



不断创新 · 追求卓越  
INNOVATING CONSTANTLY  
KEEP STRIVING FOR EXCELLENCE

[www.jsshuangyang.com](http://www.jsshuangyang.com)

地址：江苏省张家港市杨舍镇包基双羊大厦 邮编 Postcode: 215600  
ADD: Shuangyang Building, Baoji, Yangshe Town, Zhangjiagang City, Jiangsu Province, China  
电话 Telephone: 0512-58268332 传真 FAX: 0512-58268337 邮箱 E-Mail: shuangyang@jsshuangyang.com



微信号：shuangyang8

由于印刷的关系，可能与实际产品的颜色有所差异，使用时请以实物颜色为准。  
Because of the printing, it may vary with the color of the actual product, please subject to the product color when using.

仅供医疗器械专业技术人员、临床医师参考阅读，最终解释权归江苏双羊医疗器械有限公司所有。  
Only for the medical professional technical personnel and the clinician reference reading, the final interpretation right of this event is reserved by Jiangsu Shuangyang Medical Instrument Co., Ltd.



## TITANIUM STERNUM RIB FIXATION SYSTEM

为胸肋骨重建提供稳定内固定

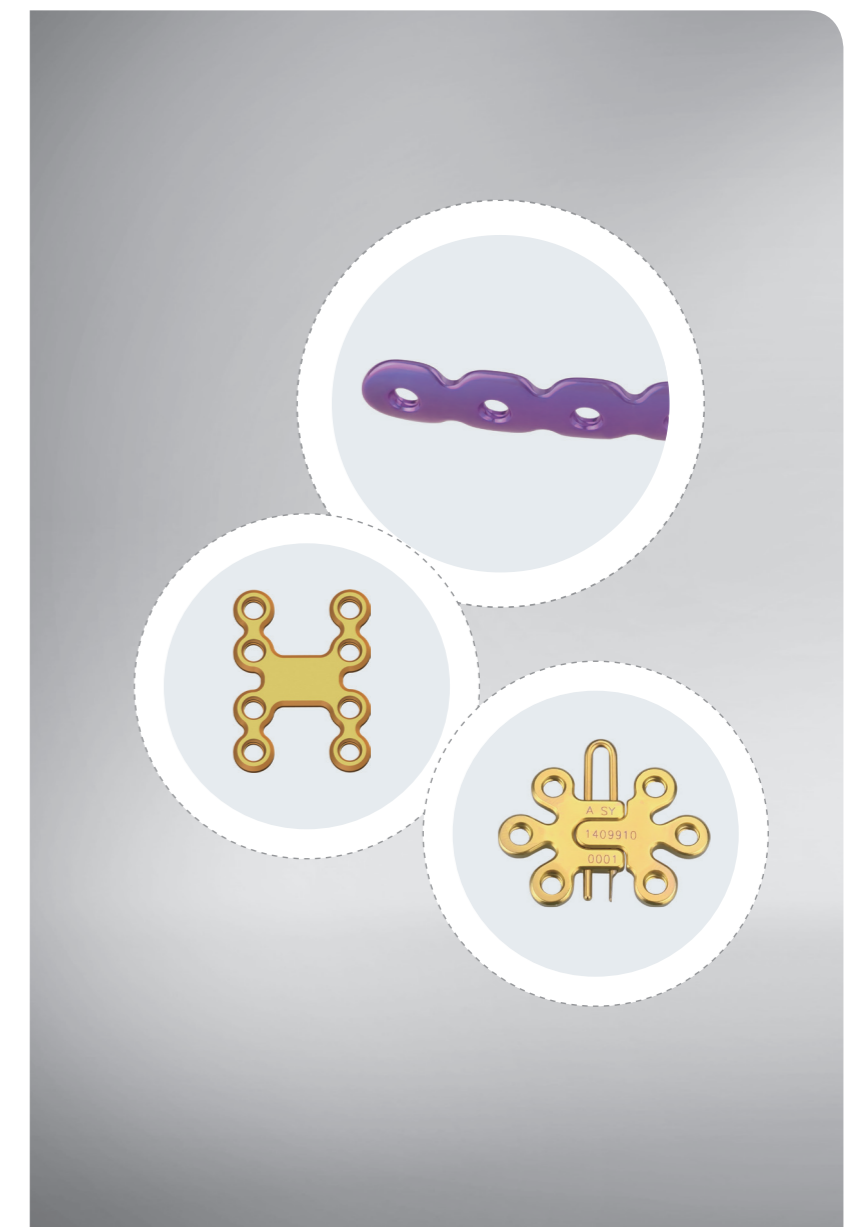
Stable Internal Fixation For Sternum/Rib Reconstruction

