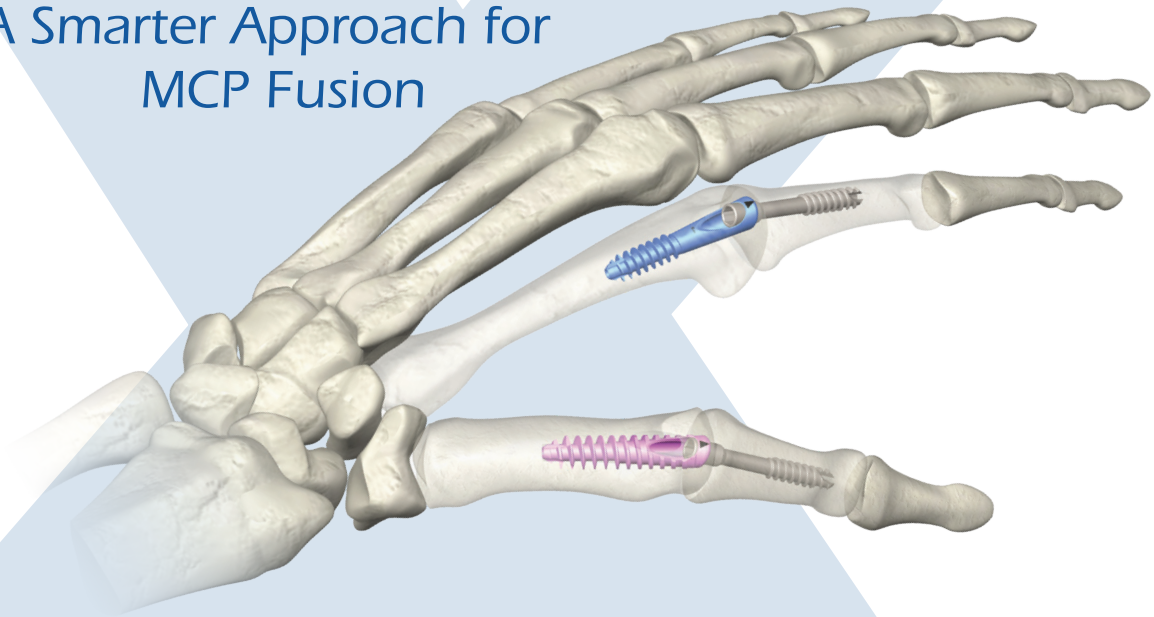
XMCP™
Fusion Fixation

Intramedullary Fixation
A Smarter Approach for
MCP Fusion



XMCP Surgical Technique

Zero Profile X Fixed Reproducible 25° Angle X Stable Intramedullary Fixation

EXTREMITY® MEDICAL

Real change ***starts*** here™

XMCP™
Fusion Fixation

Implants


4.0 X 30mm

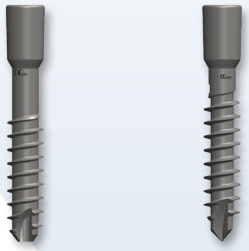

5.0 X 30mm


6.0 X 30mm


7.0 X 30mm

Cannulated Metacarpal Implants

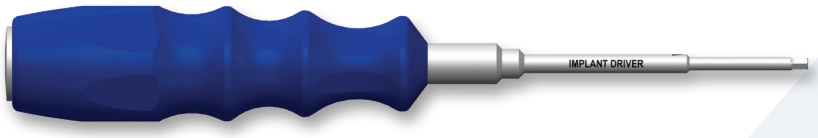
Available in small, medium, large and extra-large


