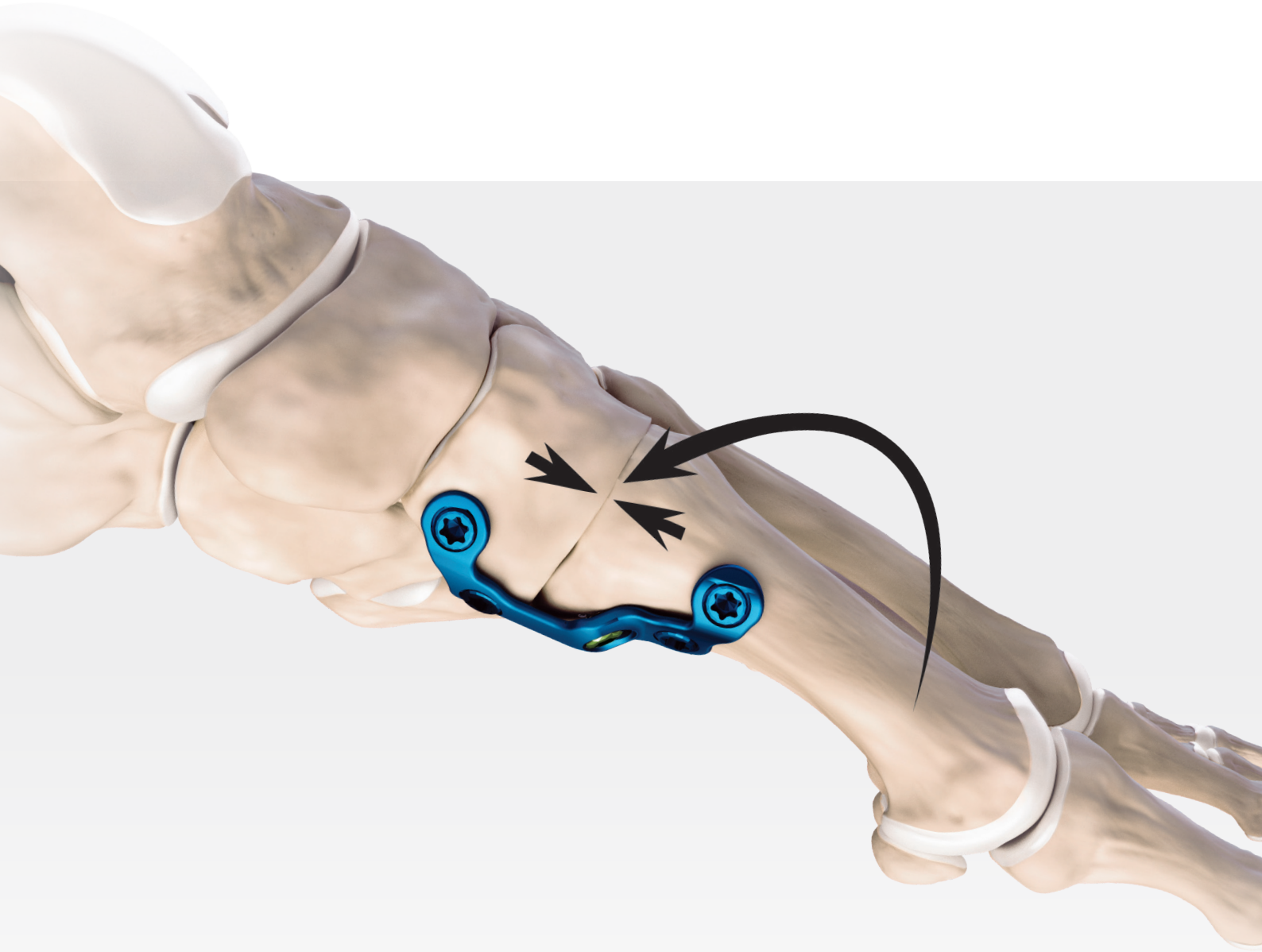
Plantar Lapidus Plate

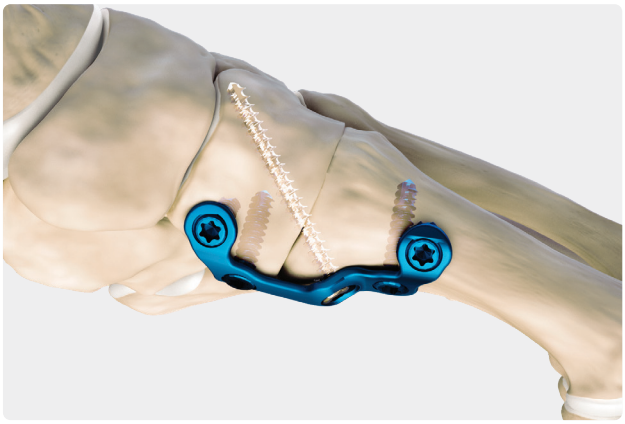
Surgical Technique



Arthrex®

Plantar Lapidus Plate

This anatomically contoured plate was designed to provide excellent fixation for a lapidus procedure. The plate is placed plantar on the first TMT joint and fixed with two locking screws at both the distal and proximal ends. The compression feature of the plate provides compression over the entire arthrodesis area. An optional Aiming Guide allows for defined placement of the compression screw in a specified direction