## 钛质胸肋骨系统

江苏双羊医疗器械有限公司  
Jiangsu Shuangyang  
Medical Instrument Co., Ltd.



[www.jsshuangyang.com](http://www.jsshuangyang.com)





## 企业简介

### Company Introduction

江苏双羊医疗器械有限公司，创建于2001年，占地面积18000平方米，建筑面积15000多平方米，注册资金2000万。是一家从事骨科植入物产品的研发、制造、销售和服务的民族企业，获得多项国家级专利。

公司选择钛及钛合金为原材料，严把质量关，选择国内外知名企业宝钛、ZAPP等作为原材料供应商，并配备世界一流的加工中心、纵切车床、数控铣床、超声波清洗等生产设备和装置，以及万能试验机、电子扭转机、数字投影仪等精密的量具。公司拥有完善的管理体系，先后通过了ISO9001:2015质量管理体系认证，ISO13485:2016医疗器械质量管理体系认证，TUV的CE认证，并于2007年率先通过国家局组织的《医疗器械生产质量管理规范植入性医疗器械实施细则（试点）》检查。

公司针对人体各个骨骼部位的特点，在著名骨科专家、教授、临床医师的悉心指导与帮助下，推出众多主导产品：锁定接骨板固定系统、钛质接骨板固定系统、钛质空心接骨螺钉及垫片、钛质胸肋骨系统、锁定颌面内固定系统、颌面内固定系统、钛质捆绑系统、解剖型钛网系统、基础工具系列等，并拥有专业的配套手术器械包，以满足临床不同的需求。公司的产品因设计可靠、加工精细、医生临床使用方便、患者愈合期短而受到了许多临床医师和患者的高度评价。

中国梦，双羊梦！双羊作为一个有使命感、有责任心、有抱负、有人文情怀的公司的初衷不会变，始终以“以人为本，诚信至上，不断创新，追求卓越”的理念不会变，争创医疗器械领域民族品牌领头羊的决心不会变。愿更多有志者与双羊共同创造美好的未来！

Jiangsu Shuangyang Medical Instrument Co., Ltd. was founded in 2001, covers an area of 18,000 m<sup>2</sup>, including a floor area of over 15,000 m<sup>2</sup>. Its registered capital reaches 20 million Yuan. As a national enterprise dedicated to the R&D, manufacturing, sales and service of orthopaedic implants, we have obtained several national patents.

Titanium and titanium alloys are our raw materials. We perform strict quality control, and select domestic and international famous brands, such as Baoti and ZAPP, as our raw material suppliers. Meanwhile, we are equipped with world class production equipment and devices including machining center, slitting lathe, CNC milling machine, and ultrasonic cleaner, etc., as well as precise measuring implements including universal tester, electronic torsion tester and digital projector, etc. Thanks to a sophisticated management system, we have acquired ISO9001:2015 Certificate of Quality Management System, ISO13485:2016 Certificate of Quality Management System for Medical Devices, and CE certificate of TUV. We are also the first to pass the inspection according to the *Enforcement Regulation (Pilot) for Implantable Medical Devices of Good Manufacturing Practice for Medical Devices* organized by the National Bureau in 2007.

