

Edition 2026



米娜[®] MINA GBR Screw & Tack & Tenting System



MINA GBR System



- **GBR(guided bone regeneration)**引导骨再生技术, 指利用屏障膜特性, 阻止来自周围软组织的成纤维细胞让骨面处的成骨细胞有足够的时间增殖, 最终达到组织再生、定向修复的目的
- GBR手术成功的关键, 在于为细胞提供屏障作用、帐篷作用、支架作用、稳定和保护作用。手术过程中, 需将植骨材料填充到需要增量的区域, 便于后期成骨。并且利用屏障膜隔绝植骨材料与外部组织的直接接触、提供可供成骨及塑性的空间。为避免屏障膜塌陷及移位等情况, 影响后期成骨效果, 膜的固定就成为一个至关重要的问题
- **MINA GBR System**为GBR手术提供了一种较好的解决方案, 其中包含了三款不同功能的固定用钉、两种不同规格的钛网以及相关配套工具。固定用的钛钉、膜钉、帐篷钉可以很好的帮助屏障膜维持隔离空间的独立和稳定性, 避免植骨材料的浪费, 提高成骨率

- **GBR (guided bone regeneration)** technique refers to utilizing the characteristics of the barrier membrane to prevent fibroblasts from the surrounding soft tissues, allowing osteoblasts on bone surface to have sufficient time to proliferate, and finally achieving the purposes of tissue regeneration and targeted repair.
- The key to the success of GBR surgery lies in providing barrier, tenting, scaffolding function, as well as stabilization and protection functions for cells. During the surgical process, bone graft materials need to be filled into the areas that require augmentation to facilitate bone formation in later stage. Moreover, the barrier membrane is used to isolate the direct contact between the bone graft materials and external tissues and to provide a space available for bone formation and shaping. To avoid situations such as collapse or displacement of the barrier membrane, which may affect the bone formation effect in the later stage, the fixation of the membrane becomes a crucial issue.
- **The MINA GBR System** provides a relatively good solution for GBR surgery. It includes three types of fixing screws with different functions, two different specifications of titanium meshes and related supporting tools. The fixing tenting can effectively help the barrier membrane maintain the independence and stability of the isolated space, avoid the waste of bone graft materials and improve bone formation rate.

MINA GBR 优势

MINA GBR Advantages

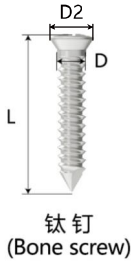
- 可以固定屏障膜, 防止骨移植材料流失, 隔绝外部环境, 避免感染
- 增强屏障膜塑形能力, 提高成骨空间稳定性
- MINA膜钉钛钉分为多种规格不同型号, 轻松应对不同临床情况
- 工具箱分区设计, 方便拿取;配套的工具配件, 便于处理各种临床情况

- It can fix the barrier membrane, prevent the loss of bone graft materials, isolate external environment and avoid infections.
- It enhances the shaping ability of the membrane and improves the stability of bone formation space.
- MINA tack and screw are available in multiple specifications and different models, which can easily cope with different clinical situations.
- The kit is designed with compartments for convenient access; the matching tool accessories are convenient for dealing with various clinical situations.



MINA GBR 1.0尝鲜套装(Screw/Tack/Tenting) System

► 24颗螺纹钛钉 ► 20颗敲击膜钉 ► 9颗帐篷钉 ► 2支定位钻 ► 2支钛钉/帐篷钉螺丝刀 ► 1支膜钉持钉器 ► 1个手动手柄 ► HDPTFE-MEM随机型号
► 24 Bone screws ► 20 Bone tacks ► 9 Tenting screw ► 2 Guide drills ► 2 Screw drivers ► 1 Tack holder ► 1 Handle ► HDPTFE-MEM random model



型号 Model	规格Spec(mm)			数量 Num
	D	L	D2	
S-140-040	1.4	4.0	2.66	4
S-140-060	1.4	6.0	2.66	2
S-140-080	1.4	8.0	2.66	4
S-140-100	1.4	10.0	2.66	2
S-160-040	1.6	4.0	2.66	4
S-160-060	1.6	6.0	2.66	2
S-160-080	1.6	8.0	2.66	4
S-160-100	1.6	10.0	2.66	2