4.0mm

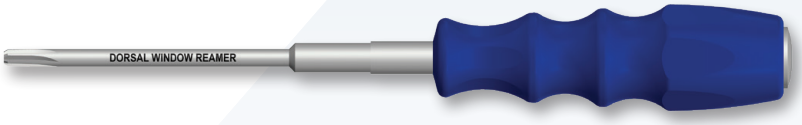
Cannulated and Solid Lag Screws

Available in 2 – 36mm lengths, by 2mm increments

General Instruments

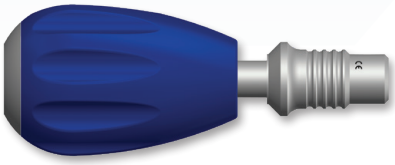


Implant Screwdriver



Dorsal Window Reamer

Implant Removal Driver



Small Implant Guide

Customer Service: 888.499.0079

www.extremitymedical.com

General Instruments

3.0mm Cannulated Drill

4.5mm Cannulated Drill

Small Metacarpal Trial

Medium Metacarpal Trial

Large Metacarpal Trial

Extra Large Metacarpal Trial

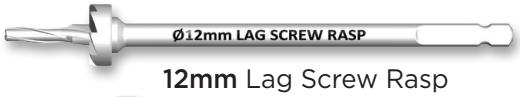
Metacarpal Reamer

Depth Gauge

12mm Dorsal Window Rasp

16mm Dorsal Window Rasp

Small Implant Guide



12mm Lag Screw Rasp

16mm Lag Screw Rasp

Removal Tool

Slap Hammer

Real change ***starts*** here™

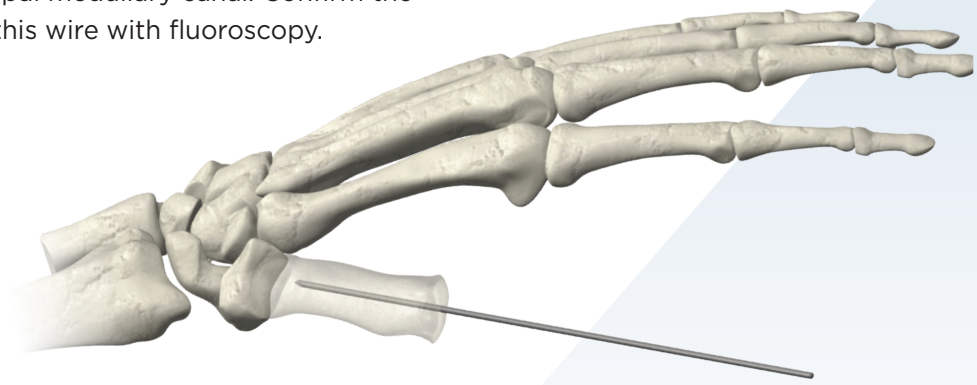
XMCP Surgical Technique Guide

STEP 1. Exposure

Create a dorsal longitudinal incision over the metacarpalphalangeal joint and expose the metacarpalphalangeal joint by mobilizing the extensor tendon mechanism. Fully flex the joint in order to visualize the metacarpal head and proximal phalanx base.

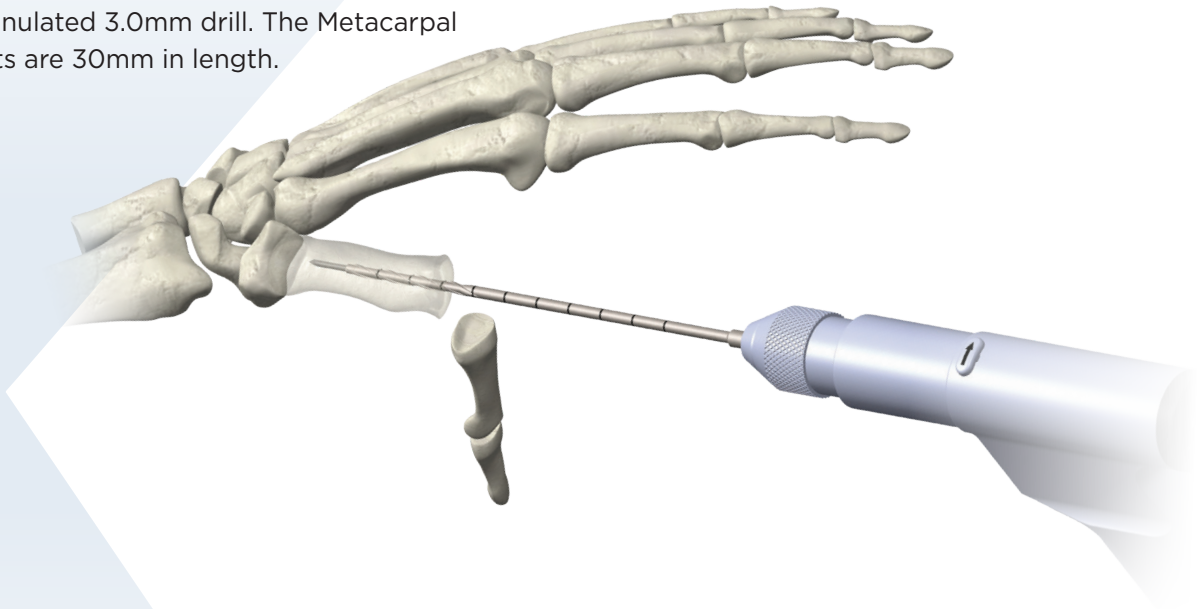
STEP 2. Metacarpal Preparation

Insert a 1.6mm Guidewire into the center of the metacarpal medullary canal. Confirm the position of this wire with fluoroscopy.



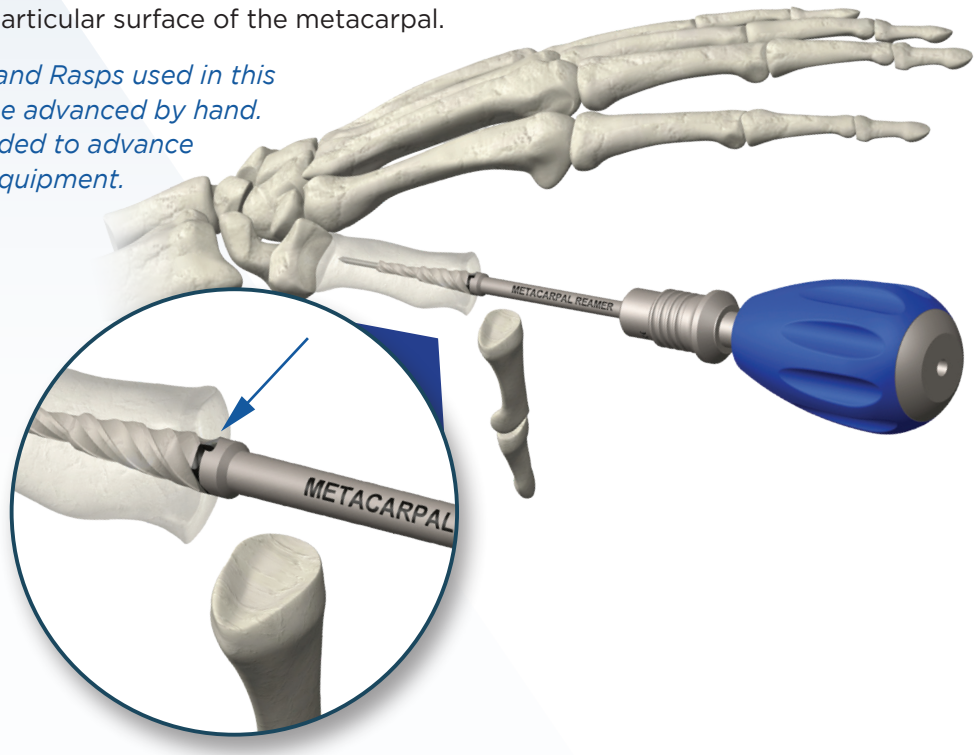
STEP 2. Metacarpal Preparation (continued)