Thanks to meticulous guidance and supports from distinguished orthopaedic specialists, professors and clinicians, we have launched numerous leading products customized for different human skeletal parts, including locking bone plate fixation system, titanium bone plate fixation system, titanium cannulated bone screw & gasket, titanium sternocostal system, locking maxillofacial internal fixation system, maxillofacial internal fixation system, titanium binding system, anatomic titanium mesh system, and basic tool series, etc. We also have professional supporting surgical instrument sets to meet various clinical needs. Extensive acclaims have been received from clinicians and patients for our easy-to-use products with reliable design and fine machining, which can bring a short healing period.

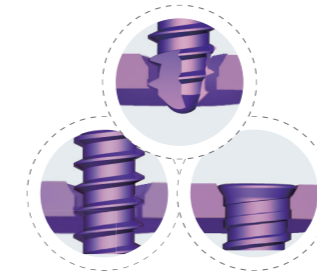
China dream and Shuangyang dream! We will stick to our original intention to be a mission-driven, responsible, ambitious and humanistic company, and adhere to our idea of "people orientation, integrity, innovation, and excellence". We are determined to be a leading national brand in the medical Instrument industry. At Shuangyang, we always welcome aspiring talents to co-create a bright future with us.



## 肋骨板 Rib plate

### 产品特点

- ◆ 左右侧解剖型设计，减少手术时间
- ◆ 肋骨板和螺钉采用螺纹导向技术锁定（螺钉第一牙拧入板孔，即进入锁定状态），确保固定稳定性，更有利于促进骨愈合
- ◆ 肋骨板激光蚀刻位于近中（即靠近胸骨一侧），方便手术者正确操作
- ◆ 术中无需去除骨膜，不损伤肋间神经和血管
- ◆ 8孔通用肋骨板，可用于任一肋骨



螺纹导向技术锁定  
Thread Guidance Locking technology

### Features

- ◆ Both left and right plates adopt anatomical design, which shortens the operation obviously.
- ◆ The rib plate and screw adopt thread guidance locking technology (the screw will be locked once the first loop is switched into the plate) to ensure the stable fixation and promote bone healing.
- ◆ The Laser mark on the plate is close to sternum, which is easier to use during operation.
- ◆ No need to remove periosteum during operation, with no damage to intercostal nerves and vessels.
- ◆ The 8 holes general rib plate can be used for every rib.



- **8孔直形 左右式**  
适用于肋骨（通用）  
**8 holes (No Left/Right)**  
Suitable for rib (General use)



- **15孔直形右**  
适用于第3肋骨（右侧）  
**15 holes (Right)**  
Suitable for the third right rib



- **15孔直形左**  
适用于第3肋骨（左侧）  
**15 holes (Left)**  
Suitable for the third left rib



- **16孔直形右**  
适用于第4/5肋骨（右侧）  
**16 holes (Right)**  
Suitable for the fourth & fifth right rib



- **16孔直形左**  
适用于第4/5肋骨（左侧）  
**16 holes (Left)**  
Suitable for the fourth & fifth left rib



- **17孔直形右**  
适用于第6/7肋骨（右侧）  
**17 holes (Right)**  
Suitable for the sixth & seventh right rib