型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
B-100-030	0.7	3.0	2.5	0.7	10
B-100-040	0.7	4.0	2.5	0.7	10



型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
T-150-070	1.5	7.0	5	1	3
T-150-090	1.5	9.0	5	1	3
T-150-110	1.5	11.0	5	1	3

BHD01

Tack driver
膜钉螺丝刀

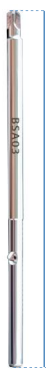
BTA01



70mm

Screw (Tenting) driver
钛钉(帐篷钉)螺丝刀

BSA03



60mm

BSA01



20mm

Guide drill
定位钻

GPD12 GPD14



8mm

28mm

HDPTFE-MEM®



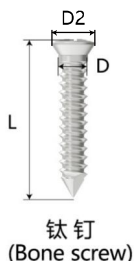
型号随机

MINA GBR1.0套装 (Screw/Tack/Tenting) System

► 48颗螺纹钛钉 ► 20颗敲击膜钉 ► 6颗帐篷钉 ► 5片钛网 ► 3支定位钻 ► 3支钛钉/帐篷钉螺丝刀 ► 2支膜钉持钉器 ► 1个手动手柄 ► 1个牙骨锤
► 48 Bone screws ► 20 Bone tacks ► 6 Tenting screw ► 5 Titanium meshes ► 3 Guide drills ► 3 Screw drivers ► 2 Tack holder ► 1 Handle ► 1 Mallet



BHD01



钛钉
(Bone screw)

型号 Model	规格Spec(mm)			数量 Num
	D	L	D2	
S-140-040	1.4	4.0	2.66	6
S-140-060	1.4	6.0	2.66	6
S-140-080	1.4	8.0	2.66	6
S-140-100	1.4	10.0	2.66	6
S-160-040	1.6	4.0	2.66	6
S-160-060	1.6	6.0	2.66	6
S-160-080	1.6	8.0	2.66	6
S-160-100	1.6	10.0	2.66	6



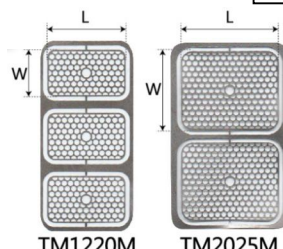
膜钉
(Bone tack)

型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
B-100-030	0.7	3.0	2.5	0.7	10
B-100-040	0.7	4.0	2.5	0.7	10



帐篷钉
(Tenting screw)

型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
T-150-070	1.5	7.0	5	1	2
T-150-090	1.5	9.0	5	1	2
T-150-110	1.5	11.0	5	1	2



钛网 (Titanium mesh)

型号 Model	规格Spec(mm)		数量 Num
	W	L	
TM1220M	12	20	3
TM2025M	20	25	2

钛网厚度0.085mm (±0.005mm)
Thickness of titanium mesh 0.085mm (±0.005mm)

Mallet
牙骨锤



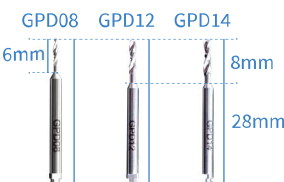
Tack holder
膜钉持钉器



Screw (Tenting) driver
钛钉(帐篷钉)螺丝刀

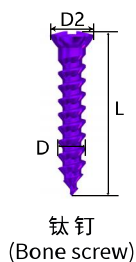


Guide drill
定位钻



MINA GBR2.0 Pro 套装(Screw/Tack/Tenting) System

► 48颗螺纹钛钉 ► 20颗敲击膜钉 ► 9颗帐篷钉 ► 3支定位钻 ► 3支钛钉/帐篷钉螺丝刀 ► 2支膜钉持钉器 ► 1个手动手柄 ► 1个牙骨锤 ► 5片钛网 ► 3支滋养孔钻
 ► 48 Bone screws ► 20 Bone tacks ► 9 Tenting screw ► 3 Guide drills ► 3 Screw drivers ► 2 Tack holder ► 1 Handle ► 1 Mallet ► 5 Titanium meshes ► 3 Nurturing hole drilling
 ► HDPTFE-MEM随机型号 ► HDPTFE-MEM random model