without interfering with the proximal locking screws. In general, plantar fixation of the lapidus arthrodesis minimizes soft-tissue irritation and converts the resulting ground forces at the metatarsal head into compression forces in the arthrodesis area, thus avoiding postoperative gapping.



Advantages

› **Anatomic Contour**
Precontoured left and right plates allow secure plantar placement and spare the tibialis anterior tendon

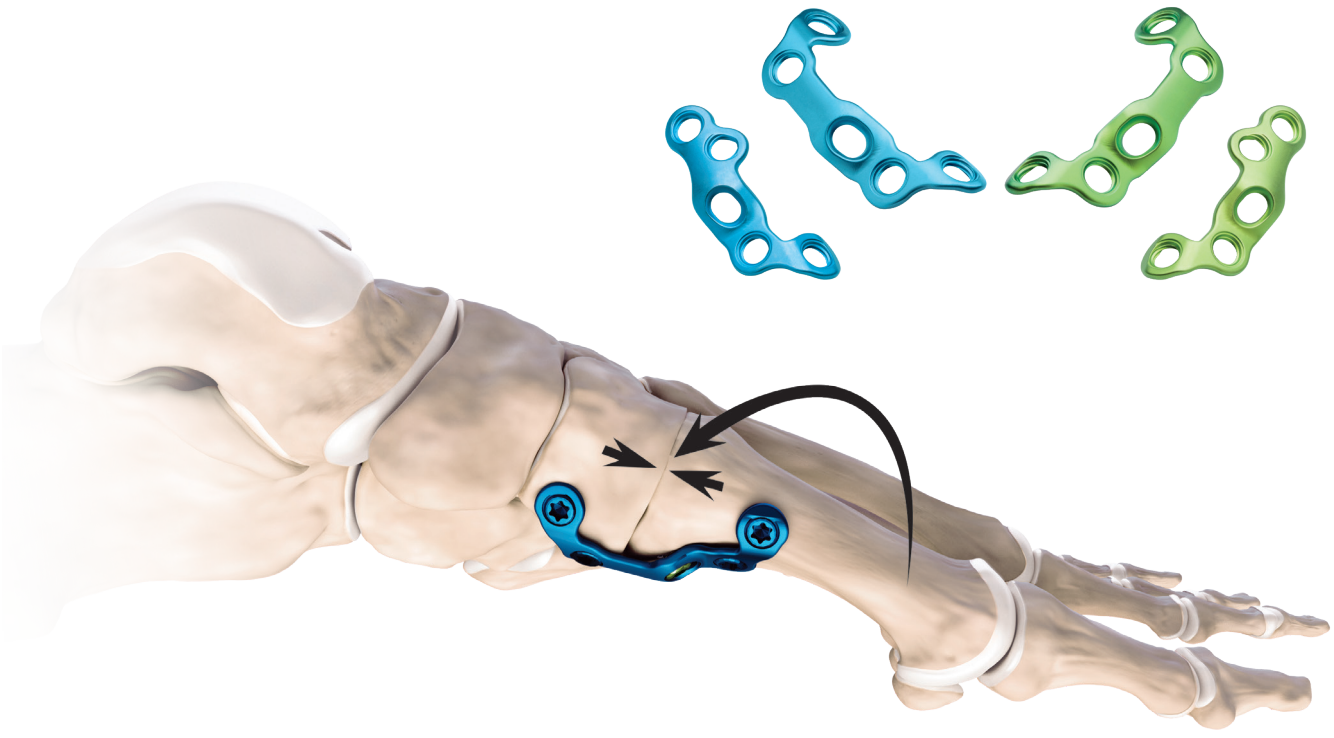
› **Locking Option**
Two proximal and two distal 3.5 mm locking screws optimize construct strength

