Low Profile MTP Plate

Surgical Technique

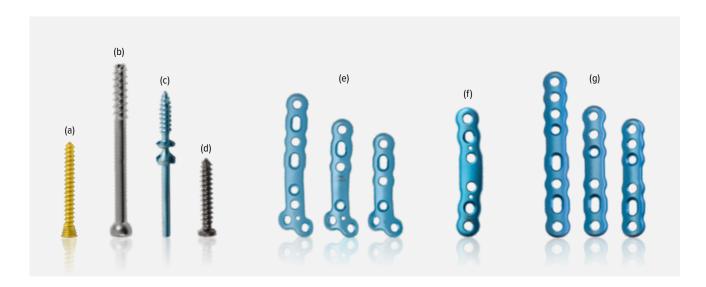




More than a plate, this is a complete system for joint preparation and fixation in the treatment of severe hallux rigidus and other MTP pathologies. Whether used in primary or revision cases, this system enables surgeons to reduce, compress, and lock the first metatarsal phalangeal joint in the ideal position for arthrodesis.

Advantages

- Anatomic plate design 1.5 mm titanium plate anatomically designed with 8° of dorsiflexion and 5° of valgus
- Concave / convex reamers facilitate quick and accurate joint preparation
- 3 mm QuickFix or FT screws enhanced ease of use in reducing the plate-to-bone with "snap-off" screws or traditional fully threaded screws
- 3 mm cannulated screw as crossed screws or in conjunction with the plate, these lag screws provide excellent compression with a low profile head
- 3 mm locking screws create greater stability in varying bone quality
- New straight MTP plates only 1.3 mm thick and can be contoured to the desired angle



- Low profile screw, locking, 3 mm (a)
- Cannulated screw, 3 mm (b)
- QuickFix screw, 3 mm (c)
- Low profile FT screw, 3 mm (d)

- Low profile MTP plates (e)
- Wingless contoured MTP plate (f)
- MTP straight plates (g)

Surgical Technique



Preparation: For optimal exposure of the MTP joint, a dorsal longitudinal incision is recommended. The incision should begin just proximal to the interphalangeal joint, extending over the extensor hallucis longus tendon medially, and ending 2 - 3 cm proximal to the joint. Incise and release the joint capsule, exposing the base of the proximal phalanx and metatarsal head. Insert a 1.6 mm guide wire in the central aspect of the metatarsal.



Metatarsal reaming: Using a power saw, resect the bone and shape the metatarsal head to prepare for reaming. Elevate the metatarsal head and plantar flex the proximal phalanx. Place the concave-shaped metatarsal reamer over the guide wire and gently ream the metatarsal head. Start spinning the reamer before touching the bone.



Phalangeal reaming: Insert the 1.6 mm guide wire in the central aspect of the proximal phalanx. Using the cannulated AO adapter, place the convex-shaped phalangeal reamer over the guide wire and gently ream the articular surface until healthy, bleeding bone is present. The reamer sizes should be consistent for both the metatarsal and phalanx to create a congruent cupshaped surface.



Preliminary plate placement: The plate can be temporarily fixed with the BB-Taks included in the set. The plate is precontoured at 8° dorsiflexion and 5° valgus. There is no need for substantial bending. If additional bending is needed, use the bending iron in the set to achieve the desired plate contour.



Nonlocking screw placement: Once the plate is placed in the ideal position, secure the plate to the bone by inserting the 3 mm "snap-off" QuickFix screws in a distal and a proximal nonlocking hole. The third nonlocking screw will be added once the level of compression is identified during the interfragmentary screw fixation. Alternatively: Measure and place nonlocking, fully threaded screws.



Interfragmentary screw: In an oblique fashion, insert the interfragmentary 1.1 mm guide wire across the construct. Proceed by drilling over the guide wire with the 2 mm cannulated drill. The interfragmentary screw can be inserted prior to plate placement if the surgeon prefers.



Secure plate-to-bone: Insert the partially threaded 3 mm cannulated screw. Once the level of compression is identified, secure all 3 nonlocking holes by tightening with the 3 mm driver shaft (for QuickFix).



Locking screw: Insert the drill / depth guide (AR-8944GL) for the 3 mm locking screws. Once the appropriate depth of the locking holes is determined, advance the screws until the screw head is flush with the plate.



Fixation complete – post-op: Patients are instructed to protect the fusion with a postoperative shoe and apply weight-bearing, only on the heel, for 6 weeks. If they are unable to comply with this protocol, they need to be non-weight-bearing for 6 weeks. Patients are progressed to full weight-bearing after 6 weeks if radiographs demonstrate a solid fusion.