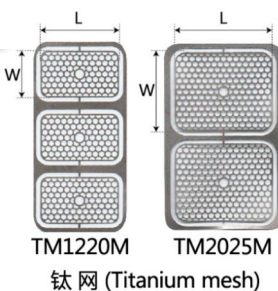
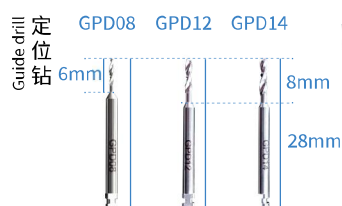
型号 Model	规格Spec(mm)			数量 Num
	D	L	D2	
S-140-040	1.4	4.0	2.66	4
S-140-060	1.4	6.0	2.66	6
S-140-080	1.4	8.0	2.66	4
S-140-100	1.4	10.0	2.66	6
S-140-120	1.4	12.0	2.66	4
S-160-040	1.6	4.0	2.66	4
S-160-060	1.6	6.0	2.66	6
S-160-080	1.6	8.0	2.66	4
S-160-100	1.6	10.0	2.66	6
S-160-120	1.6	12.0	2.66	4



型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
B-100-030	0.7	3.0	2.5	0.7	10
B-100-040	0.7	4.0	2.5	0.7	10

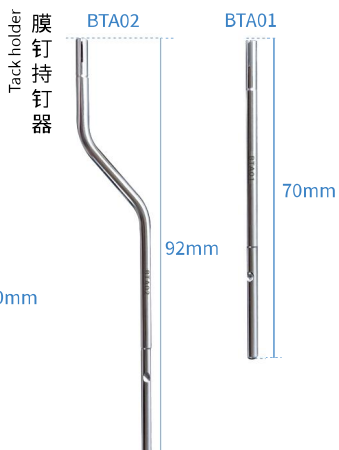
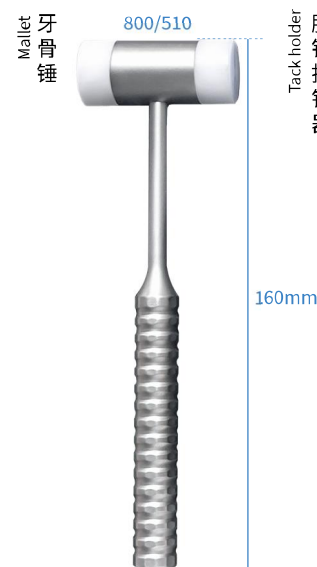


型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
T-150-070	1.5	7.0	5	1	3
T-150-090	1.5	9.0	5	1	3
T-150-110	1.5	11.0	5	1	3



型号 Model	规格Spec(mm)		数量 Num
	W	L	
TM1220M	12	20	3
TM2025M	20	25	2

钛网厚度0.085mm (±0.005mm)
 Thickness of titanium mesh 0.085mm (±0.005mm)



MINA GBR (1.0版)-(2.0Pro)-(尝鲜版)配置对比图



GBR1.0 (74颗钉)

GBR2.0Pro (77颗钉)

GBR尝鲜版 (53颗钉)

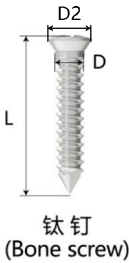
名称	型号	GBR1.0	GBR2.0Pro	GBR尝鲜版
钛钉	S-140-040	√ 六颗	√ 彩色四颗	√ 四颗
	S-140-060	√ 六颗	√ 彩色六颗	√ 两颗
	S-140-080	√ 六颗	√ 彩色四颗	√ 四颗
	S-140-100	√ 六颗	√ 彩色六颗	√ 两颗
	S-140-120	✗	√ 彩色四颗	✗
	S-160-040	√ 六颗	√ 彩色四颗	√ 四颗
	S-160-060	√ 六颗	√ 彩色六颗	√ 两颗
	S-160-080	√ 六颗	√ 彩色四颗	√ 四颗
	S-160-100	√ 六颗	√ 彩色六颗	√ 两颗
	S-160-120	✗	√ 彩色四颗	✗
膜钉	B-100-030	√ 十颗	√ 彩色十颗	√ 十颗
	B-100-040	√ 十颗	√ 彩色十颗	√ 十颗
帐篷钉	T-150-070	√ 两颗	√ 三颗	√ 三颗
	T-150-090	√ 两颗	√ 三颗	√ 三颗
	T-150-110	√ 两颗	√ 三颗	√ 三颗
钛网	TM1220M	√	√	✗
	TM2025M	√	√	✗
定位钻	GPD08	√	√	✗
	GPD12	√	√	√
	GPD14	√	√	√
钛钉/帐篷钉 螺丝刀	BSA01	√	√	√
	BSA02	√	√	✗
	BSA03	√	√	√
膜钉持钉器	BTA01	√	√	√
	BTA02	√	√	✗
蓝色手柄	BHD01	√	√	√
牙骨锤	800/510	√	√	✗
滋养孔钻	N104	✗	√	✗
	N124	✗	√	✗
	N144	✗	√	✗
	不可吸收膜一张 (随机)	✗	√	√

