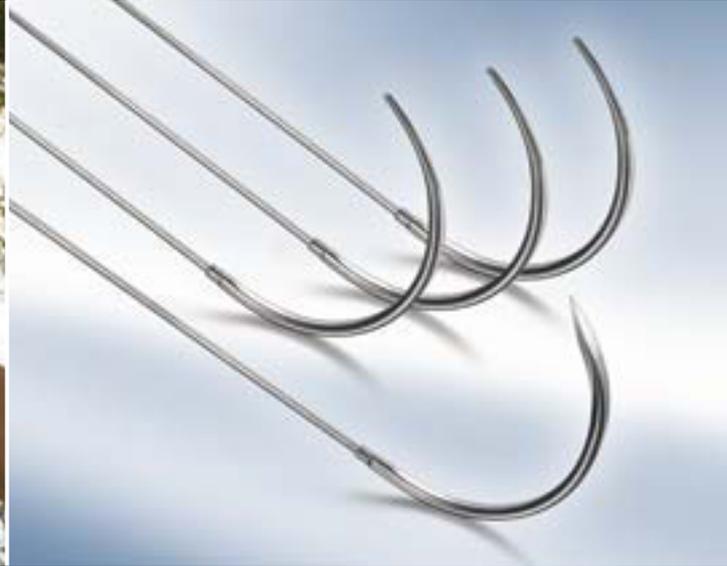


Sternum Care

Reliable solutions for Sternal Closure

Steelex® Sternal Set, PremiCron® Sternal Set and Bone Wax.



Closure Technologies

Sternum Care

Reliable solutions for Sternal Closure



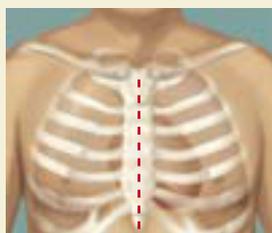
Sternal Closure today

Closing the sternum is almost the last step to be taken after long high demanding cardiac or thoracic surgical procedures. It is the last step but not the least important. **Sternal closure must be reliable, easy and fast.**

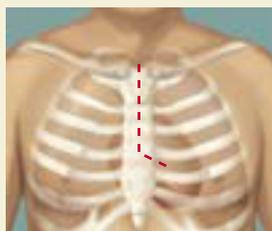
Over one million median sternotomies are performed worldwide yearly and the results of the closure depend heavily on having the adequate products.

Complications are not frequent but they are severe when they happen.

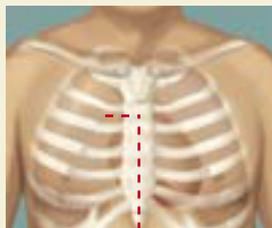
B. Braun designs reliable solutions for every sternal closure.



Complete median sternotomy



Partial upper sternotomy



Lower partial sternotomy



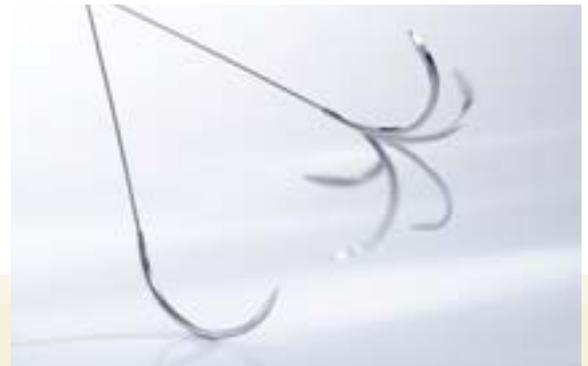
There are different approaches in performing a sternotomy. There is the traditional median sternotomy or the partial sternotomy that can be performed when limited exposure is adequate. **Bone Wax** may be used to stop sternum bleeding after performing the sternotomy.

There are also many techniques for closing the sternum. It may be closed for instance peristernally or intrasternally needing the adequate needle for each approach. In order to pass through the sternum maximal penetration is needed so a needle with 'sternum' point (HRS) would be recommendable whereas for going around the sternum a blunt (HRN) or short cutting (HRC) would be more recommendable.

The gold standard product for closing the sternum is steel wire (**Steelex® Sternum Set**) as it is a fast, reliable and easy way to close the sternum. However polyester (**PremiCron® Sternum Set**) is also used for protecting the sternum in some cases.

B. Braun offers products designed to provide flexible solutions for sternal closure.

Steelex® Sternum Set – for general sternal closure



PremiCron® Sternum Set – for delicate sternal closure



Bone Wax – for sternal hemostasis



Sternum Care – Steelex® Sternum Set

Reliable solutions for every Sternal Closure

Steelex® Sternum Set

Stainless Steel monofilament armed with high quality needles for a sternal closure in cardiac surgery procedures.

Features

- High quality surgical Stainless Steel (316 L) monofilament Sets
- Armed with the adequate range of round bodied needles with blunt cutting and/or sternum tips
- Available in lengths of 45 and 75 cm

Secure Axial attachment

Our secure needle to thread attachment is available with rotating tip for easier handling and less chances of wire kinking as well as with fixed attachment.