Forefoot Fusion Module, Implants

Product Description	Item Number
MTP plate, contoured, standard, left	AR- 8944CL-S
MTP plate, contoured, standard, right	AR- 8944CR-S
MTP plate, contoured, long, left	AR- 8944CL-L
MTP plate, contoured, long, right	AR- 8944CR-L
MTP plate, contoured, short, left	AR- 8944CL-P
MTP plate, contoured, short, right	AR- 8944CR-P
MTP plate, standard, 10° valgus	AR- 8944-10S *
MTP plate, standard, 10° valgus, 8° dorsiflexion	AR- 8944C-10S *
Low profile MTP plate, straight, standard	AR- 8944-S
Low profile MTP plate, straight, long	AR- 8944-L
Low profile MTP plate, straight, long, sterile	AR- 8944L-S
Low profile MTP plate, straight, short	AR- 8944-P
QuickFix™ screw, yellow, 3 mm x 13 mm	AR- 8931-13
QuickFix™ screw, light blue, 3 mm x 15 mm	AR- 8931-15
QuickFix™ screw, aqua, 3 mm x 17 mm	AR- 8931-17
QuickFix™ screw, bronze, 3 mm x 19 mm	AR- 8931-19
Cortical screw, fully threaded,	AR- 8933-10
3 mm x 10 - 24 mm	to -24
Variable angle locking screw,	AR- 8933V-10
3 mm x 10 - 40 mm	to -24
QuickFix™ screw, cannulated,	AR- 8730-18PT
3 mm x 18 - 40 mm	to -40PT

[»] Please note that all implants above are also available sterile.

Forefoot Fusion Module, Instruments (AR-8944S)

Product Description	Item Number
Guide wire, 1.6 mm	AR- 8941K
Hohmann retractor	AR- 13210
McGlamry elevator, 13 mm	AR- 8944M
Metatarsal reamers,	AR- 8944MR -
14 mm - 22 mm	14RU to -22RU
Phalangeal reamers,	AR- 8944PR -
14 mm - 22 mm	14RU to -22RU
Circular reamers,	AR- 8944MC -
16 mm - 22 mm	16RU to -22RU

QuickFix™ Instruments

Product Description	Item Number
QuickFix™ cutter, cannulated	AR- 8930R
Driver shaft, 3 mm	AR- 8931D
Drill bit, 2 mm	AR- 4160-20-RU
Depth guide	AR- 8930G

Instruments for 3 mm FT Screws

Product Description	Item Number
Drill bit, 2 mm	AR- 8944-22-RU
Depth guide	AR- 8930G
Driver, T10 hexalobe	AR- 8944D

Instruments for 3 mm Locking Screws

Product Description	Item Number
Drill bit, 2 mm	AR- 8944-22
Driver, T10 hexalobe	AR- 8944D
Drill / depth guide, locking, 3 mm	AR- 8950-07

Instruments for 3 mm Cannulated Screws

Product Description	Item Number
Guide wire, 1.1 mm x 15 cm	AR- 8933K
Drill bit, cannulated, 2 mm	AR- 8933-20C-RU
Drill bit, cannulated, 3 mm	AR- 8933-30C-RU
Drill guide, 1.1 mm / 2 mm	AR- 8933G
Countersink	AR- 8933CS
Depth device, cannulated	AR- 8944DG
Driver shaft, T10 hexalobe, cannulated	AR- 8737-16
Screw holding forceps	AR- 8941F

Additional Instrumentation

Product Description	Item Number
Bending iron	AR- 8941BI
Bending pliers	AR- 8941BP
Driver handle, AO	AR- 13221AOC
BB-Tak	AR- 13226
AO adapter, cannulated	AR- 4160AOC
Forefoot fusion module instrument case	AR- 8944C
Guide wire, double trocar, 1.1 mm	AR- 8933KD

All sterile item numbers end with an additional "S" if not otherwise stated. *not available sterile

Ordering Information

Product Description	Used for Sterile Plates	Item Number
Trial, for MTP plate, contoured, short, left	AR- 8944CL-PS , - SS	AR- 8944CL-PT
Trial, for MTP plate, contoured, short, right	AR- 8944CR-PS, -SS	AR- 8944CR-PT
Trial, for MTP plate, contoured, long, left	AR- 8944CL-LS	AR- 8944CL-LT
Trial, for MTP plate, contoured, long, right	AR- 8944CR -LS	AR- 8944CR-LT
Trial, for MTP plate, straight, short	AR- 8944-PS , AR- 8944-SS	AR- 8944-PT
Trial, for MTP plate, straight, long	AR- 8944L-S	AR- 8944L-T

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This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience, and should conduct a thorough review of pertinent medical literature and the product's Directions For Use. Postoperative management is patient specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level and/or outcomes.

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