MINA 钛钉套装 (Screw) System

► 56颗螺纹钛钉 ► 2片钛网 ► 2支定位钻 ► 3支钛钉/帐篷钉螺丝刀 ► 1个手动手柄
► 56 Bone screws ► 2 Titanium meshes ► 2 Guide drills ► 3 Screw drivers ► 1 Handle

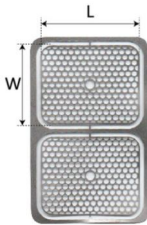


BHD01



钛钉
(Bone screw)

型号 Model	规格Spec(mm)			数量 Num
	D	L	D2	
S-140-040	1.4	4.0	2.66	6
S-140-060	1.4	6.0	2.66	8
S-140-080	1.4	8.0	2.66	8
S-140-100	1.4	10.0	2.66	6
S-160-040	1.6	4.0	2.66	6
S-160-060	1.6	6.0	2.66	8
S-160-080	1.6	8.0	2.66	8
S-160-100	1.6	10.0	2.66	6



TM2025M
钛网
(Titanium mesh)

型号 Model	规格Spec(mm)		数量 Num
	W	L	
TM2025M	20	25	2

钛网厚度0.085mm (±0.005mm)
Thickness of titanium mesh 0.085mm (±0.005mm)

钛钉 (帐篷钉) 螺丝刀
Screw (Tenting) driver



定位钻
Guide drill

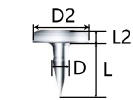


MINA 膜钉/帐篷钉套装 (Tack/Tenting) System

- 20颗敲击膜钉 ► 6颗帐篷钉 ► 3片钛网 ► 2支定位钻 ► 3支钛钉/帐篷钉螺丝刀 ► 2支膜钉持钉器 ► 1个手动手柄 ► 1个牙骨锤
► 20 Bone tacks ► 6 Tenting screws ► 3 Titanium meshes ► 2 Guide drills ► 3 Screw tenting drivers ► 2 Tack holder ► 1 Handle ► 1 Mallet

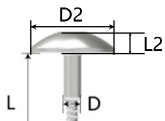


BHD01



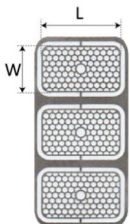
膜钉
(Bone tack)

型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
B-100-030	0.7	3.0	2.5	0.7	10
B-100-040	0.7	4.0	2.5	0.7	10



帐篷钉
(Tenting screw)

型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
T-150-070	1.5	7.0	5	1	2
T-150-090	1.5	9.0	5	1	2
T-150-110	1.5	11.0	5	1	2

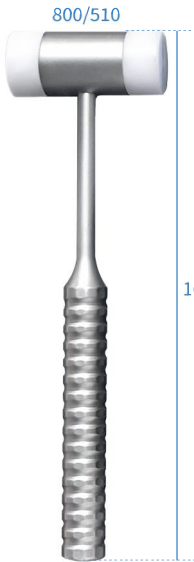


TM1220M
钛网
(Titanium mesh)

型号 Model	规格Spec(mm)		数量 Num
	W	L	
TM1220M	12	20	3

钛网厚度0.085mm (±0.005mm)
Thickness of titanium mesh 0.085mm (±0.005mm)

