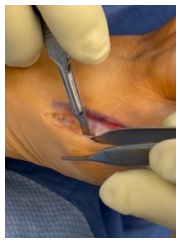
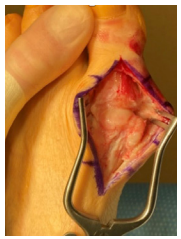
Triplanar 1st MTP Fusion with SpeedMTP™ Rapid Compression Implant

Key Steps & Fluoro Checks

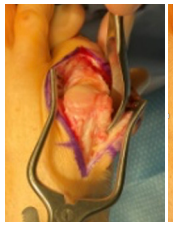
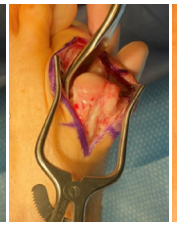
1. Incision and Dissection

Perform a dorsal longitudinal incision medial to the extensor hallucis longus (EHL) tendon to visualize the 1st metarsophalangeal (MTP) joint. Create a full-thickness, subperiosteal tissue envelope.

2. Joint Release

A McGlamry elevator is utilized to release the plantar, medial, and lateral soft tissues around the 1st metatarsal head.


Note: Resect any dorsomedial or dorsolateral eminence and the base of the proximal phalanx as needed.

3. Joint Prep

Prep the 1st MTP joint using cup and cone reamers or preferred method.

Use the 1.6mm fluted drill bit to fenestrate both joint surfaces.



Note: Autograft or allograft may be utilized as needed.

4. Provisional Fixation

Manually de-rotate the hallux into proper alignment in the frontal, sagittal and transverse planes. Axially compress the joint while advancing a 1.6mm K-wire across the joint from lateral to medial.

A 1.1mm K-wire is placed from medial to lateral across the 1st MTP joint as a secondary point of fixation.

Confirm alignment clinically and radiographically.

Utilize a flat plate to clinically assess sagittal plane alignment, confirming the IPJ is just off the weightbearing surface (or in the desired position).

Note: Optionally, an axial K-wire may be used to maintain the sagittal and transverse plane alignment prior to throwing the first K-wire.



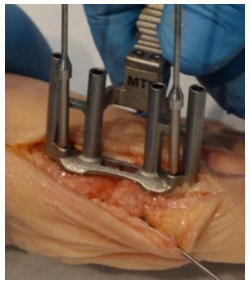

5. SpeedMTP™ Drill Guide Placement

Center the Drill Guide dorsally over the joint surface ensuring the underside of the Drill Guide is in full contact with bone. Contour the bone surface as needed to properly seat the Drill Guide.

Place the threaded tacks to secure the Drill Guide in place.


Radiographically confirm the implant position is centered over the joint line and confirm no interference with the provisonal fixation.

Note: The FastPitch® screws will be on the same side as the tack holes in the Drill Guide. The implant can be placed with the FastPitch® screws medial or lateral.




See surgical technique (09-00006L) & instructions for use (09-00005L & LBL 1405-9010) on www.treace.com for complete indications, contraindications, warnings, and precautions.

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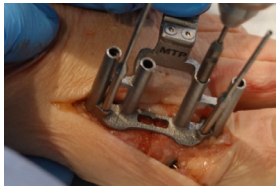
6. Drilling for SpeedMTP™ Implant

Use the appropriate drill for all 4 dorsal holes through the Drill Guide.

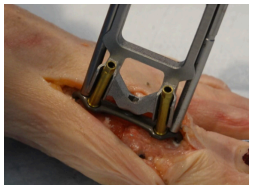
Reverse out the threaded tacks and remove the Drill Guide.



7. Energize and Insert SpeedMTP™ Implant

Energize the implant by squeezing the Threaded Rods together and place them into the Inserter Cap. Ensure the Threaded Rods are not squeezed beyond parallel.

Gently insert the implant into the pre-drilled holes by hand. When close to full insertion, the Inserter Cap may be lightly tapped with a mallet until the implant is fully seated.



Note: Do not remove the Inserter Cap at this time.

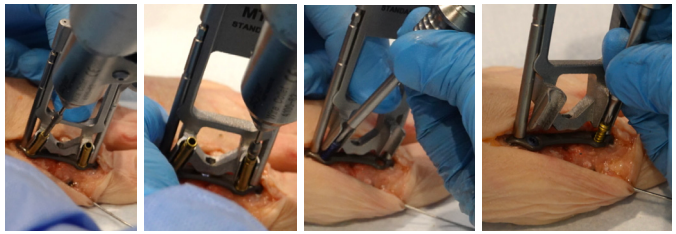
8. FastPitch® Screw Insertion

Use the appropriate drills for the distal and proximal FastPitch® screws through the gold Drill Guides.

Reference the drill for screw lengths.

Remove the gold Drill Guides and insert the appropriate FastPitch® screws into the proximal and distal holes.

Ensure the screws are fully seated and locked.

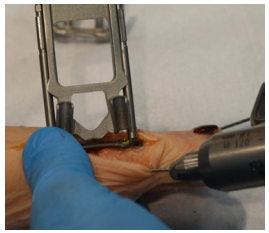


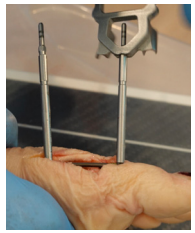
9. Activate SpeedMTP™ Implant

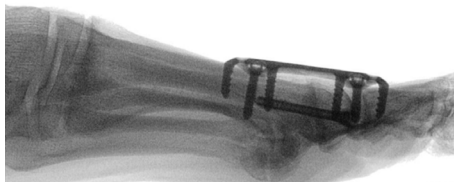
While squeezing the Threaded Rods, remove the Inserter Cap to activate the energized SpeedMTP™ implant.

Use the bottom of the Inserter Cap to unscrew the Threaded Rods.

Remove any remaining provisional fixation and confirm proper implant placement and final construct under fluoroscopy.







10. Removal Instructions:

Should removal of the implant be required, expose the arthrodesis site for access using general instrumentation.

The implants can be removed by using a screwdriver for unscrewing the screws, then reapply the threaded rods onto the implant using the Inserter Cap to fully tighten into the threads. Gently squeeze the Threaded Rods and place the Inserter Cap overtop. Position a general instrument (freer, osteotome, etc.) under the bridge of the implant and use to pry out of the implantation site.

Alternatively, the implant can be removed by cutting the bridge and retrieving each portion independently.