

**2.7mm Forefoot
Surgical Technique**

Astrolabe recognizes that proper surgical procedures and techniques are responsibilities of medical professionals.

The following guidelines are provided for information purposes only. Each surgeon must evaluate the appropriateness of the procedures based on their medical training, experience and condition of the patient. Before using the system, the surgeon must consult the operating instructions for additional warnings, precautions, indications, contraindications and adverse effects.

2.7mm Forefoot System



2.7mm Forefoot Plates



**LOCKING PLATE
'UNIVERSAL'**
10mm - 30mm



**LOCKING PLATE
'SPACER'**
no spacer - 8 mm



**LOCKING PLATE
'RECONSTRUCTION'**
35mm - 40mm



**LOCKING PLATE
'MP ARTHRODESIS'**
28mm - 45mm

2.7mm Forefoot Screws Set



**2.7mm
CORTICAL SCREW**
8mm - 30mm
2mm increments



**2.7mm
LOCKING SCREW**
8mm - 30mm
2mm increments



**2.0mm
CORTICAL SCREW
REMOVABLE INSERTER**
11mm - 30mm



**2.5mm x 3.2mm
CANNULATED COMPRESSION
SCREW**
8mm - 24mm (1mm increments)
26mm- 30mm (2mm increments)



**3.0mm x 3.9mm
CANNULATED HIGH
COMPRESSION SCREW**
10mm - 30mm (1mm increments)



MINI STAPLES
90°/ 65°
8mm x 8mm
8mm x 10mm
10mm x 10mm
10mm x 12mm

2.7mm Forefoot System



2.7 mm
Cortical/ Locking

Ø2.0 mm CORTICAL SCREW, REMOVABLE INSERTER



- Self-drilling and self-taping compression screws
- Used for the fixation of small bone fragments
- Oblique distal osteotomy of the metatarsals (Weil)
- Chevron distal osteotomy
- Various types of osteotomies in the feet and hands

2.5mm x 3.2mm & 3.0mm x 3.9mm CANNULATED COMPRESSION SCREW

Fixation of small bones



- Shoulder fractures, osseous ligament and tendon avulsion of the proximal humerus and glenohumeral joint
- Elbow fractures of the distal humerus, proximal ulna and proximal radius
- Wrist fractures, styloid avulsions and fixation of radius and ulna fragments
- Fractures and arthrodesis of carpal bones
- Transverse and spiral fractures of the phalanges, metacarpal and carpal bones
- Phalanges, metacarpal and carpal bones arthrodesis and osteotomies
- Foot fractures, arthrodesis and correction osteotomies of phalanges, tarsal and metatarsal bones

MINI STAPLES



- Mini-staple with 2 angles: 63 ° and 90 °
- ideal for fixation of Akin osteotomies

2.7mm Forefoot System

LOCKING PLATE 'UNIVERSAL'



- Universal 4-hole plates to stabilize a variety of arthrodesis and osteotomies;
- This multifunctional titan plate is useful for base osteotomies, e.g. Closed-Wedge, Open-Wedge and Crescentric;
- This rigid plate is also suitable for Lisfranc fusions, MPJ fusions or revisions of non-unions.

LOCKING PLATE 'SPACER'



- Plates anatomically pre-molded with spacers available from 0 to 8 mm,
- The different spacers allow precise correction of the intermetatarsal angle, as well as the stabilization of base osteotomies;
- The neutral plate (no spacer) is used in closed wedge osteotomies and "Crescentric" in MT1

LOCKING PLATE 'MP ARTHRODESIS'



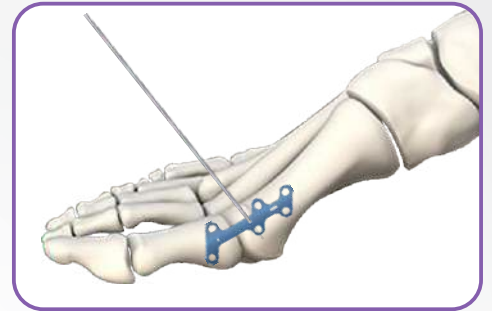
- Plate designed for stabilization of arthrodesis in the MP joints;
- Suitable for interpositional arthrodesis in the MP joint and for revisions in case of non-union (Ex. Keller-Brandes);
- Plate with 10° valgus angle and 3 sizes available: S, M and L;
- Size S is used for primary fusions.
- M / L sizes are used for revision and / or fixation with bone graft, after Keller procedure.
- The central holes of the plate facilitate the fixation of bone graft.