Mallet
牙骨锤



Tack holder
膜钉持钉器



Screw (Tenting) driver
钛钉 (帐篷钉) 螺丝刀



Guide drill
定位钻



MINA 帐篷钉套装 (Tenting) System

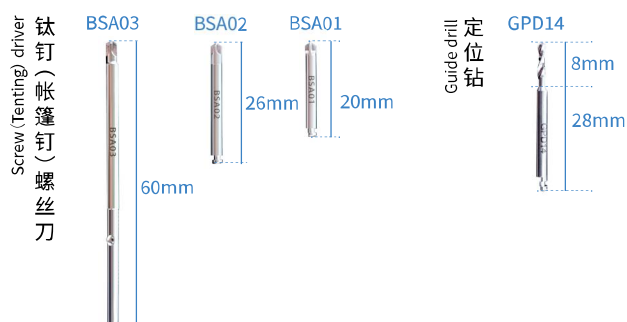
► 20/30颗帐篷钉 ► 3支钛钉/帐篷钉螺丝刀 ► 1支定位钻 ► 1个手动手柄
 ► 20/30 Tenting screws ► 3 Screw tenting drivers ► 1 Guide drill ► 1 Handle



20颗装
Packed with 20 pieces



型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
T-150-070	1.5	7.0	5	1	7
T-150-090	1.5	9.0	5	1	7
T-150-110	1.5	11.0	5	1	6



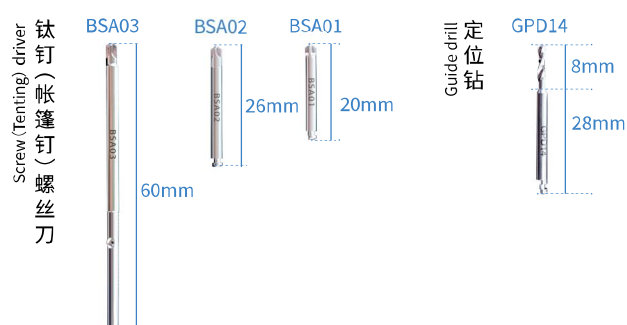
BHD01



30颗装
Packed with 30 pieces



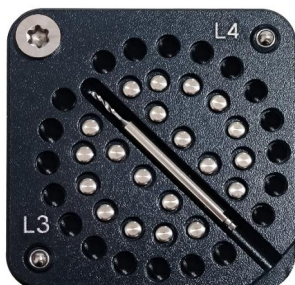
型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
T-150-070	1.5	7.0	5	1	10
T-150-090	1.5	9.0	5	1	10
T-150-110	1.5	11.0	5	1	10



BHD01

MINA 膜钉套装 (Tack-M) System

► 20/40颗敲击膜钉 ► 1支定位钻 ► 1支膜钉持钉器 ► 1个牙骨锤
► 20/40 Bone tacks ► 1 Guide drill ► 1 Screw holder ► 1 Mallet



膜钉
(Bone tack)

20颗装

Packed with 20 pieces

型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
B-100-030	0.7	3.0	2.5	0.7	10
B-100-040	0.7	4.0	2.5	0.7	10

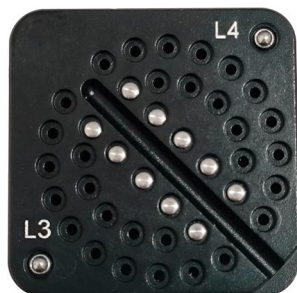
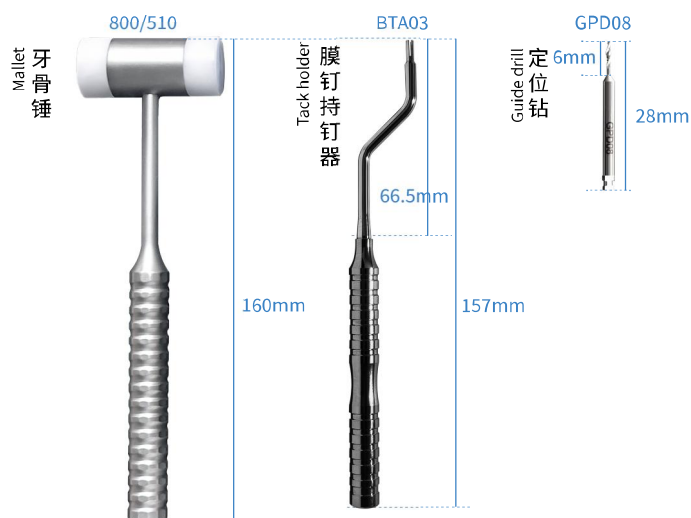


膜钉
(Bone tack)

40颗装

Packed with 40 pieces

型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
B-100-030	0.7	3.0	2.5	0.7	20
B-100-040	0.7	4.0	2.5	0.7	20