Benefits

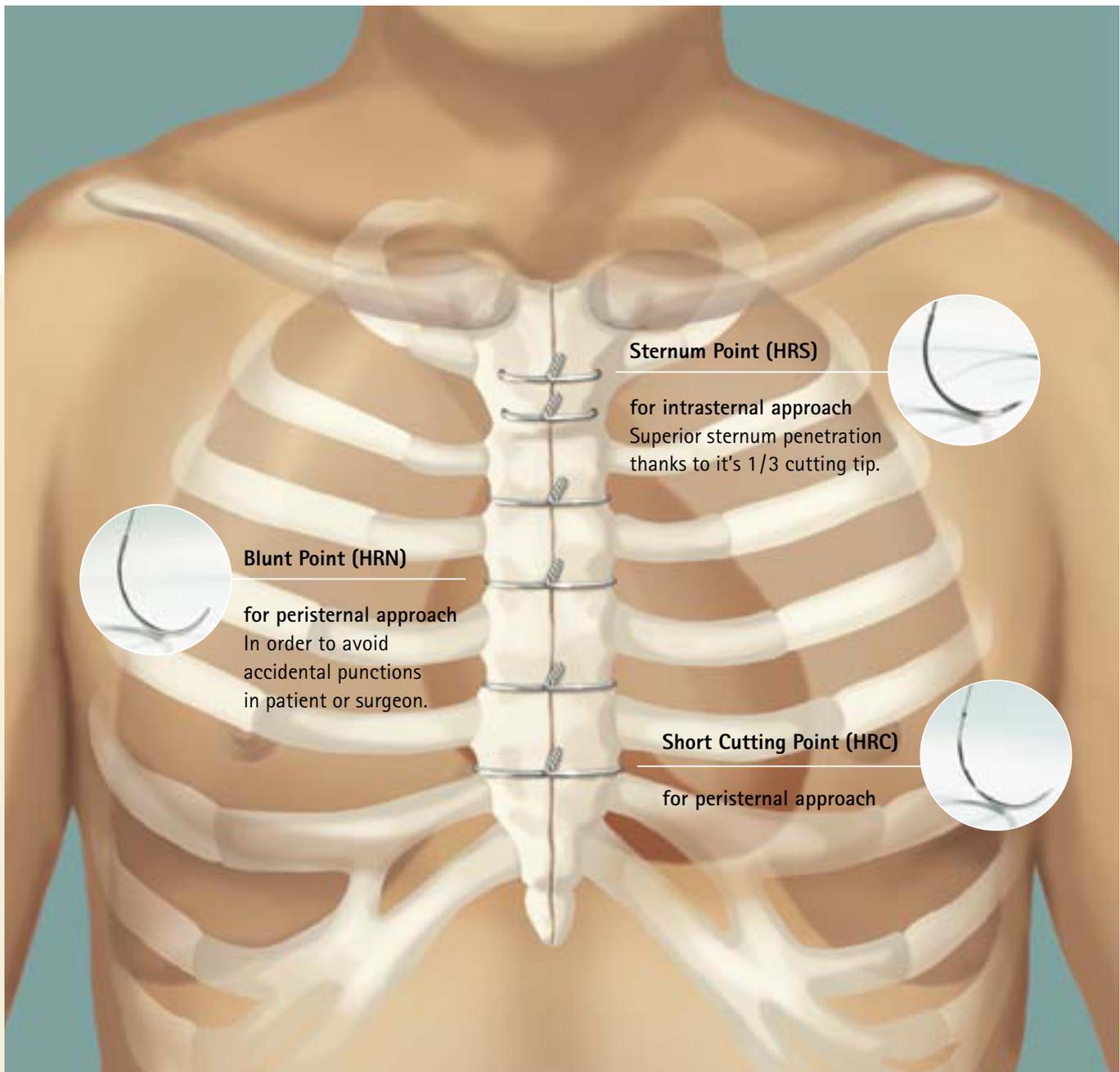
- Exceptional tensile strength to hold bone and tissue without rupture
- Atraumatic flexible wires for high anatomical conformity to bone and tissue and easy handling
- Gentle passage through tissue and bone

Steelex® Sternum Set needles

New high performance needles for an easy and atraumatic passage. Designed for achieving excellent bending strength and strong needle to thread attachments.