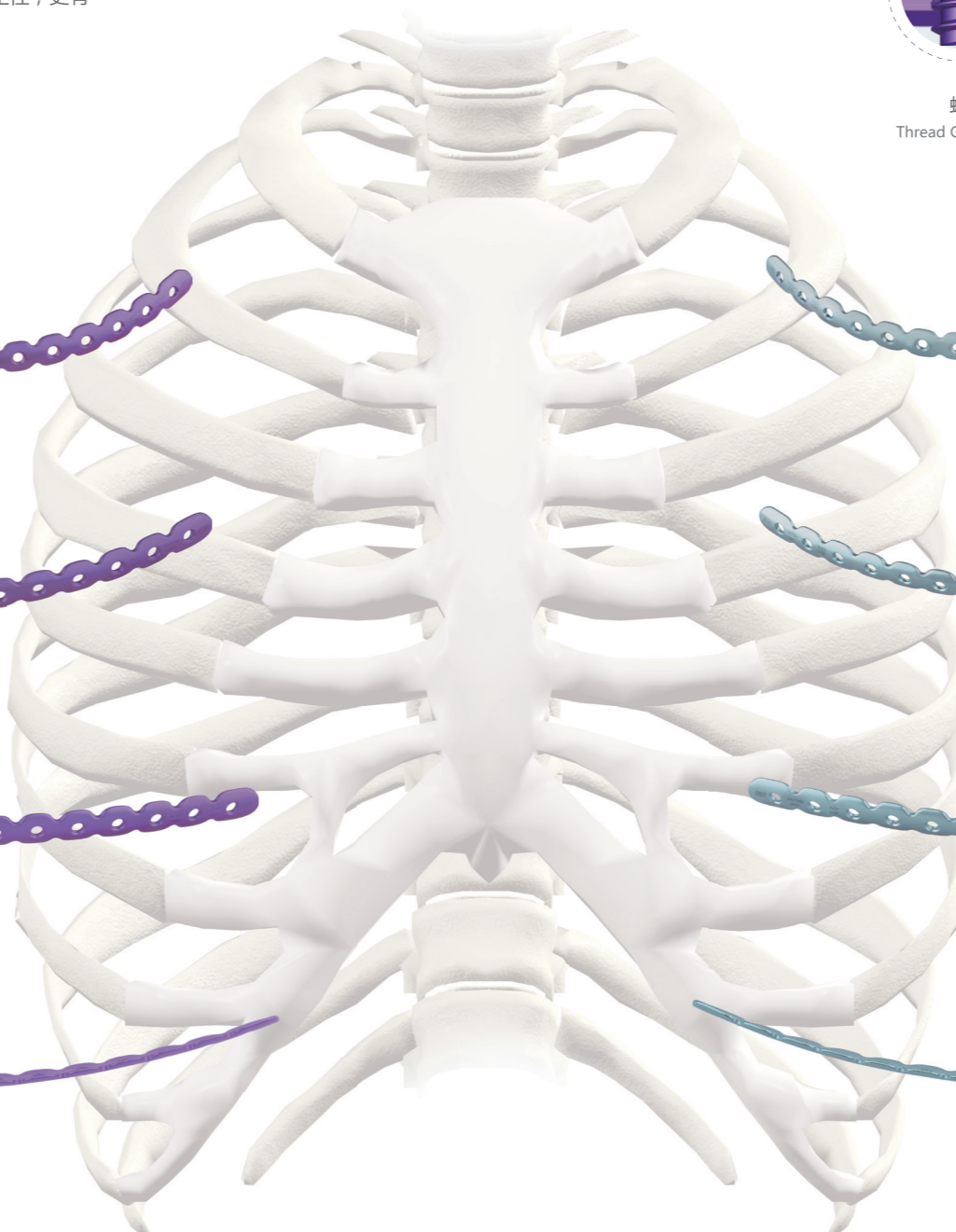
- **17孔直形左**  
适用于第6/7肋骨（左侧）  
**17 holes (Left)**  
Suitable for the sixth & seventh left rib



- **18孔直形右**  
适用于第8/9肋骨（右侧）  
**18 holes (Right)**  
Suitable for the eighth & ninth right rib



- **18孔直形左**  
适用于第8/9肋骨（左侧）  
**18 holes (Left)**  
Suitable for the eighth & ninth left rib



订货编码 Item No.	规格 Specification(mm)
10.06.06.08011005	锁定 3.0 型系列 8 孔直形 左右式 3.0 series locking plate, 8 holes (No Left/Right)
10.06.06.15111005	锁定 3.0 型系列 15 孔直形左 3.0 series locking plate, 15 holes (Left)
10.06.06.16111005	锁定 3.0 型系列 16 孔直形左 3.0 series locking plate, 16 holes (Left)
10.06.06.17111005	锁定 3.0 型系列 17 孔直形左 3.0 series locking plate, 17 holes (Left)
10.06.06.18111005	锁定 3.0 型系列 18 孔直形左 3.0 series locking plate, 18 holes (Left)
10.06.06.15211005	锁定 3.0 型系列 15 孔直形右 3.0 series locking plate, 15 holes (Right)
10.06.06.16211005	锁定 3.0 型系列 16 孔直形右 3.0 series locking plate, 16 holes (Right)
10.06.06.17211005	锁定 3.0 型系列 17 孔直形右 3.0 series locking plate, 17 holes (right)
10.06.06.18211005	锁定 3.0 型系列 18 孔直形右 3.0 series locking plate, 18 holes (Right)

**Φ3.0 锁定钉**  
 Φ3.0 locking screw



改锥自持 四方驱动  
 Great self-holding ability,  
 Quadrangle drive.