› **Compression Option**
The 4.0 mm compression screw through the plate provides compression over the entire arthrodesis area and eliminates an additional dorsal compression screw

› **Plantar Fixation**
Avoids gapping of the arthrodesis at early weightbearing

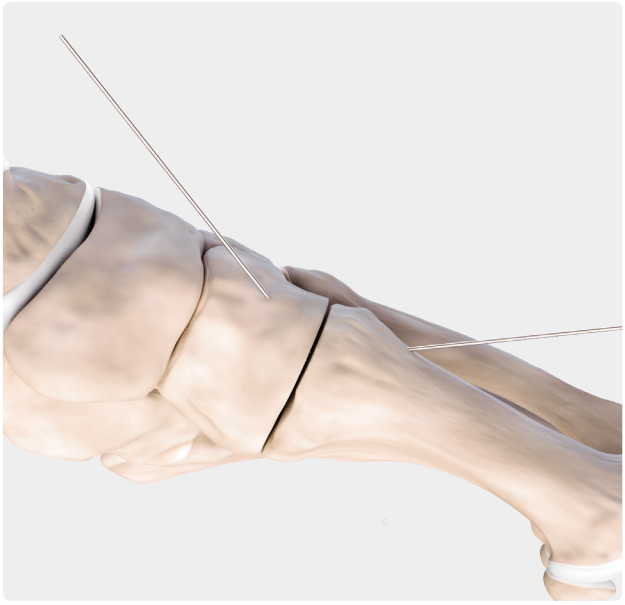
› **Minimized Profile**
Low-profile plates and screw heads reduce soft-tissue irritation and the need for removal

› **Optional Aiming Guide**
Allows defined placement of the compression screw in a specified direction without interfering with the proximal locking screws