Specific tip design



Sternum Care – Steelex® Sternum Set

For Sternum Closure

Product overview

Structure	Monofilament (Steelex®)
Colour	Metallic (Steelex®)
Chemical composition	Stainless steel
Coating	Uncoated
Origin	Metal
Sizes	USP 1 (4 metric) - USP 7 (9 metric)
Type of absorption	Non-absorbable
Sterilisation	Ethylene oxide or gamma-irradiation



Steelex® Sternum Set in the most convenient Packaging

Long Pack with various pack quantities and sizes

- Avoids memory effect
- Ready to use
- Available as COMBO (different points in one box for combined approach)

- Oval winding saving space package (SOW)



Needle length mm	Thread length cm	USP metric						
		1 4	2 5	3 6	4 6	5 7	6 8	7 9
1/2 circle round bodied needle with sternum point								
 HRS 40	4 x 45	G0617835	G0617838					
 HRS 48	4 x 45 4 x 45 axial				G0617784 G0617792	G0617717 G0617733	G0617814 G0617806	G0617795 G0617796
 HRS 48 Sow	45 45 axial					G0617555 G0617545	G0617556 G0617546	
	75 75 axial					G0617579 G0617563		
 HRS 60	4 x 45 4 x 45 axial					G0617742 G0617741		
	2 x 75 2 x 75 axial					G0617776 G0617750		
 HRS 60 Sow	45 45 axial					G0617864 G0617865		
	75 75 axial					G0610008 G0617040		

C Box of 36 units	B Box of 24 units	G Box of 12 units	M Box of 6 units
-------------------	-------------------	-------------------	------------------

Sternum Care – Steelex® Sternum Set

For Sternum Closure

Needle length mm	Thread length cm	USP metric						
		1 4	2 5	3 6	4 6	5 7	6 8	7 9
1/2 circle round bodied needle with short cutting point								
 HRC 37ss	4 x 45	G0617144						
 HRC 48	4 x 45 4 x 75					G0617135 G0617134	G0610167	
1/2 circle round bodied needle with blunt point								
 HRN 48	4 x 45					G0617749	G0617813	G0617550
 HRN 48	4 x 75							G0617802
 HRN 60	4 x 45							G0617120

Needle		Thread length cm	USP metric							
length mm			1 4	2 5	3 6	4 6	5 7	6 8	7 8	
COMBO										
		4 x 45						G0617880	G0617881	G0617882
		4 x 45						G0617995	G0617996	

Sternum Care – PremiCron® Sternum Set

Reliable solutions for every Sternal Closure

Features

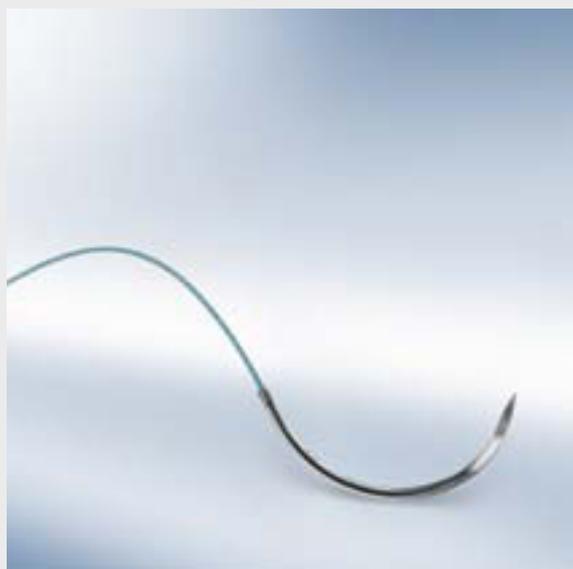
- Synthetic non-absorbable braided polyester
- Armed with sternum point needles

Benefits

- Excellent knotting and handling properties
- Great bone protection thanks to high flexibility
- High tensile strength to keep sternum stable

Recommended for:

- Pediatric use
- Stainless steel allergic patients
- Weak sternum protection
- Probable reoperations



Needle length mm	Thread length cm	USP metric						
		1 4	2 5	3 6	4 6	5 7	6 8	7 8
1/2 circle round bodied needle with sternum point								
 HRS 40	4 x 75	B0026766						
 HRS 48	4 x 75	B0026767						
	4 x 75	G0026702						
 HRS 60	4 x 75	G0026705						

Bone Wax / Bone Wax Stick

Mechanical hemostasis of the Sternum

Features

Bone Wax is a sterile mixture of beeswax (70 %) and vaseline (30 %) to stop bleeding in bones.

Benefits

- Direct spreading onto the bleeding sternum
- No need to be moulded or kneaded

Advantages

- Soft, easy to shape and apply only 'hand-warm'
- Practical, transparent double peel-packs

Recommended for:

- Bone hemostasis after Sternotomy



Content / Box	Cat. No.
24 pieces; 2.5 g/pc	1029754

Stick format

Advantages

- Easy handling
- Unique, practical lipstick format



Content / Box	Cat. No.
12 pieces; 3.15 g/pc	1029755



B. Braun Surgical, S.A. | Carretera de Terrassa, 121 | 08191 Rubí | Spain
Phone +34 93 5 86 62 00 | Fax +34 93 6 99 63 30 | www.bbraun.com

Aesculap AG | Am Aesculap-Platz | 78532 Tuttlingen | Germany
Phone +49 7461 95-0 | Fax +49 7461 95-26 00 | www.aesculap.com

Aesculap – a B. Braun company

The product trademarks 'PremiCron' and 'Steelex' are registered trademarks of B. Braun Melsungen AG.

Subject to technical changes. All rights reserved.
This brochure may only be used for the exclusive purpose of obtaining information about our products. Reproduction in any form partial or otherwise is not permitted.

Brochure No. B23802

0514/0.5/2