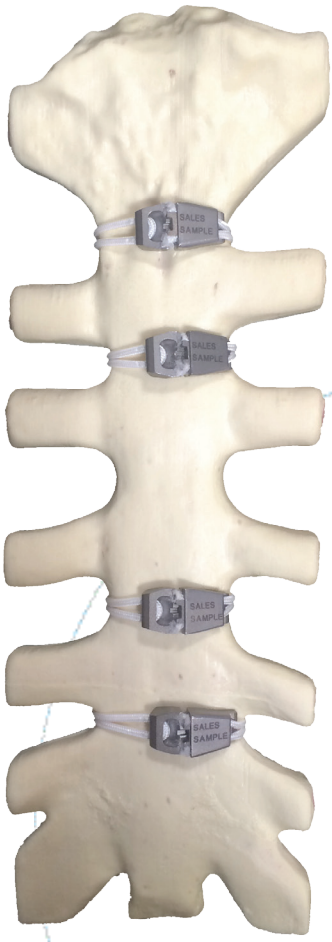
Iso-Elastic™ Polymer Sternotomy Closure System

- Elastically Absorbs Load & Maintains Compression
- Dual Strand Footprint Reduces Cut-Through
- Low Profile Clasp Minimizes Palpability
- Polymer Cable Allows for Quick Re-Entry



A clinically proven[5] polymer cable system providing superior fatigue strength and dynamic compression across healing bone fragments

Four SuperCables used for closure of median sternotomy



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Quality Care. Clinically Proven.

A Better Way, For Better Outcomes

A clinically proven[5] polymer cable system providing superior fatigue strength and dynamic compression across healing bone fragments.

The carefully engineered "Iso-Elastic" property of the polymer SuperCable provides "dynamic compression" across the sternal halves to better accommodate the physiologic loads acting on the healing sternum. This Iso-Elastic property also acts as a "shock absorber" on the sternum, helping to neutralize loads caused by coughing, sneezing and patient movement, thus reducing the chance of cut-through and loss of fixation. The broader footprint of the double-strand cable can also help to minimize cut-through into soft bone. The improved fixation offered by SuperCable provides the opportunity for more rapid and reliable bone healing, more rapid post-op recovery, and reduced patient complications and readmissions. Surgical time is similar to that with the use of traditional 7 to 8 pass wire fixation.[6] No sternal dehiscences, deep or superficial sternal infections were seen at postoperative follow-up in case series involving over 200 patients.[6,7]

In vitro testing shows that the Iso-Elastic SuperCable provides substantial sternotomy closure force after cyclic loading associated with forces expected during coughing and sneezing, whereas monofilament wires and braided metal cables both showed significant loss of fixation closure force.[2,3] The superior stability offered by SuperCable offers the potential to reduce post-operative pain and bleeding, along with other complications associated with median sternotomy.[1,4,8,9] Additionally, the SuperCable does not contain nickel, thereby minimizing metal sensitivity issues. Finally, the polymer cable can be quickly cut with a scalpel for fast re-entry in emergent situations.

Scan for publication on SuperCable clinical experience, including surgical video.

Scan for report comparing sternotomy closure force after cyclic loading achieved with iso-elastic cables, wire and braided metal cables.

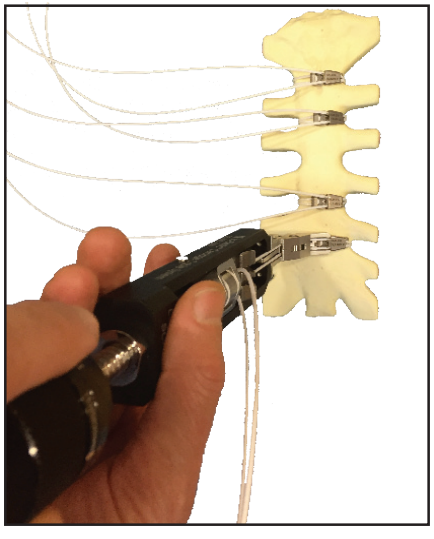
Scan for video of testing comparing sternotomy closure force after cyclic loading achieved with iso-elastic cables, wire and braided metal cables.

Citations related to SuperCable and sternotomy closure

1. Nørgaard et al (2006) The outcome of sternal wire removal on persistent anterior chest wall pain after median sternotomy. Euro J of Cardio-thoracic Surg 29: 920-924.
2. Biomechanical Comparison of Three Sternotomy Closure Techniques: Static & Cyclic Lateral Distraction (2016). Data on file at Kinamed Inc.
3. Sternotomy Closure Force Under Cyclic Lateral Distraction: Comparison of Three Closure Techniques (2017). Data on file at Kinamed Inc.
4. Biddau et al (2006). Migration of a Broken Cerclage Wire from the Patella into the Heart. A Case Report. J Bone Joint Surg 88-A:2057-2059.
5. Della Valle et al (2010). Early Experience with a Novel Non-Metallic Cable in Reconstructive Hip Surgery. Clin Orthop Relat Res 468:2382-2386.
6. Que (2019) Sternotomy Closure With a Unique Iso-Elastic™ Polymer Cable System. CTSNet.
7. Ntinopoulos et al (2022) Polymer iso-elastic cables, a viable alternative to reduce sternal complications in obese patients after median sternotomy. 36th Annual EACTS Annual Meeting, Milan, Italy.
8. Schreffler et al (2001) Intravascular migration of fractured sternal wire presenting with hemoptysis. Annl of Thoracic Surg 71:1682–1684.
9. Zywicka et al (2019) Sternal Wires–Induced Severe Systemic Inflammatory Response and Cardiac Tamponade. Annl of Thoracic Surg 107: e175–e176.

Consumables Kit	Catalog No.
SuperCable Iso-Elastic Sternotomy Closure Kit (4 Sternotomy Cables, 1 Mini-Passer)	35-400-3010
SuperCable Iso-Elastic Sternotomy Closure Kit (2 Sternotomy Cables, 1 Mini-Passer)	35-400-2005
Single Use Instruments	
SuperCable Cerclage, Curved Mini-Passer (single-use, sterile-packed)	38-800-3400
Instruments (reusable)	
SuperCable Cerclage, Tensioning Instrument, 60 Degree Angled	35-800-7000

The Curved Mini-Passer provides for passage of the Iso-Elastic cable through the intercostal spaces and is included in the Closure Kits above.



Simple Instrumentation: *The Tensioning Instrument allows for precise tightening and locking of cables as well as sequential retensioning of previously placed cables.*

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For more information:

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FM 75124

CE 2797

**Cable made from UHMWPe and Nylon. US Pat. Nos. 6,589,246; 7,207,090; 8,469,967. Japan Pat. Nos. 4,829,236. Europe Pat. Nos. 1,389,940; 1,781,961; 2,432,401; 3,013,268. Turkey Pat. Nos. TR201309922T4; TR201405440T4. Additional US & World patents pending.*

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