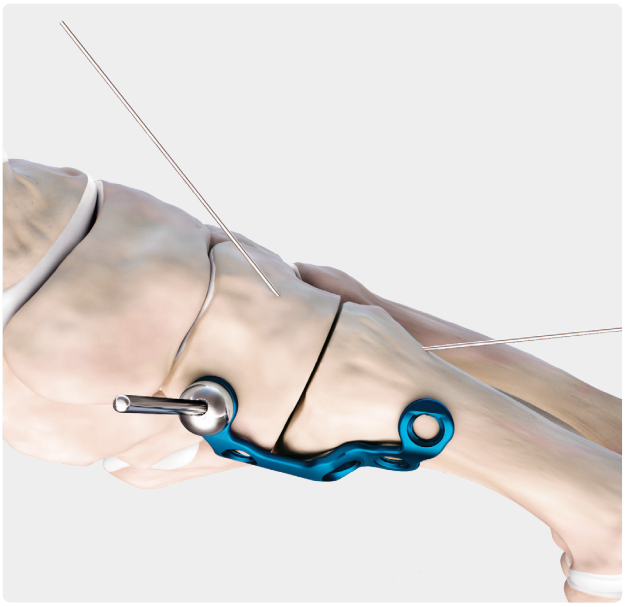
Surgical Technique

Incision
A single incision is made over the medial aspect of the 1st TMT joint at the level of the abductor fascia to expose the medial cuneiform and the base of the metatarsal. The insertion area of the tibialis anterior tendon is left intact while the anatomic plate preserves its insertion. This incision can be extended over the medial metatarsal to expose the MTP joint and perform a capsular and soft-tissue release. Alternatively, a second distal incision may be considered.



1

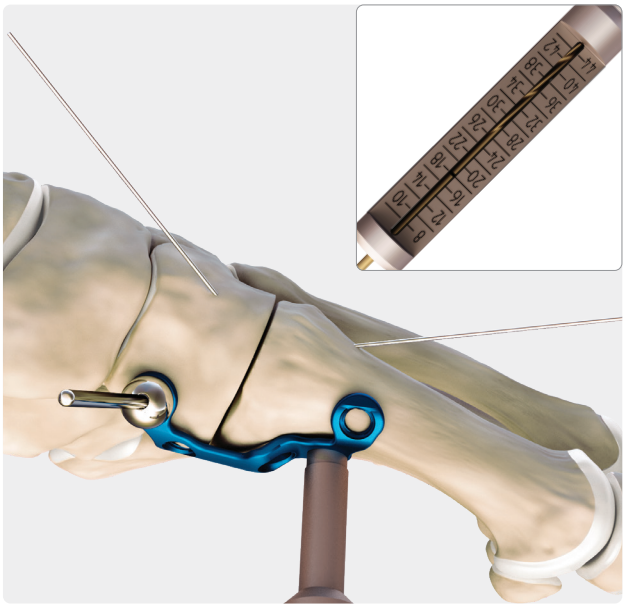
Initially, remove the cartilage and prepare the 1st TMT joint for fusion. After the appropriate reduction is achieved, provisionally fix the joint with K-wires. You may also use a reduction clamp to hold correction and maintain the desired position and compression.



2

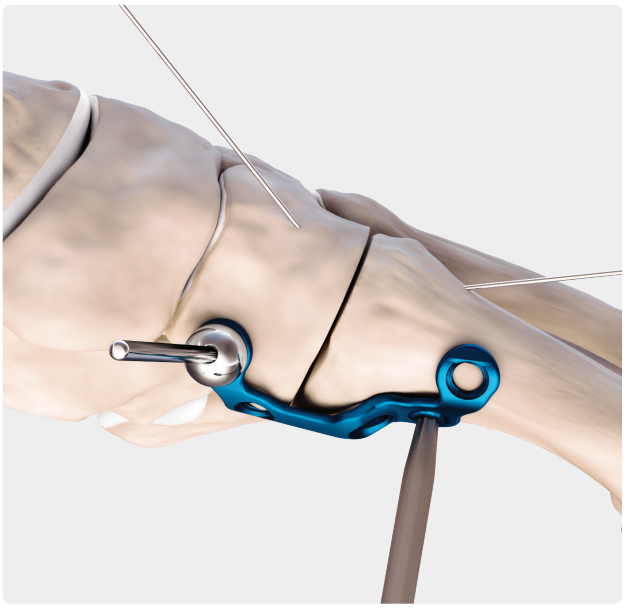
Place the plate plantar on the TMT joint over the tibialis anterior tendon. You may use the Drill Guide as a joystick. Make sure the plate is properly fit to the bone.

> **Note:** Do not place the plate too far proximal and be careful to respect the navicular bone. A slight gap between the step of the plate and the proximal metatarsal will be eliminated when tightening the compression screw.