Establish a pilot hole by drilling 30mm with the cannulated 3.0mm drill. The Metacarpal Implants are 30mm in length.



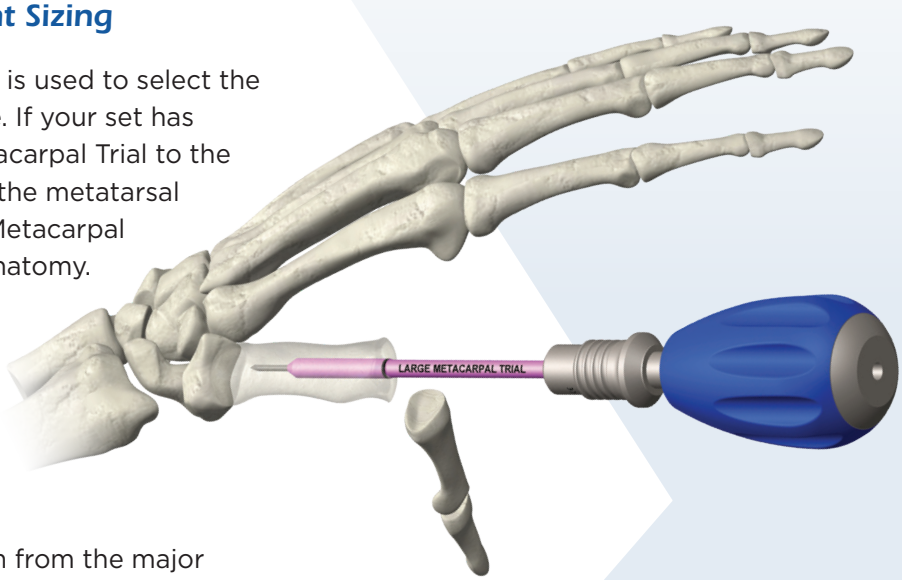
Advance the cannulated Metacarpal Reamer over the Guidewire and advance it until the black depth line is just beneath the articular surface of the metacarpal.

Note: All Reamers and Rasps used in this technique should be advanced by hand. It is not recommended to advance them with power equipment.



STEP 3. Metacarpal Implant Sizing

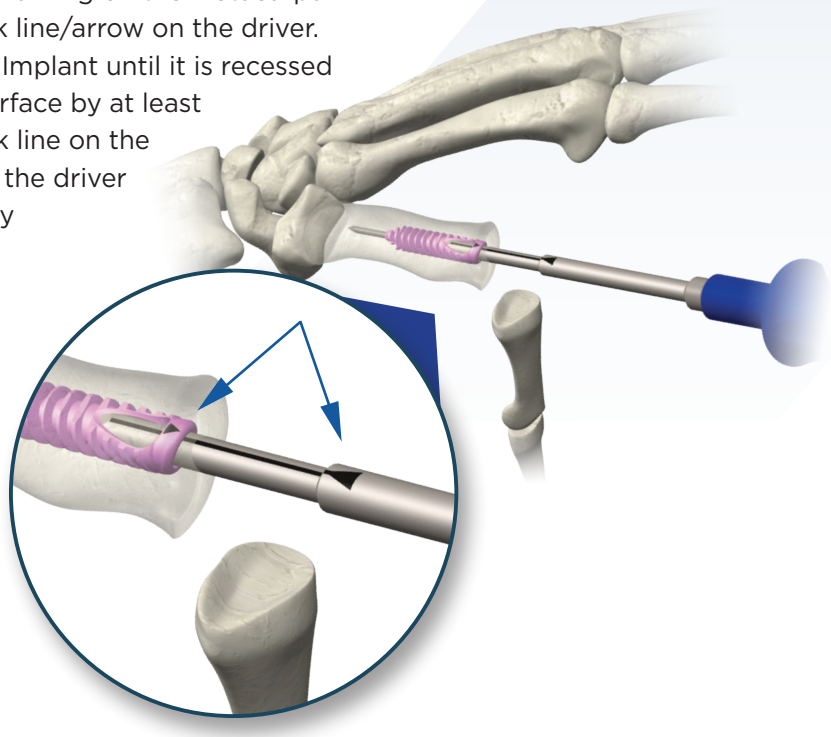
Pre-operative X-ray templating is used to select the proper Metacarpal Implant size. If your set has Metacarpal Trials, attach a Metacarpal Trial to the handle and insert the trial into the metatarsal to determine the appropriate Metacarpal Implant size for the patient's anatomy. Sequentially trial up to the size of the implant which achieves the best metacarpal canal fit and fill. Verify the trials fit in the canal using fluoroscopy.