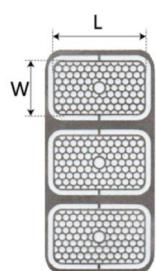


膜钉
(Bone tack)

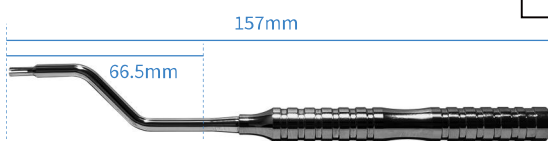
10颗装

Packed with 10 pieces

型号 Model	规格Spec(mm)				数量 Num
	D	L	D2	L2	
B-100-030	0.7	3.0	2.5	0.7	5
B-100-040	0.7	4.0	2.5	0.7	5



TM1220M
钛网
(Titanium mesh)



BTA03
膜钉持钉器
(Tack holder)

型号 Model	规格Spec(mm)		数量 Num
	W	L	
TM1220M	12	20	3

钛网厚度0.085mm (±0.005mm)
Thickness of titanium mesh 0.085mm (±0.005mm)

MINA Tack-m (20颗装) - (40颗装) - (10颗装) 配置对比图



名称	型号	TACK-M 20颗装	TACK-M 40颗装	TACK-M 10颗装
膜钉	B-100-030	✓ 十颗	✓ 二十颗	✓ 五颗
	B-100-040	✓ 十颗	✓ 二十颗	✓ 五颗
钛网	TM1220A	✗	✗	✓
定位钻	GPD08	✓	✓	✗
膜钉持钉器(弯)	BTA03	✓	✓	✓
牙骨锤	800/510	✓	✓	✗

GBR配套工具 (可单独购买)

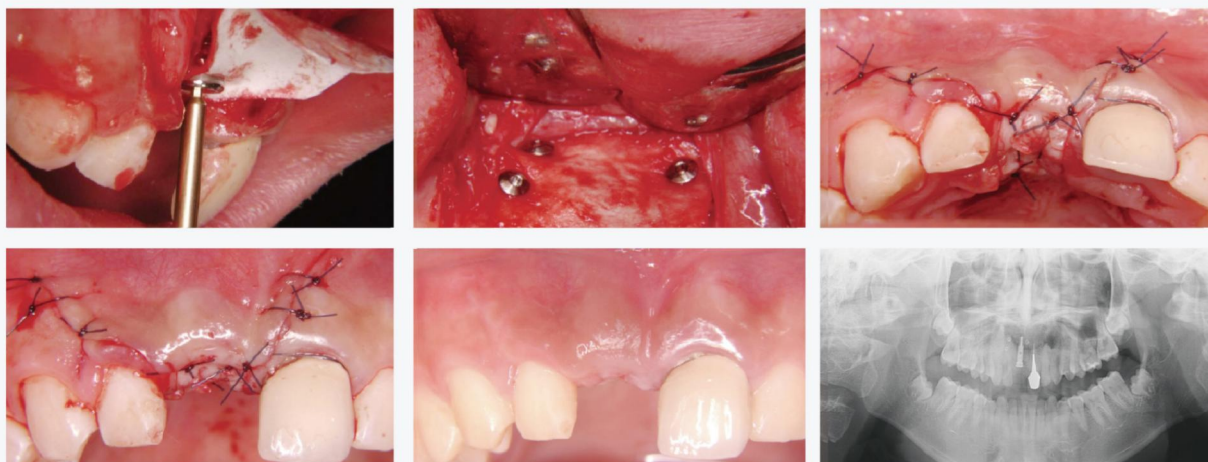
产品名称 Product Name	型号 Model	规格Spec(mm)	使用说明 Instructions for Use
Ø0.8定位钻 Ø0.8 Guide drill	GPD08	D0.8 x L28	配合膜钉使用 Used in combination with bone tack
Ø1.2定位钻 Ø1.2 Guide drill	GPD12	D1.2 x L28	配合D1.4/D1.6钛钉、帐篷钉使用 Used in combination with D1.4/D1.6 bone screw or tenting screw
Ø1.4定位钻 Ø1.4 Guide drill	GPD14	D1.4 x L28	配合D1.4/D1.6钛钉、帐篷钉使用 Used in combination with D1.4/D1.6 bone screw or tenting screw
Ø1.0滋养孔钻 Ø1.0 Nurturing hole drilling	N104	D1.0 x L29.5	用于定位钻孔, 为骨生长提供血供 Used for positioning drilling and providing blood supply for bone growth
Ø1.2滋养孔钻 Ø1.2 Nurturing hole drilling	N124	D1.2 x L29.5	用于定位钻孔, 为骨生长提供血供 Used for positioning drilling and providing blood supply for bone growth