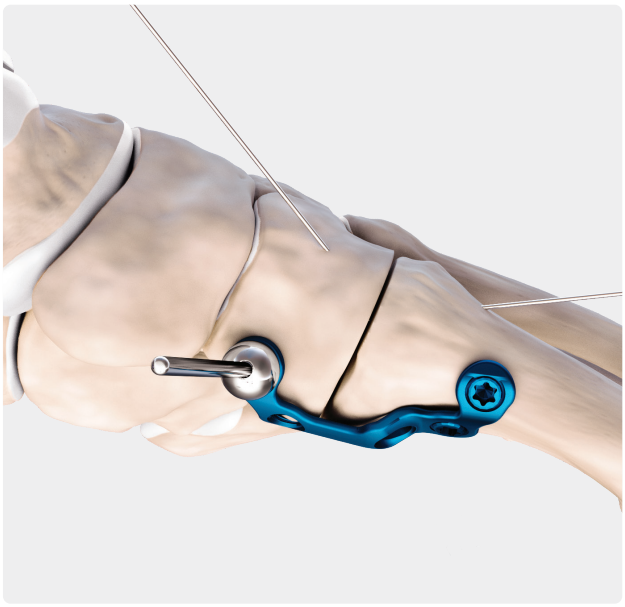
3

Insert the locking Drill Guide into the plantar distal locking hole and dril with the 2.5 mm drill through both cortices. Correct screw length can be noted from the laser line on the 2.5 mm drill.



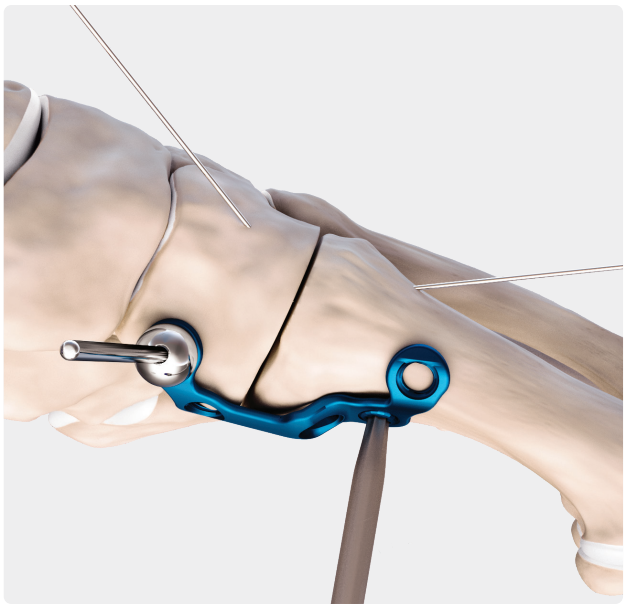
4

Use the screwdriver to insert a 3.5 mm locking screw into the plantar distal locking hole.

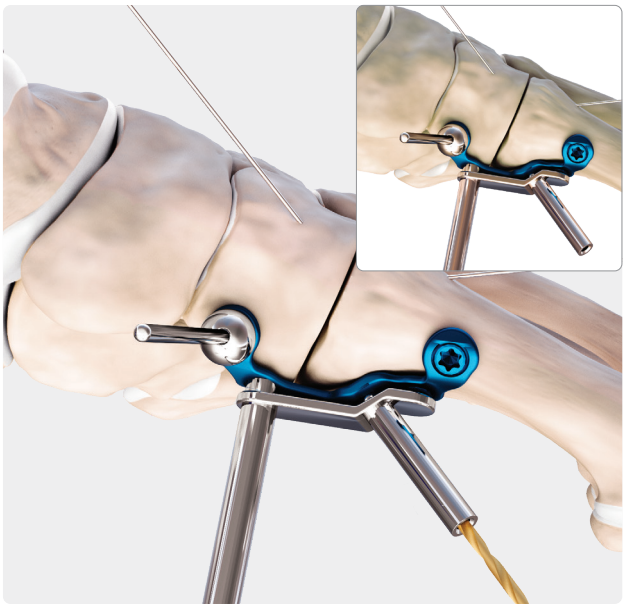


5

Repeat steps 3 and 4 and insert the most distal 3.5 mm locking screw.