订货编码 Item No.	规格 Specification(mm)
11.06.0530.006117	Φ3.0×6mm
11.06.0530.008117	Φ3.0×8mm
11.06.0530.010117	Φ3.0×10mm
11.06.0530.012117	Φ3.0×12mm
11.06.0530.014117	Φ3.0×14mm
11.06.0530.016117	Φ3.0×16mm

**胸骨板 Titanium sternum plate**

- ◆ 胸骨板和螺钉采用螺纹导向技术锁定，确保固定稳定性
- ◆ 胸骨板有整体式和分体式，整体式易于操作，分体式在紧急情况时可通过 U 型钉释放

◆ The sternum plate and screw adopt thread guidance locking technology, to ensure the stable fixation.



◆ The sternum plate consists of integral type and split type. The integral type is easy to operate, and the split type can be released by U-clip when emergency.



整体式 板厚 1.7mm Integral type, thickness 1.7mm









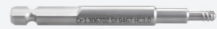
订货编码 Item No.	规格 Specification	图片 Product image
10.06.06.04019051	锁定 3.0 型系列 4 孔 T 形 左右式 3.0 series locking plate, 4 holes sternum plate	
10.06.06.06019051	锁定 3.0 型系列 6 孔 T 形 左右式 3.0 series locking plate, 6 holes sternum plate	
10.06.06.08019051	锁定 3.0 型系列 8 孔 T 形 左右式 3.0 series locking plate, 8 holes sternum plate	
10.06.06.10019151	锁定 3.0 型系列 10 孔 T 形 左右式 I 型 3.0 series locking plate, 10 holes sternum plate I	
10.06.06.10019251	锁定 3.0 型系列 10 孔 T 形 左右式 II 型 3.0 series locking plate, 10 holes sternum plate II	
10.06.06.12011051	锁定 3.0 型系列 12 孔直形 左右式 3.0 series locking plate, 12 holes straight sternum plate	
10.06.06.20011051	锁定 3.0 型系列 20 孔直形 左右式 3.0 series locking plate, 20 holes straight sternum plate	

分体式 板厚 2.3mm Split type, thickness 2.3mm





订货编码 Item No.	规格 Specification	图片 Product image
10.06.06.04019050	锁定 3.0 型系列 4 孔 T 形 左右式 3.0 locking series, 4 holes sternum plate	
10.06.06.06019050	锁定 3.0 型系列 6 孔 T 形 左右式 3.0 locking series, 6 holes sternum plate	
10.06.06.08019050	锁定 3.0 型系列 8 孔 T 形 左右式 3.0 series locking plate, 8 holes sternum plate	
10.06.06.10019150	锁定 3.0 型系列 10 孔 T 形 左右式 I 型 3.0 series locking plate, 10 holes sternum plate I	
10.06.06.10019250	锁定 3.0 型系列 10 孔 T 形 左右式 II 型 3.0 series locking plate, 10 holes sternum plate II	
10.06.06.12011050	锁定 3.0 型系列 12 孔直形 左右式 3.0 series locking plate, 12 holes straight sternum plate	
10.06.06.20011050	锁定 3.0 型系列 20 孔直形 左右式 3.0 series locking plate, 20 holes straight sternum plate	