Ø1.4滋养孔钻 Ø1.4 Nurturing hole drilling	N144	D1.4 x L29.5	用于定位钻孔, 为骨生长提供血供 Used for positioning drilling and providing blood supply for bone growth
钛钉(帐篷钉)螺丝刀(短) Bone screw (tenting) driver (short)	BSA01	L20	用于连接种植机手柄, 进行钛钉/帐篷钉取出、植入等操作 Connect implant machine handle for removing or implanting screw/tenting screw etc
钛钉(帐篷钉)螺丝刀(长) Bone screw (tenting) driver (long)	BSA02	L26	用于连接种植机手柄, 进行钛钉/帐篷钉取出、植入等操作 Connect implant machine handle for removing or implanting screw/tenting screw etc
钛钉(帐篷钉)螺丝刀(手动) Bone screw (tenting) driver (manual)	BSA03	L60	用于连接手动手柄, 进行钛钉/帐篷钉取出、植入等操作 Connect handle for removing or implanting screw/tenting screw etc
膜钉持钉器(直) Tack holder (straight)	BTA01	L70	用于连接手动手柄, 进行膜钉取出、植入等操作 Connect handle for removing or implanting bone tack etc
膜钉持钉器(弯) Tack holder (bent)	BTA02	L92	用于连接手动手柄, 进行膜钉取出、植入等操作 Connect handle for removing or implanting bone tack etc
膜钉持钉器弯(自带手柄) Tack holder bent (handle comes with)	BTA03	L66.5	自带手柄, 进行膜钉取出、植入等操作 Handle comes with for removing or implanting bone tack etc
膜钉持钉器直(自带手柄) Tack holder straight (handle comes with)	BTA04(选配)	L74	自带手柄, 进行膜钉取出、植入等操作 Handle comes with for removing or implanting bone tack etc
手动手柄 Handle	BHD01	-	手动手柄 Handle
牙骨锤 Mallet	800/510	-	敲击锤, 植入膜钉 Knocking, implanting tack