6a

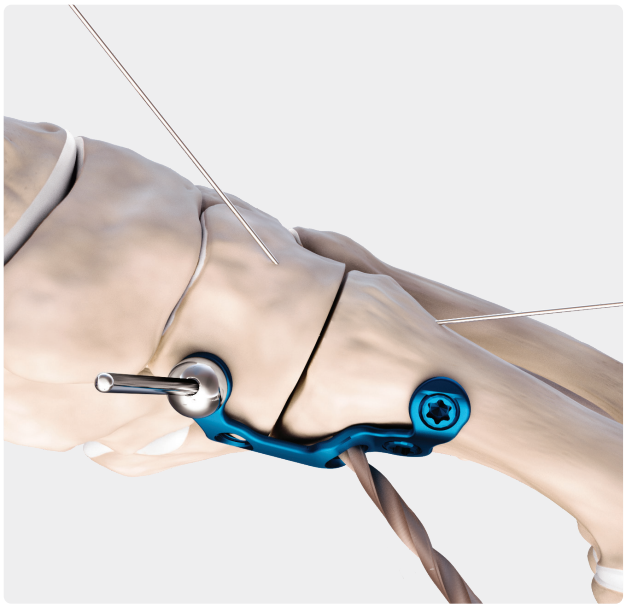


6b

Drill through the metatarsal and medial cuneiform using a 2.5 mm drill. Aim for the dorsal lateral aspect of the medial cuneiform.

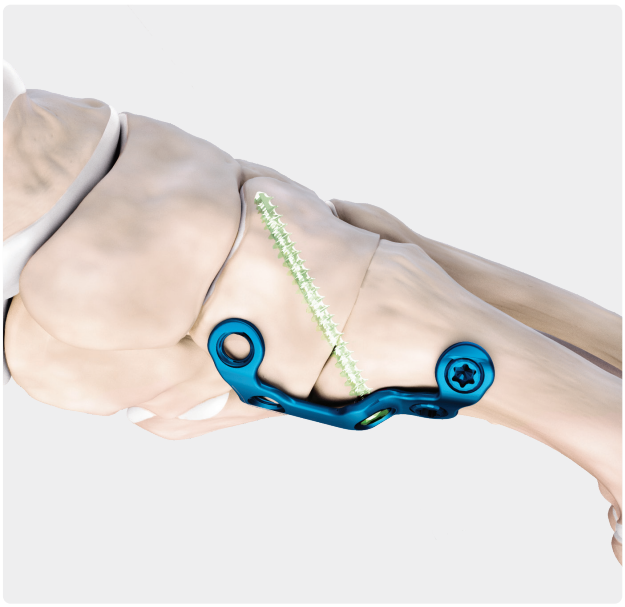
Note: You may also choose to drill into the middle cuneiform using the same principles.

Optional: Place the Aiming Guide on the plate by inserting the small pin on the lower side of the Aiming Guide into the distal screw head. Thread the Aiming Guide fixation screw into the plantar proximal locking screw hole of the plate. The Aiming Guide provides defined placement of the compression screw at the best angle through the medial cuneiform and prevents interfering with locking screws.



