

1st MTPJ Arthrodesis Surgical Technique

The Vilex 1st MPJ Fusion Plate



Part of the Vilex Plate Set —
an innovative plate system designed for foot and ankle surgery.



Introduction

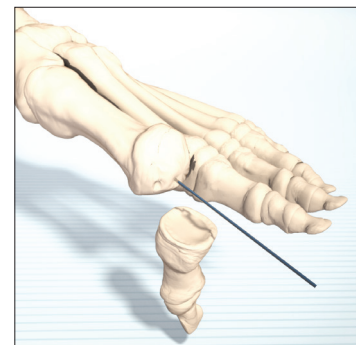
The Vilex 1st MPJ fusion plate can be found among an assortment of plates specifically designed for extremity surgery in the Vilex Plate Set. Fusion of the 1st metatarsal phalangeal joint is commonly performed for treatment of Hallux Rigidus, Severe Hallux Valgus, Nonunions, and Arthritis. The Vilex Plate Set includes cannulated cup and cone reamers for easy joint preparation. Plate benders are also available but typically not needed for the pre-contoured anatomic plate. The Vilex 1st MPJ fusion plate will compress and stabilize the joint in an ideal position for fusion.

STEP-BY-STEP SURGICAL PROCEDURE

- 1** A dorsal longitudinal incision is made typically over the 1st MPJ just medial to the extensor hallucis longus tendon. The joint capsule is incised and capsular tissue reflected to provide exposure to the metatarsal head and base of the proximal phalanx.



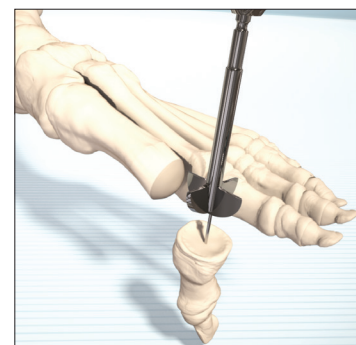
- 2** After creating adequate exposure to the 1st MPJ, drive the k-wire about 30mm into the metatarsal head in line with the shaft.



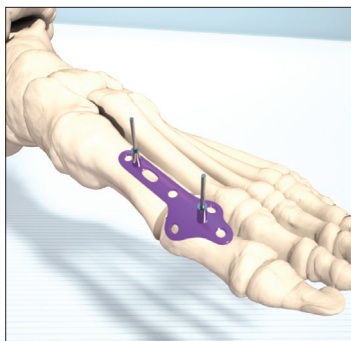
- 3** Glide the cannulated concave reamer over the k-wire and with the reamer spinning, gently ream the metatarsal head down to healthy, bleeding bone. Remove the k-wire.



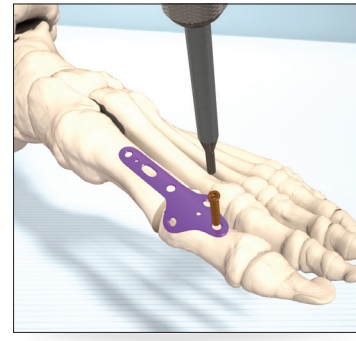
- 4** Insert the k-wire into the base of the proximal phalanx. Use the convex reamer and repeat the process on the phalangeal end.



- 5** After confirming that both ends of the joint fit correctly, apply the pre-contoured plate dorsally. As the plate is already pre-bent, bending irons are typically not needed but are available if any further bending is needed. The plate can be temporarily held in place with the wire tacks.

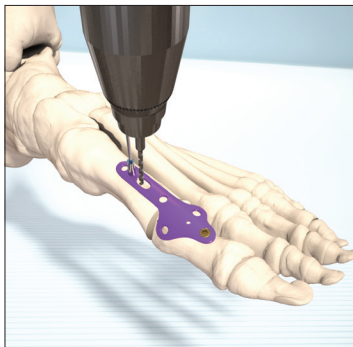


- 6** (a) Solid Screw: Insert a drill guide into the most distal hole, drill and use the universal depth gauge, insert the solid locking screw into the most distal hole. Remove the distal wire tack.

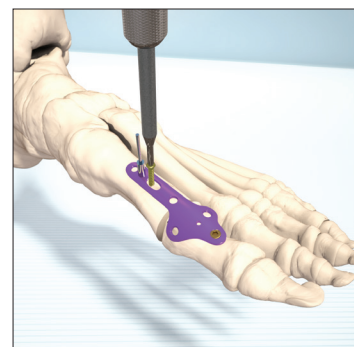


- (b) Cannulated Screw: Insert a wire guide into the most distal hole and drive a 1.1mm guide wire, use the cannulated drill and depth gauge, insert the cannulated screw into the most distal hole. Remove the distal wire tack.

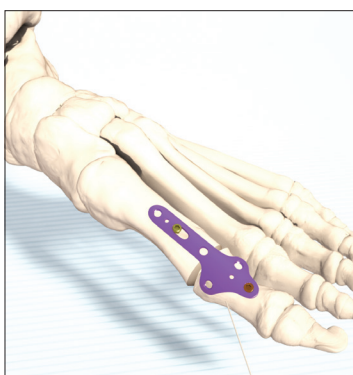
- 7** Eccentrically drill the proximal aspect of the compression screw hole.



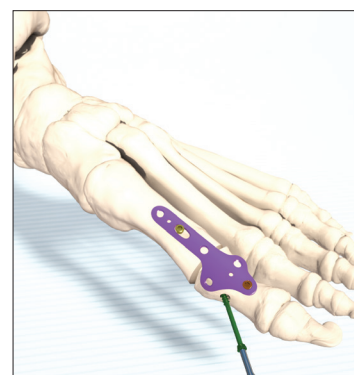
- 8** Insert a non-locking screw without engaging the plate.



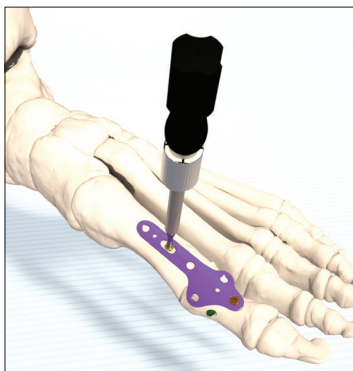
- 9** Remove the proximal wire tack. Drive the 1.1mm guide wire from the distal-medial to proximal-lateral across the joint. Measure and countersink.



- 10** Use the cannulated screw driver to insert the screw. The joint will compress as the screw advances.



- 11** Tighten the compression screw.



- 12** Add locking screws to the remaining holes.



1st MPJ Fusion Plates are locking plates; however, non-locking screws may be used with the plate based on the surgeons' preference. Vilex offers cannulated locking and non-locking screws in the plate tray as well as solid locking and non-locking screws.

To see the complete line of Vilex products, go to vilex.com or call 1-800-521-5002 and talk to a Vilex representative.



Plates



Screws



Subtalar
Arthroereisis



Base MPJ
Implant



Head MPJ
Implant



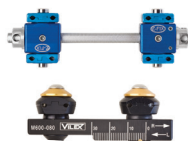
Lesser MPJ
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ez-FIX



Power



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Burrs and
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