Each trial is undersized by 1mm from the major diameter of the implant. Select the Metacarpal Implant that corresponds to the last trial fully seated into the canal (laser line).

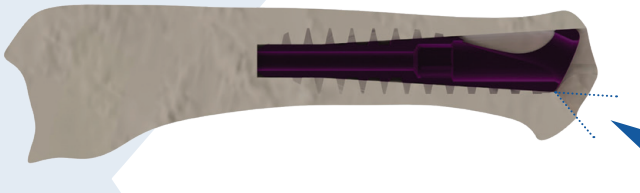
STEP 4. Metacarpal Implant Insertion

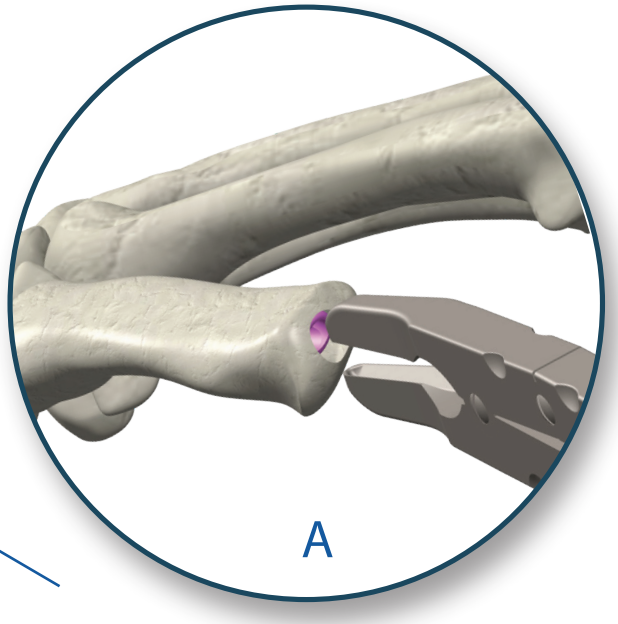
Align the black laser marking on the Metacarpal Implant with the black line/arrow on the driver. Insert the Metacarpal Implant until it is recessed below the articular surface by at least 2mm so that the black line on the implant and arrow on the driver are positioned dorsally at 12 o'clock.



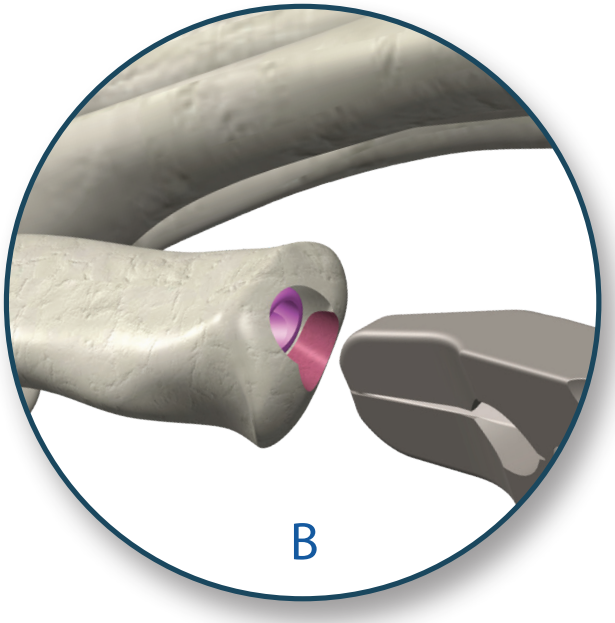
STEP 5. Metacarpal Preparation

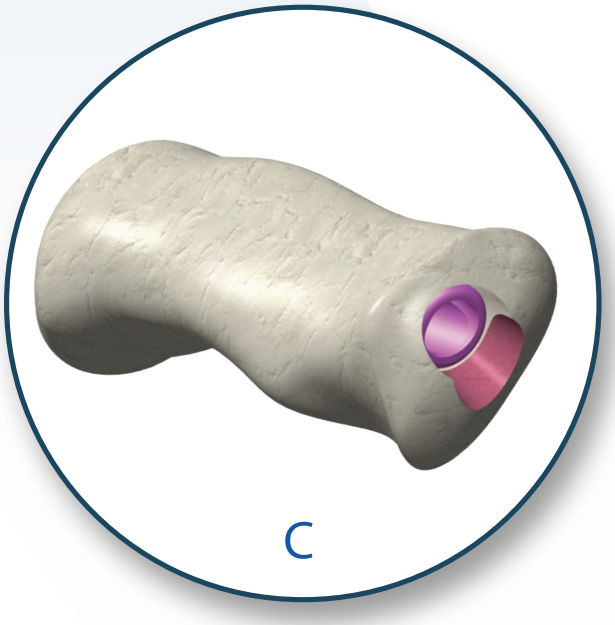
Next, remove the inferior lip beneath Metacarpal Implant (6 o'clock) with rongeurs.