LOCKING PLATE 'RECONSTRUCTION'

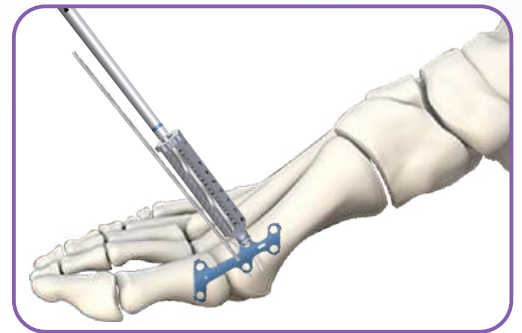


- High stability due to the locked screws, which are crosswise inserted in the plate;
- 2 different models: 35mm and 40mm;
- The plates with multiple holes are designed for the reconstruction of the arthrodeses

- After choosing the appropriate plate, if necessary, it can be moulded (item 20) to better fit the patient's anatomy and provisionally fixed in place with a Kirschner Wire.



- Once the plate is temporarily fixed, attach the Threaded Graduated Drill Guide (item 10 - **it is mandatory if your option is to use Locking Screws**) on the plate and proceed with a perpendicular drilling, using the Drill Bit (item 01/03/04).

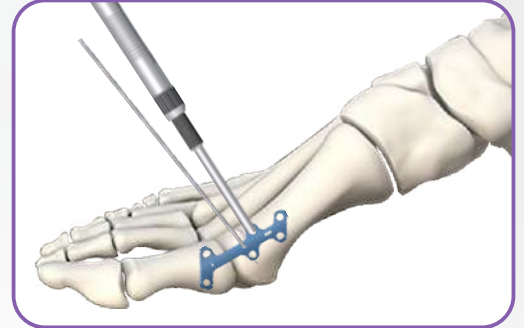


- If the option is to use Cortical Screws (non-locking) the Drill Bit can be conducted through the holes of the plates without a Drill Guide.

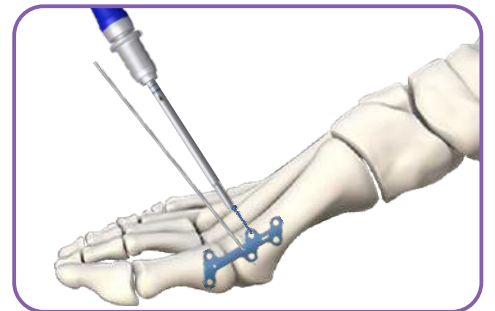
- **Note:** Avoid excessive modeling of the plate as this can compromise its locking mechanisms. When using plate bender (item 20), holes adjacent to the bender can lose the ability to lock. If this occurs, a Cortical Screw must be used.

Surgical Technique

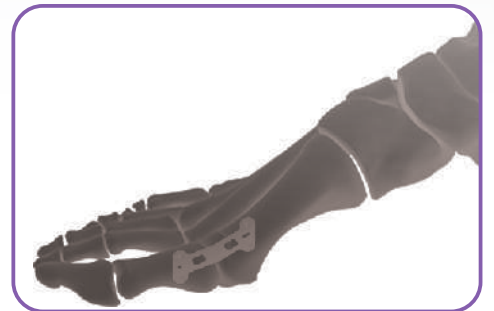
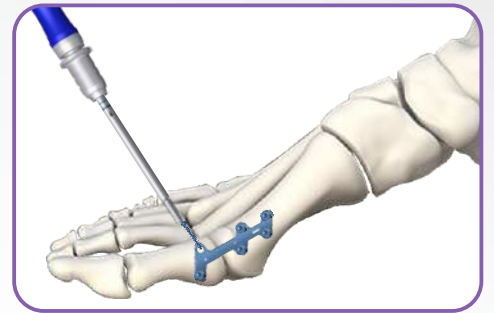
- The reading of the screw measurement can be made directly on the Threaded Graduated Drill Guide (item 10) or by using the Depth Gauge (item .