### 胸肋骨板配套器械 Sternum Rib Plate Matching Instruments

标配 Standard



订货编码 Item No.	规格 Specification	数量 Quantity	图片 Product image
50.03.023.00	医用钻头 $\Phi 2.3$ (限位型) 6mm $\Phi 2.3$ medical drill bit (Limited type)	2	
50.03.024.00	医用钻头 $\Phi 2.3$ (限位型) 8mm $\Phi 2.3$ medical drill bit (Limited type)	2	
50.03.025.00	医用钻头 $\Phi 2.3$ (限位型) 10mm $\Phi 2.3$ medical drill bit (Limited type)	2	
50.03.026.00	医用钻头 $\Phi 2.3$ (限位型) 12mm $\Phi 2.3$ medical drill bit (Limited type)	2	
50.03.027.00	医用钻头 $\Phi 2.3$ (限位型) 14mm $\Phi 2.3$ medical drill bit (Limited type)	2	
50.03.028.00	医用钻头 $\Phi 2.3$ (限位型) 16mm $\Phi 2.3$ medical drill bit (Limited type)	2	
50.15.004.00	四角改锥 SW1.7 Quadrangle screwdriver	1	
50.03.004.00	导钻 $\Phi 2.3 \times 50$ mm Drill guide	2	
50.03.029.00	临时固定器 HC3.0 Temporary holder	4	

订货编码 Item No.	规格 Specification	数量 Quantity	图片 Product image
50.01.008.00	测深器 0-30mm Depth gauge	1	
50.03.006.00	经皮进钉导钻 $\Phi 3.0 \times 35\text{mm}$ Percutaneous drill guide	1	
50.01.003.00	直型 $\Phi 4.5$ II型 Straight quick coupling handle	1	
50.03.030.00	胸肋骨螺钉盒 Sternum & rib screw box	1	

订货编码 Item No.	规格 Specification	数量 Quantity	图片 Product image
50.03.013.00	持板加压撑开器 HC3.0 Plate holder compression spreader	1	
50.03.011.00	剪板器 L=190mm Plate cutter	2	
50.03.012.00	弯板器 L=200mm Plate bender	2	
50.03.031.00	胸肋骨器械箱 Sternum & Rib Instrument Box	1	

选配 Option

订货编码 Item No.	规格 Specification	图片 Product image
50.03.042.00	尖头复位钳 (小号) Probe reduction forceps (Small)	
50.03.043.00	尖头复位钳 (大号) Probe reduction forceps (Large)	
50.03.044.00	圆头持板钳 Round nose plate holder	
50.03.045.00	平头持板钳 Flat nose plate holder	

订货编码 Item No.	规格 Specification	图片 Product image
50.03.046.00	通用测深器 (0 ~ 30mm) Universal depth gauge	
50.02.010.00	多功能塑形钳 Multi-functional moulding forcep	

## 钛缆 Titanium Cable

**18.10.21.11008** 扁接头（锁扣） $\Phi 1.1 \times 8 \text{mm}$   
 Flat connector (Cable lock)

- 四爪扁接头可以把持住骨面，确保紧缆过程中位置的相对稳定

The four-claw flat connector can hold the bone surface stably and ensure the relative stability of the position during the tightening process.



**18.10.12.10600** 弯引针钛缆  $\Phi 1.0 \times 600 \text{mm}$   
 Curved needle cable

- 钛缆由多股钛丝捻制而成，柔韧性好，可以理想的拉紧和固定  
Titanium cable is made of multi-strand titanium wires, which is flexible and ideal to realize stable fixation.

- 钛缆配合扁接头固定，相对于硬钢丝的打圈和扭结更稳固，减少手术时间  
Titanium cable together flat connector for fixation is more stable than hard cable, and without any ringing and twisting, which reduces the operation time efficiently.



## 产品特点 Features

- 钛缆随着所含钛丝股数的增多，表面积增大，具有很强的抗应变能力，可以理想的拉紧和固定，完全淘汰了打圈和扭结等一些硬钢丝的特点。

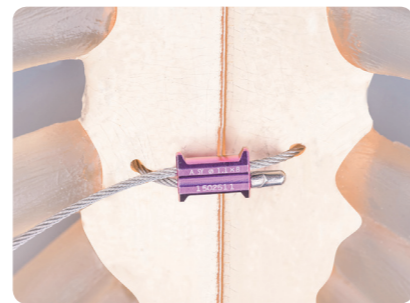
The surface area of the titanium cable increase by the number of the wire increasing. The cable with the superior ability of strain resistance and can be tightened and fixed well compared with the hard steel wire.