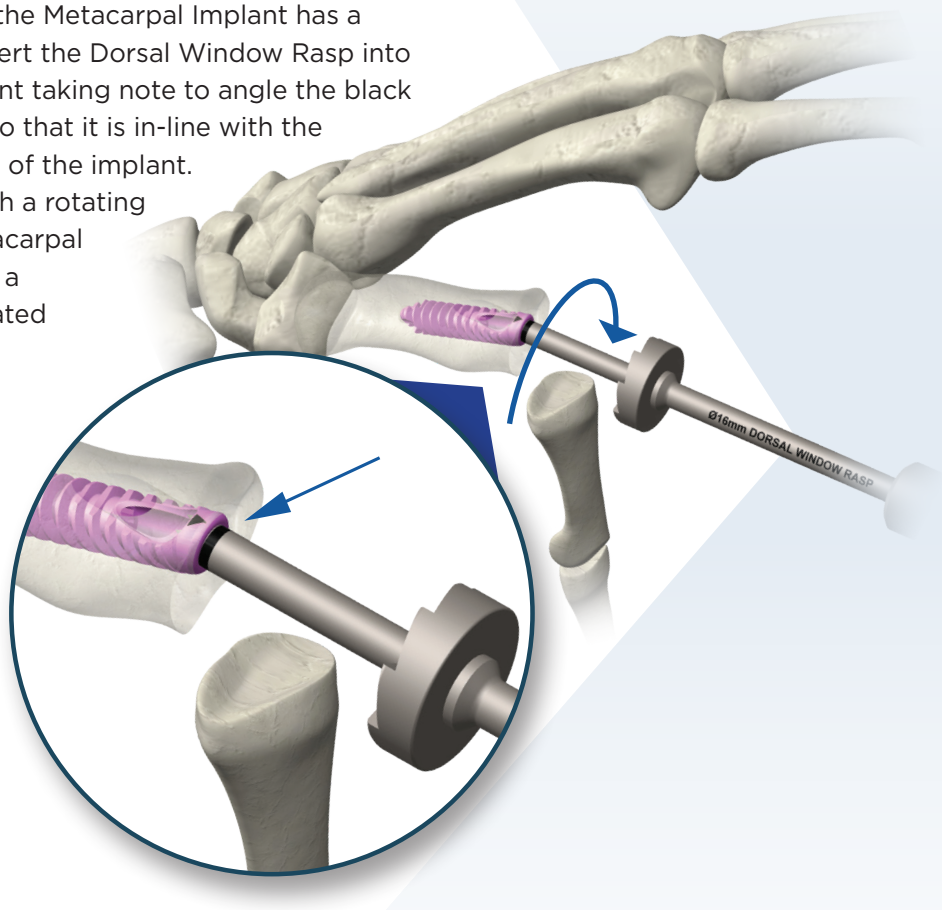
Removal of this bone enables the joint preparation instrument in the next step to prepare the joint at the correct angle.





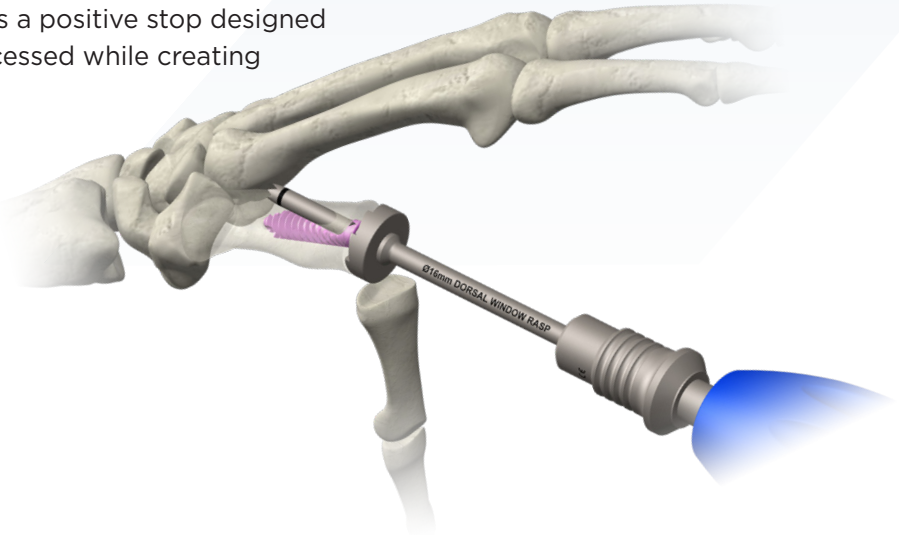
STEP 5. Metacarpal Preparation (continued)

The distal surface of the Metacarpal Implant has a built-in 25° angle. Insert the Dorsal Window Rasp into the Metacarpal Implant taking note to angle the black marking of the rasp so that it is in-line with the opening of the eyelet of the implant. Advance the rasp with a rotating motion until the metacarpal head is flattened and a dorsal window is created in the metacarpal.



