

OSSIOfiber[®] MIA (Minimally Invasive All-Natural) Bunion Surgical Technique Guide

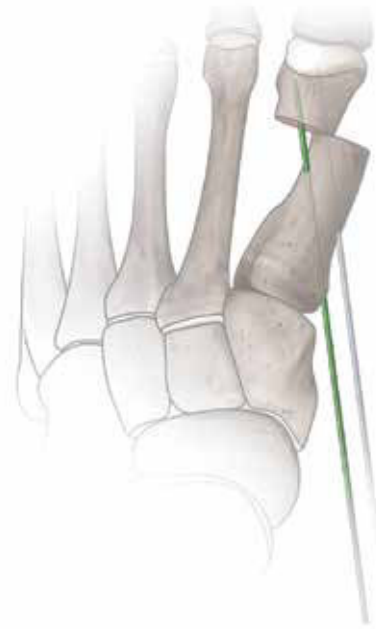
*Featuring the Beveled
Threaded Trimmable Fixation Nail*



Pre-operative and 6-month post-operative X-rays provided
by Dr. Steven Neufeld, MD.

1 Proximal K-Wire Placement

- Insert two 1.6 mm diamond-tip K-Wires percutaneously across the osteotomy site at the proximal fixation position of the first metatarsal, ensuring appropriate trajectory and compression across the osteotomy.
- Confirm positioning fluoroscopically.



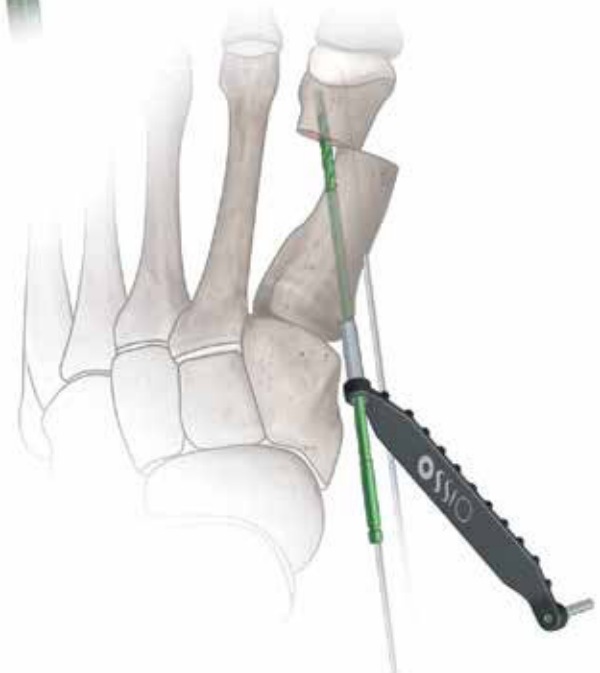
2 Proximal Depth Measurement

- Place the narrow-tip depth gauge over the proximal 1.6 mm K-Wire until it seats on the cortical surface.
- Record the measured depth to determine the desired implant length.