弯引针直接引缆，方便手术操作  
 The curved needle can guide the cable directly, which is easy to operate.



扁接头锁紧状态  
 The locked flat connector



## 配套器械 Matching instruments

**50.06.007.00** 扁接头压紧钳  
 Flat connector crimper



压紧状态保持 10 秒以上  
 Keep compressing over 10 seconds



- 一次性压紧扁接头，无松脱现象  
钛合金材质，轻便  
有保险装置，确保扁接头压到位后，保险装置弹开

Once the flat connector is compressed, there will be no losing phenomenon.  
 Titanium alloy, light weight.  
 With insurance device. The crimper ensures the flat connector be thoroughly locked.

**50.06.006.00** 剪缆钳  
 Cable cutter

- 沿扁接头边缘剪断钛缆，尽量一次性剪断  
重复剪缆，需垫纱布防止钛屑散落

Cut the titanium cable along the edge of cable lock. Please cut one-time. If cut again, must lay gauze to avoid scraps of the titanium cable



剪缆操作示意  
 Operation diagram for cable cutting





## 紧缆枪 Tighten cable tool

**50.06.016.00** 前压缆锁 Φ1.0  
 Front pressure cable lock Φ1.0



**50.06.017.00** 后压缆锁 Φ1.0  
 Back pressure cable lock Φ1.0



**50.06.001.00** 紧缆器 (单向)  
 Tighten cable tool (one direction)

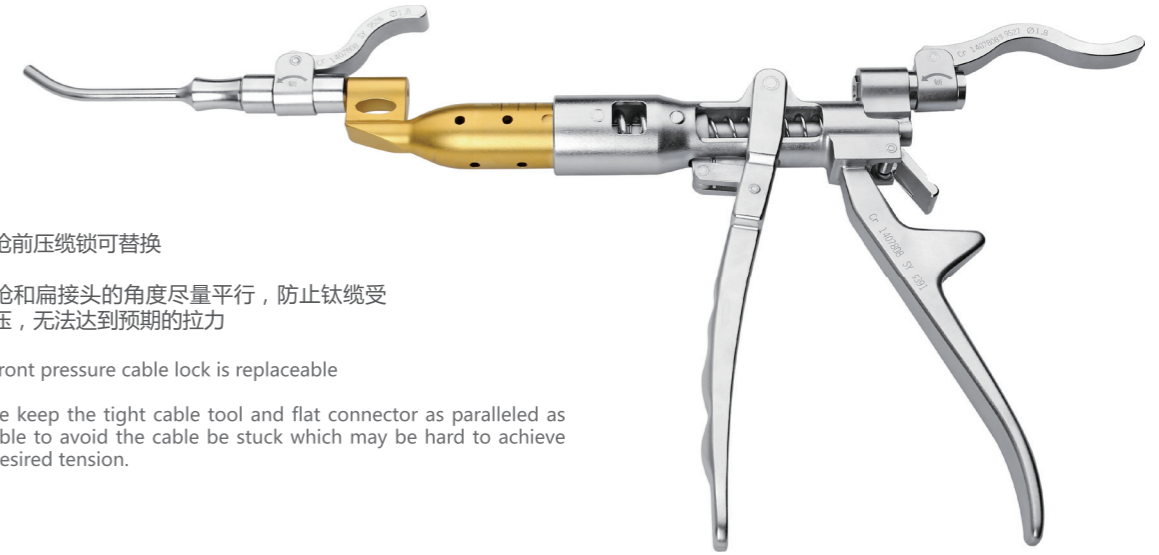


## 特点 Features

- 紧缆枪前压缆锁可替换
- 紧缆枪和扁接头的角度尽量平行，防止钛缆受到卡压，无法达到预期的拉力

The front pressure cable lock is replaceable

Please keep the tight cable tool and flat connector as paralleled as possible to avoid the cable be stuck which may be hard to achieve the desired tension.