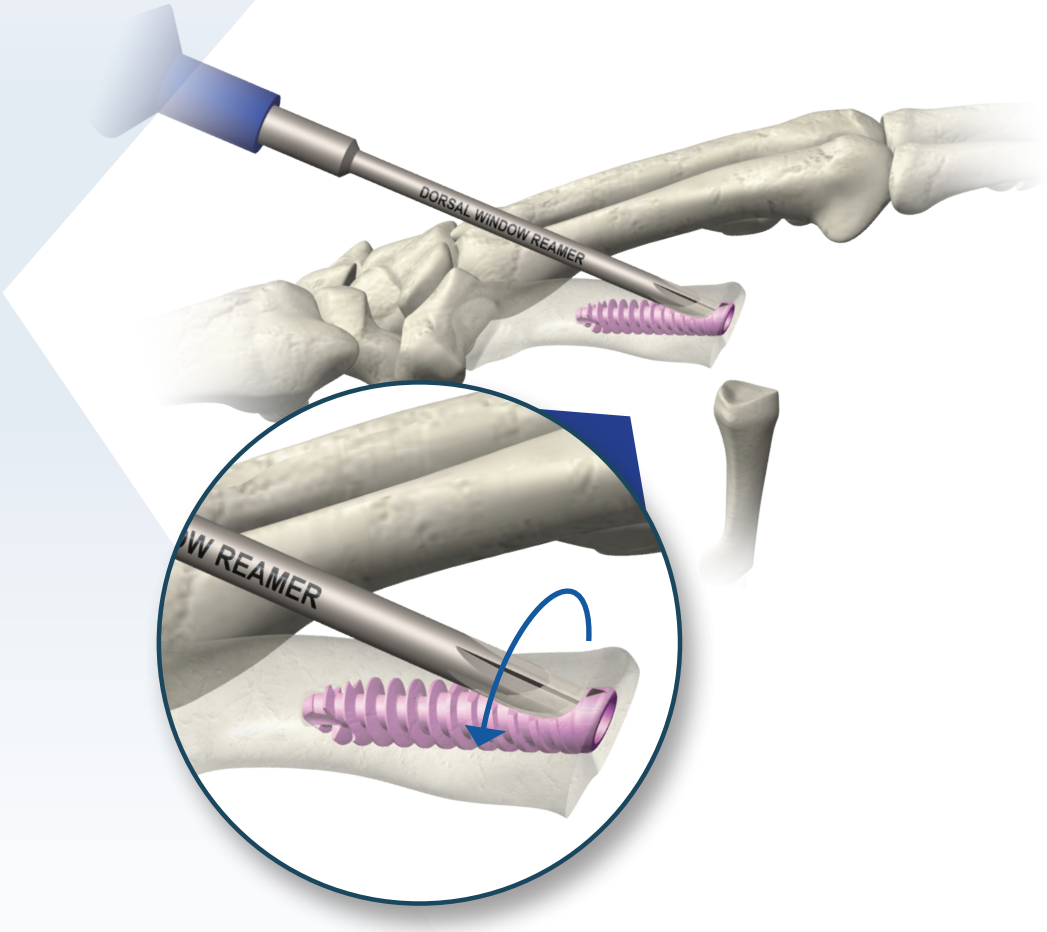
The Dorsal Window Rasp has a positive stop designed to leave the implant 1mm recessed while creating a 25° angled surface.

Remove any remaining bone around the resected surface with ronguers.