- Use the Shaft Screwdriver (item 11/ 12) properly attached to the Handle (item 08) and insert the screw.



- The procedure of placement of the screws is repeated as many times as necessary, for optimal fixation of the plate.
- Check the final position of the screws through the image intensifier to check if final position is according to initial intention.



01

Drill Bit, Ø2.0 x 120 mm, Stop 50 mm,
AO Coupling, Blue Code
Cod.: 09.01.03.20020



02

Drill Bit, Cannulated, Øext. 2.0 x Øint. 1.2 x 95 mm, twist length 26 mm
AO Coupling
Cod.: 09.01.04.20095



03

Drill Bit, Ø1.5 x 70 mm, Stop 20 mm,
Stryker Coupling
Cod.: 09.01.07.15010



04

Drill Bit, Ø2.0 x 125 mm, Stop 50 mm,
Stryker Coupling, Barrel Ø4.5 mm,
Blue Code
Cod.: 09.01.07.20021



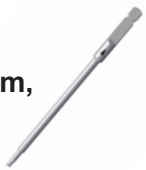
05

Drill Bit, Cannulated, Øext. 2.0 x Øint. 1.2 x 95 mm, twist length 24 mm
Cod.: 09.01.10.20095



06

**Countersink, Cannulated, for
Compression Screw Ø2.5 x Ø3.2 mm,**
AO Coupling
Cod.: 09.02.02.02532



07

**Countersink, Cannulated, for High
Compression Screw Ø3.0 x Ø3.9 mm,**
AO Coupling
Cod.: 09.02.02.03039



08

Handle, Cannulated,
AO Coupling, 120 mm, Blue
Cod.: 09.04.04.12010



09

Handle, Cannulated,
AO Coupling, 120 mm, Red
Cod.: 09.04.04.12040



10

Graduated Drill Guide,
Ø2.0 x 40 mm, Threaded,
Blue Code
Cod.: 09.05.14.04020



11

Shaft Screwdriver, Torx-6, 90 mm,
AO Coupling, Red Code
Cod: 09.07.04.06094



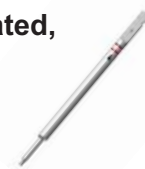
12

Shaft Screwdriver, Torx-8, 90 mm,
AO Coupling, Blue Code
Cod.: 09.07.04.08091



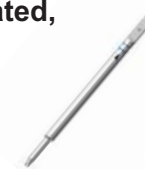
13

Shaft Screwdriver, Cannulated,
Torx-6, 90 mm,
AO Coupling, Red Code
Cod.: 09.07.08.06094



14

Shaft Screwdriver, Cannulated,
Torx-8, 90 mm,
AO Coupling, Blue Code
Cod. 09.07.08.08091



15

**Shaft Screwdriver, for
Removable Inserter Screw,**
AO Coupling
Cod.: 09.07.15.00000



16

Depth Gauge, 60 mm
Cod. 09.08.01.00060:



- 16 **Depth Gauge, 60 mm**
Cod.:09.08.01.00060:



- 17 **Gauge 40 mm, Direct Measuring**
for Wire 100 mm, Ø up to 1.4 mm
Cod.:09.08.02.14040



- 18 **Plate and Screw Holding Forceps**
Angled, 150 mm
Cod.: 09.10.06.00150



- 19 **Scarf Forceps, Curved Serrated Jaw**
160 mm - Long Ratchet
Cod.: 09.10.07.10160



- 20 **Bending Pliers**
Flat, 135 mm
Cod.: 09.14.02.00135



- 21 **Impactor for Mini-Staple,**
Straight, 165 mm
Cod.: 09.23.02.00165



- 22 **Impactor for Mini-Staple,**
Angled, 165 mm
Cod.:09.23.02.10165





ASTROLABE
life and mobility

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Rua José Gomes Ferreira nº 2 - Armazém 1
2660-517 São Julião do Tojal, Loures, Portugal
Tlf.: (+351) 219 672 298 | info@astrolabe-medical.com
www.astrolabe-medical.com