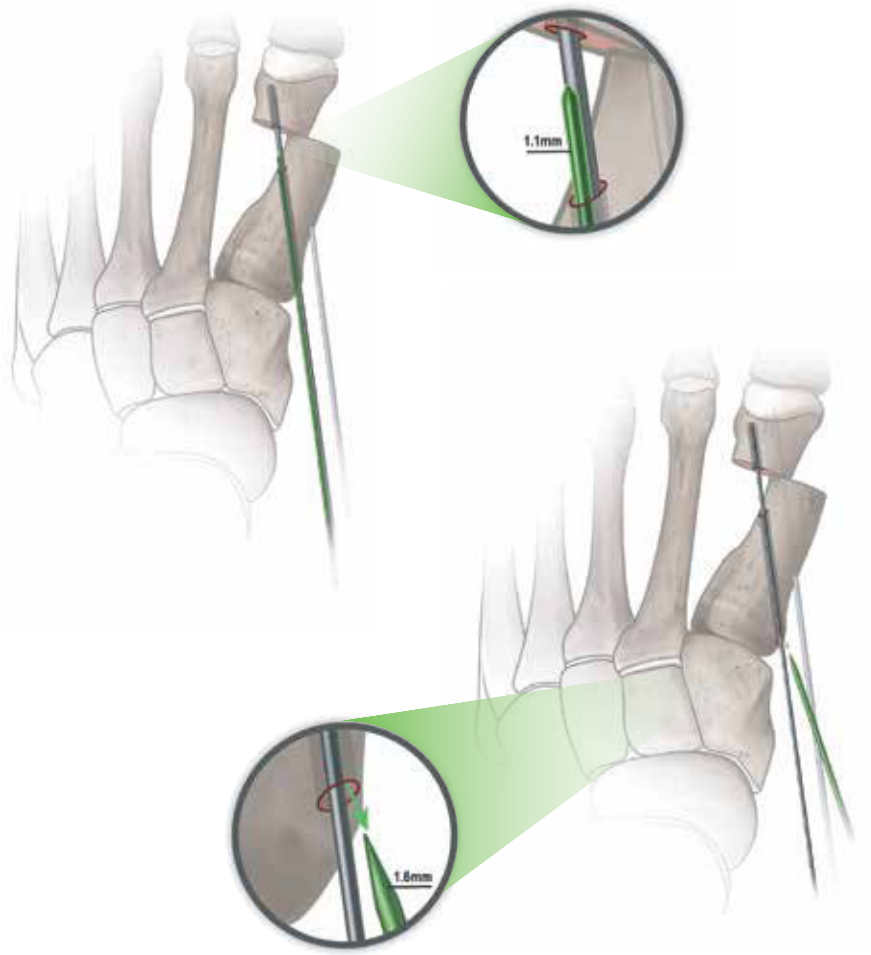
3 Proximal Depth Preparation

- Using the cannulated drill bit, drill over the proximal 1.6 mm K-Wire to create the pilot tunnel to the measured depth.
- Remove the drill while maintaining the 1.6 mm K-Wire in position.



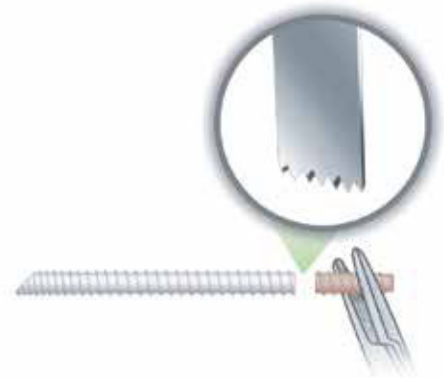
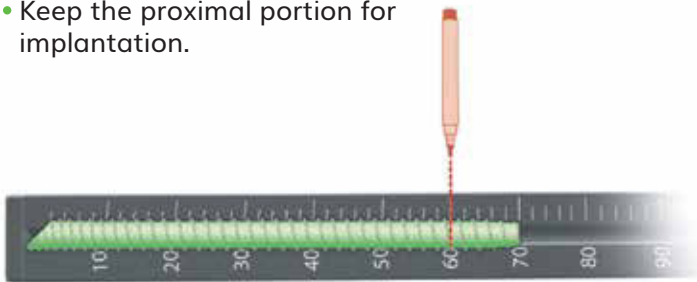
4 Exchange for 1.1 mm Guide Wire

- Slide the 1.1 mm K-Wire along the 1.6 mm K-Wire to maintain the prepared trajectory.
- Once positioned, remove the 1.6 mm K-Wire, leaving the 1.1 mm K-Wire in place to guide implant insertion.



5 Implant Trimming

- Trim the distal tip of the Beveled Threaded Trimmable Fixation Nail to the previously measured implant length.
- Keep the proximal portion for implantation.



6 Driver Assembly and Calibration

- Place the trimmed implant onto the beveled adjustable-length driver shaft, ensuring the beveled end of the implant aligns precisely with the beveled shoulder of the driver.
- Extend and adjust the driver shaft length to match the trimmed implant length.
- Verify final length alignment through the driver window indicator.



7 Implant Sharpening

- Insert the implant, while attached to the adjustable driver, into the provided implant sharpener.
- Apply axial pressure and rotate the driver clockwise until no substantial material shavings are expelled.
- Once complete, the implant is ready for insertion.



8 Proximal Nail Insertion

- Advance the implant and driver assembly over the 1.1 mm guide wire into the prepared tunnel.
- Drive the implant to the desired depth across the osteotomy.
- Remove the guide wire following final seating.



9 Distal K-Wire Placement and Preparation

- Repeat Steps 1–4 at the distal fixation position:
 - Insert two 1.6 mm diamond-tip K-Wires
 - Measure depth using the depth gauge
 - Drill over the distal wire
 - Exchange to the 1.1 mm guide wire

10 Distal Nail Preparation and Insertion

- Repeat Steps 5–8 for the distal implant:
 - Trim implant to measured length
 - Assemble and calibrate beveled driver
 - Sharpen implant
 - Insert implant over distal 1.1 mm guide wire
- Final fixation is achieved with proximal and distal beveled implants spanning the osteotomy.



MIA Bunion System featuring the Beveled Threaded Trimmable Fixation Nail Ordering Info

The OSSIOfiber® MIA Bunion Correction System includes one instrumentation kit and one implant.

Description	Product Code
OSSIOfiber® Threaded Trimmable Fixation Nail, Beveled, 4.5 X 70 mm	OF1104570S
OSSIOfiber® Threaded Trimmable Fixation Nail, 4.5 X 70 mm System, Beveled	OF2104530S

TTFN 4.5x70mm Beveled Kit Content

- Cannulated drill bit
- 1.6mm diamond tip K-Wire (2)
- 1.1mm trocar tip K-Wire (2)
- Beveled Adjustable length driver
- Implant Sharpener
- Narrow tip depth gauge
- Drill guide



Indications

The OSSIOfiber® Threaded Trimmable Fixation Nails are indicated for maintenance of alignment and fixation of bone fractures, comminuted fractures, fragments, osteotomies, arthrodesis, and bone grafts, of the upper extremity, fibula, knee, ankle and foot in the presence of appropriate brace and/or immobilization in adults and children (2-12 years) and adolescents (12-21 years) in which growth plates have fused or in which growth plates will not be crossed by fixation.

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