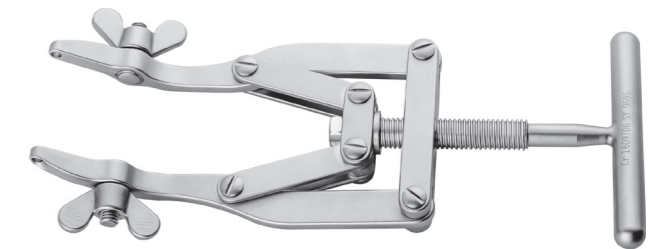


- 单向收缆  
Please tighten the cable in one direction



## 选配 Option

**50.06.023.00** 紧缆钳 (双向)  
 Cable tighten tool (Two-direction)



- 双向收缆  
Cable tighten tool (Two-direction)

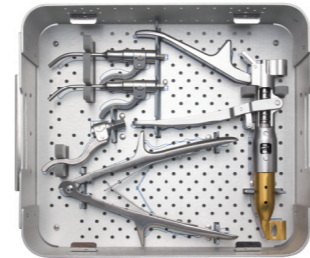
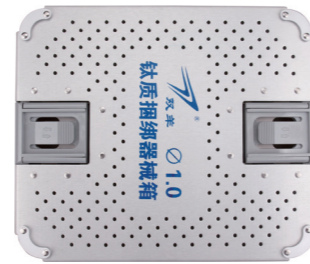
50.06.018.00 持针钳  
Needle holder



钛缆配套器械 Titanium Cable Matching Instruments

标配 Standard

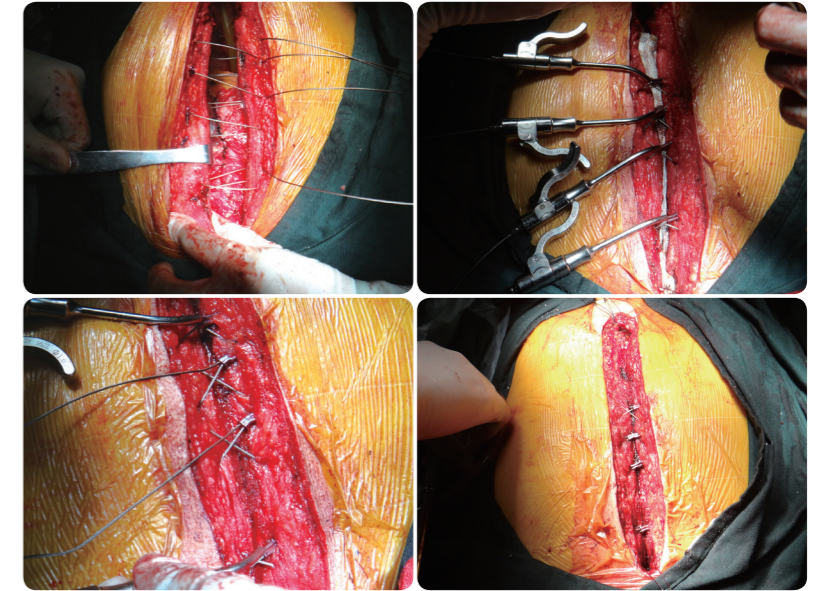
订货编码 Item No.	型号规格 Specification	数量 Quantity
50.06.016.00	Φ1.0 前压缆锁 Φ1.0 front pressure cable lock	4
50.06.017.00	Φ1.0 后压缆锁 Φ1.0 back pressure cable lock	1
50.06.001.00	紧缆器 (单向收缆) Cable tighten tool (One direction)	1
50.06.007.00	扁接头压紧钳 Flat connector crimper	1
50.06.006.00	剪缆钳 Cable cutter	1
50.06.019.00	Φ1.0 钛质捆绑器械箱 Titanium binding instrument box Φ1.0	1



选配 Option

订货编码 Item No.	型号规格 Specification	数量 Quantity
50.06.018.00	持针钳 Needle holder	
50.06.023.00	紧缆钳 (双向收缆) Tighten cable tool (two-direction)	

钛缆关胸手术 Titanium cable thoracic surgery



\*手术实拍照片  
Clinical operation photos