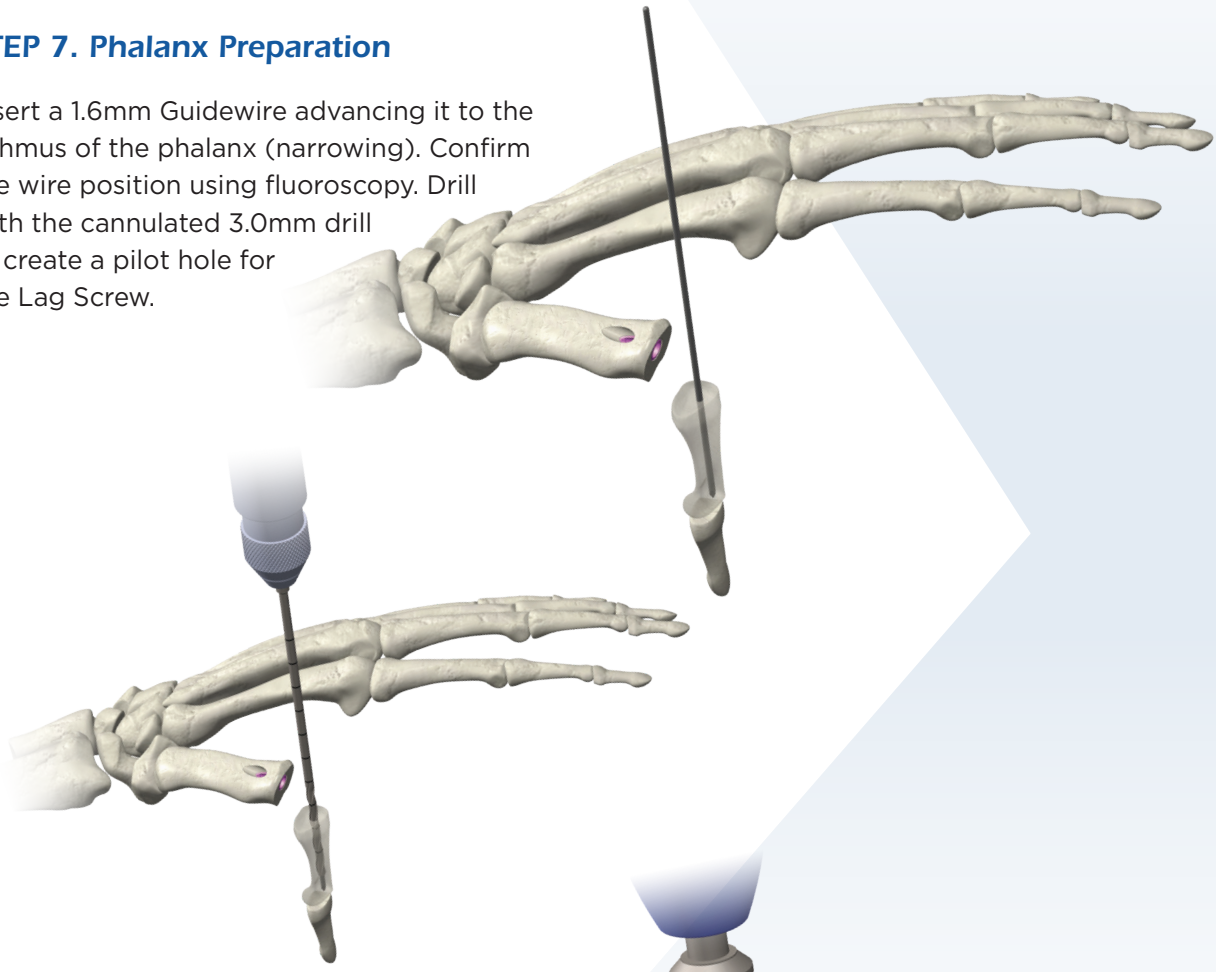
STEP 6. Dorsal Window Reamer

Insert the Dorsal Window Reamer into the dorsal window of the Metacarpal Implant and gently rotate to widen the dorsal bony window for the Lag Screw head.

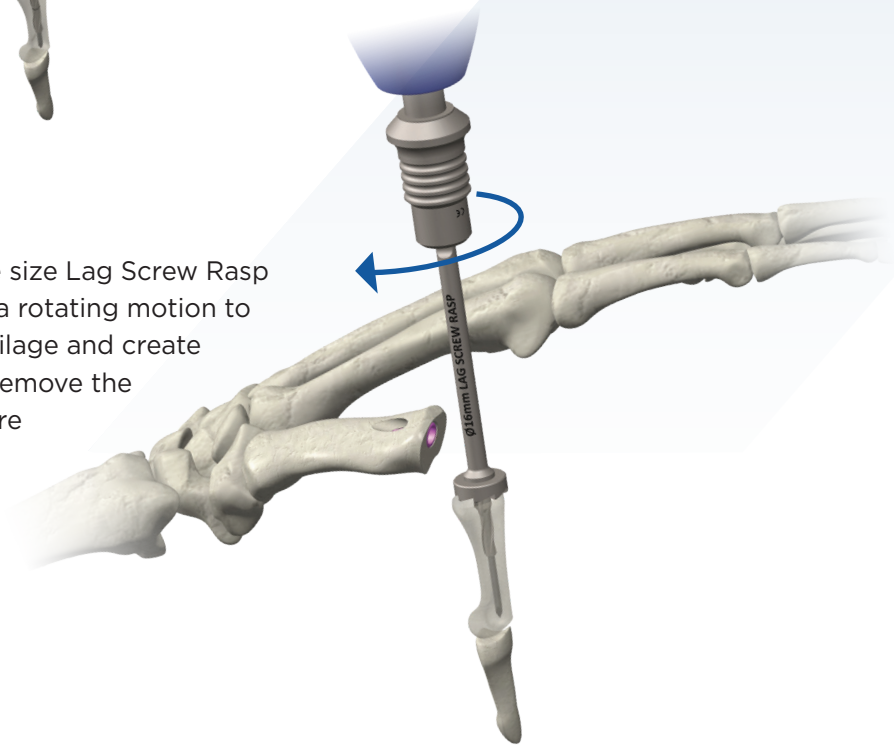


STEP 7. Phalanx Preparation

Insert a 1.6mm Guidewire advancing it to the isthmus of the phalanx (narrowing). Confirm the wire position using fluoroscopy. Drill with the cannulated 3.0mm drill to create a pilot hole for the Lag Screw.

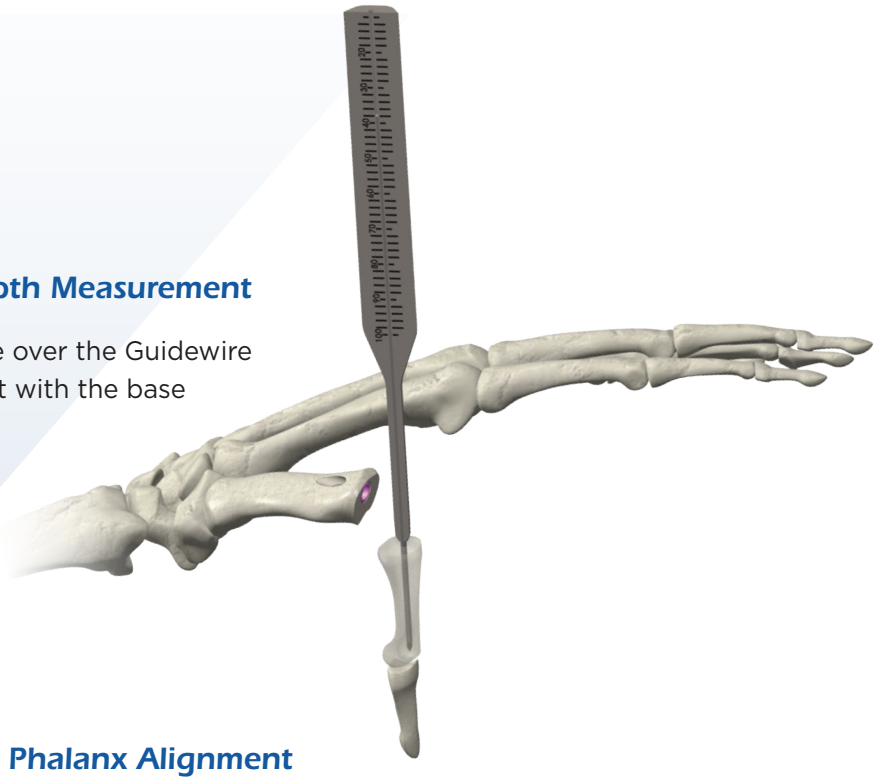


Advance the appropriate size Lag Screw Rasp over the Guidewire with a rotating motion to remove the articular cartilage and create a flat bleeding surface. Remove the rasp leaving the Guidewire in place.