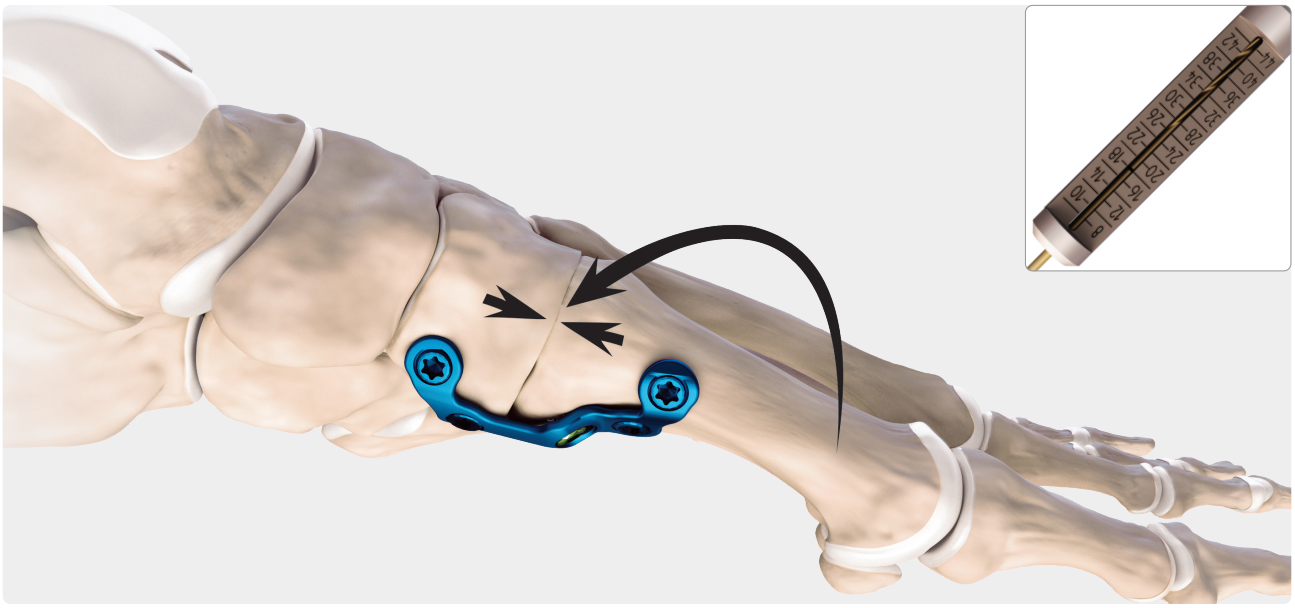
7

Optional: Remove the Aiming Guide. Overdrill the metatarsal with the 4.0 mm drill and then measure the screw length with the depth gauge.



8

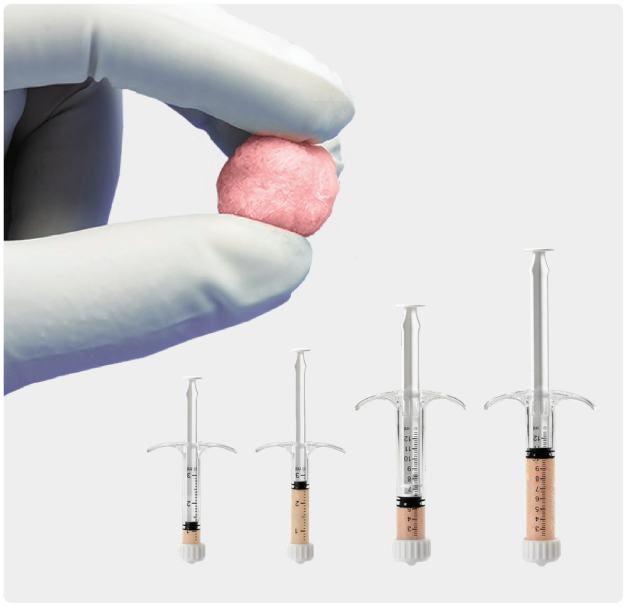
Insert a 4.0 mm cancellous screw in the compression hole. Remove the K-wires and BB-Tak anchors before completely tightening the screw to achieve compression.



9

Insert the locking Drill Guide in the proximal locking holes and drill with the 2.5 mm drill. Note the correct screw lengths from the laser line on the 2.5 mm drill. Insert the remaining proximal locking screws to complete the construct.