临床病例 Clinical Case

使用钛钉、膜钉的GBR手术案例
GBR Surgery Cases Using Bone screw,tack

CASE 01 Bone Tack

MINA
MINIMA DENTAL



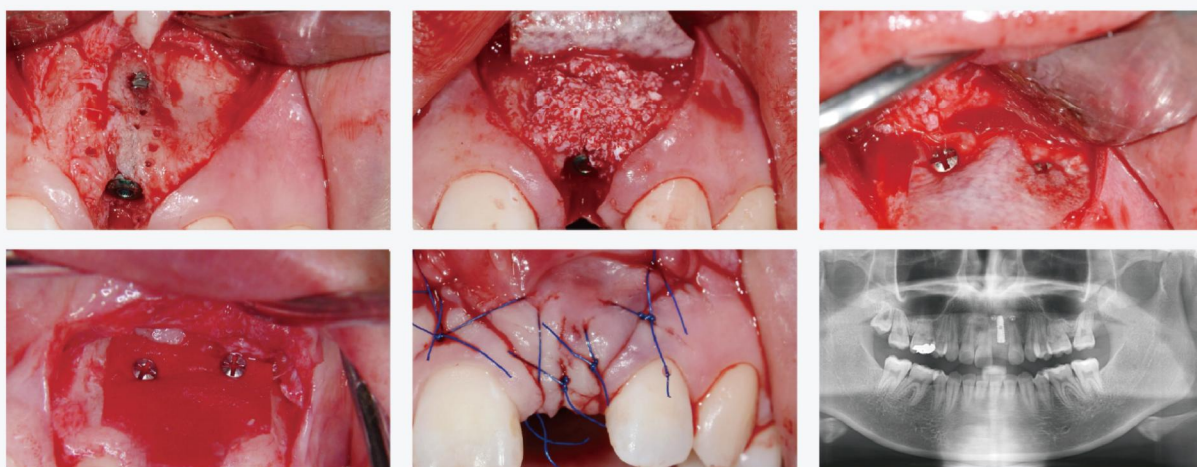
CASE 02 Bone Screw

MINA
MINIMA DENTAL



CASE 03 Bone Screw

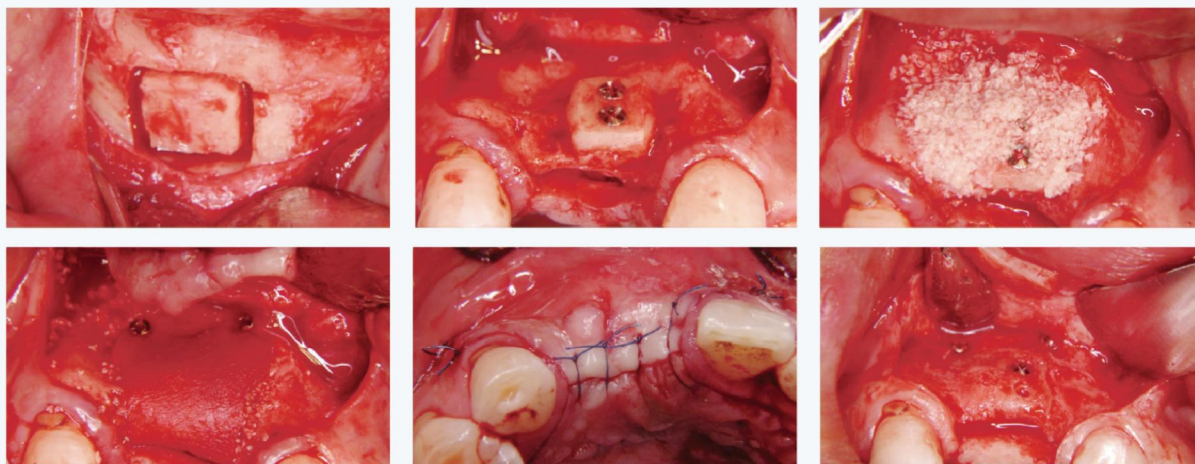
MINA
MINIMA DENTAL



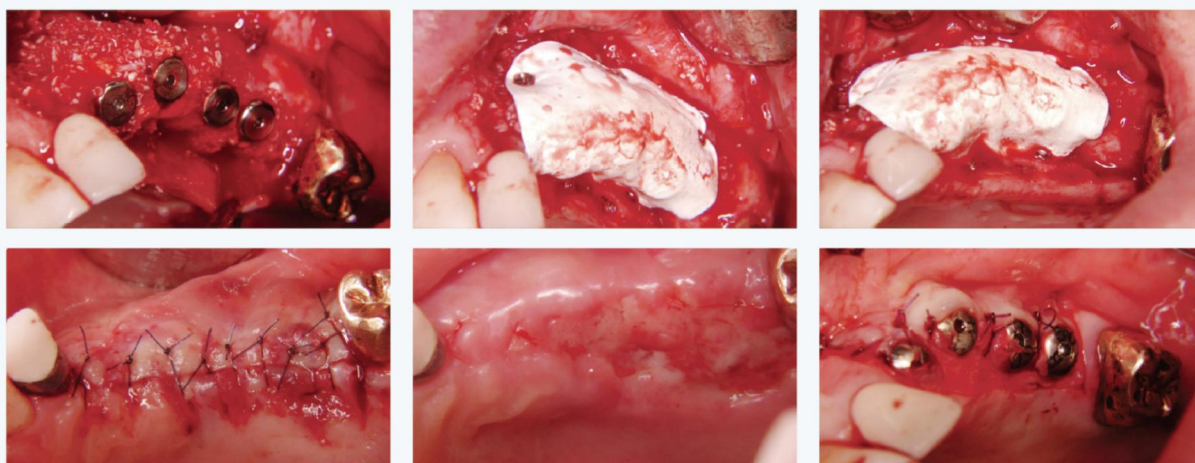
临床病例 Clinical Case

使用钛钉、膜钉的GBR手术案例
GBR Surgery Cases Using Bone screw,tack

CASE 04 Bone Screw-Block Bone



CASE 05 Bone Screw



CASE 06 Bone Screw-ridge split