Biologic Augmentation Options



ArthroCell™ Viable Bone Matrices
ArthroCell viable bone allograft contains cellular, scaffold, and gel components derived from human bone. The cellular component consists of mesenchymal stem, osteoprogenitor, and pluripotent cells.

ArthroCell, 2.5 cc	ABS-2009-02
ArthroCell, 5.0 cc	ABS-2009-05
ArthroCell Plus allograft, 1 cc	ABS-2090-01
ArthroCell Plus allograft, 2.5 cc	ABS-2090-02
ArthroCell Plus allograft, 5.0 cc	ABS-2090-05

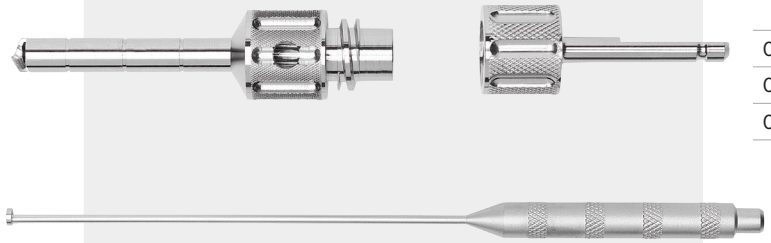
AlloSync™ Expand
The unique geometry of AlloSync Expand 100% demineralized bone is ideal for intraoperative handling and controlled expansion into bone voids. Fibers come preloaded in a syringe that allows for consistent hydration of the graft with biologic fluids, such as BMA.

AlloSync Expand, 1 cc	ABS-2017-01
AlloSync Expand, 2.5 cc	ABS-2017-02

AlloSync™ DBMs

AlloSync bone grafts contain osteoconductive and osteoinductive properties, providing the optimal signaling and scaffold for bone remodeling.

AlloSync DBM cube, 8 × 8 × 8 mm	ABS-2005-01
AlloSync DBM cube, 10 × 10 × 10 mm	ABS-2005-02
AlloSync DBM cube, 12 × 12 × 12 mm	ABS-2005-03
AlloSync DBM strip, 10 × 10 × 3 mm	ABS-2006-01
AlloSync DBM strip, 15 × 40 × 3 mm	ABS-2006-02
AlloSync DBM strip, 19 × 26 × 7 mm	ABS-2006-03
AlloSync DBM strip, 10 × 20 × 7 mm	ABS-2006-04
AlloSync DBM chips (1-4 mm), 1 cc	ABS-2007-01
AlloSync DBM chips (1-4 mm), 2.5 cc	ABS-2007-02
AlloSync DBM chips (1-4 mm), 5 cc	ABS-2007-03



OsteoAuger™ Bone Graft Harvesting System

OsteoAuger harvesters are available in 6 mm, 8 mm, and 10 mm diameters for flexibility in harvesting bone from a variety of anatomic locations. The sharp tip morselizes autologous bone for easy use in fusion or fracture cases.

OsteoAuger bone graft harvester, 6 mm	ABS-8000-06
OsteoAuger bone graft harvester, 8 mm	ABS-8000-08
OsteoAuger bone graft harvester, 10 mm	ABS-8000-10

Ordering Information

Plates	
Plantar lapidus plate, left	AR-8941PL
Plantar lapidus plate, left, short	AR-8941PLS
Plantar lapidus plate, right	AR-8941PR
Plantar lapidus plate, right, short	AR-8941PRS
Plantar lapidus plate caddy	AR-8950C-36

Instrumentation	
Drill guide for compression hole	AR-8949DG
Aiming guide, left, for plantar lapidus plate	AR-8941AL
Aiming guide, right, for plantar lapidus plate	AR-8941AR
Aiming guide fixation screw for plantar lapidus plate	AR-8941AS

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Arthrex manufacturer, authorized representative, and importer information (Arthrex eIFUs)

US patent information