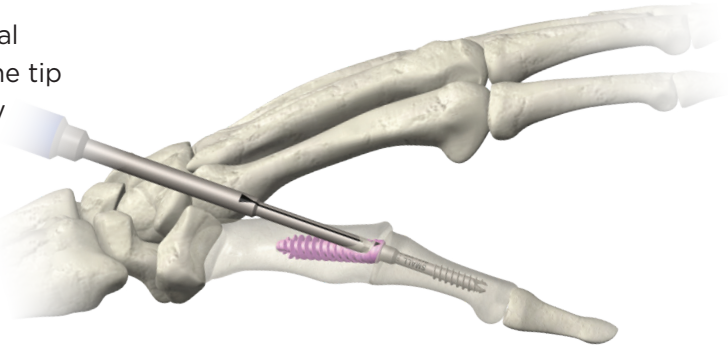
STEP 8. Lag Screw Depth Measurement

Advance the Depth Gauge over the Guidewire until the tip makes contact with the base of the phalanx.

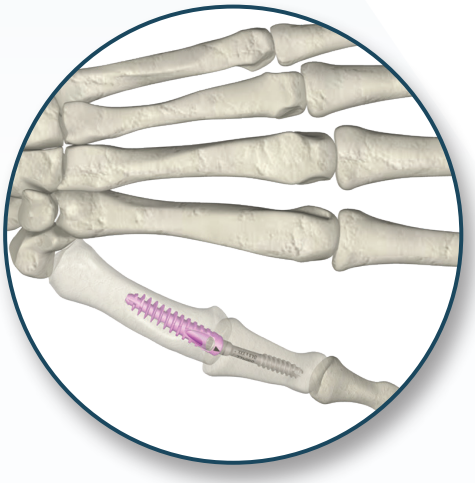


STEP 8. Lag Screw and Phalanx Alignment

Insert the proper Lag Screw through the dorsal window of the Metacarpal Implant. Position the tip of the Lag Screw into the pilot hole previously created in the phalanx. While firmly holding the phalanx, advance the Lag Screw into the phalanx until increased torque is felt. This signals engagement and locking of the Morse Taper between the Lag Screw and Metacarpal Implant. Avoid over tightening and over stressing the bone screw interface.



Verify under fluoroscopy that the Lag Screw is fully seated.



STEP 9. Closure

Repair the extensor mechanism and close in the standard fashion.

Postoperative Treatment: A cast or splint is typically used to protect and support the thumb during healing and only limited load bearing is allowed until the fusion is complete.

XMCP Removal Instructions

- Remove tissue in-growth from the dorsal metacarpal window and Lag Screw head hex recess.
- Insert the Removal Driver into the Lag Screw.
- Unscrew the Lag Screw counter-clockwise to remove the screw from the implant.

  In the event the locking mechanism is still engaged, insert the Removal Tool through the Driver into the head of the screw. This will lock the screw head onto the driver.
- Attach the Slap Hammer to the Removal Tool and apply slight back-pressure to disengage the Morse Taper connection.

  Continue turning the Screw Driver counterclockwise until the entire Lag Screw is removed.

  The Metacarpal Implant can be removed by exposing the metacarpophalangeal joint and clearing all tissue in-growth in the hex recess.
- Attach the Implant Driver and turn counterclockwise to remove the implant.

XMCP System Implants and Instruments

Implants

Part #	Description
102-40020	Small Lag Screw - 4.0mm x 20mm
102-40022	Small Lag Screw - 4.0mm x 22mm
102-40024	Small Lag Screw - 4.0mm x 24mm
102-40026	Small Lag Screw - 4.0mm x 26mm
102-40028	Small Lag Screw - 4.0mm x 28mm
102-40030	Small Lag Screw - 4.0mm x 30mm
102-40032	Small Lag Screw - 4.0mm x 32mm
102-40034	Small Lag Screw - 4.0mm x 34mm
102-40036	Small Lag Screw - 4.0mm x 36mm
113-40020	Small Lag Screw (solid) - 4.0mm x 20mm
113-40022	Small Lag Screw (solid) - 4.0mm x 22mm
113-40024	Small Lag Screw (solid) - 4.0mm x 24mm
113-40026	Small Lag Screw (solid) - 4.0mm x 26mm
113-40028	Small Lag Screw (solid) - 4.0mm x 28mm
113-40030	Small Lag Screw (solid) - 4.0mm x 30mm
113-40032	Small Lag Screw (solid) - 4.0mm x 32mm
113-40034	Small Lag Screw (solid) - 4.0mm x 34mm
113-40036	Small Lag Screw (solid) - 4.0mm x 36mm
120-12530	Small Metacarpal Implant - 4.0mm x 30mm
120-22530	Medium Metacarpal Implant - 5.0mm x 30mm
120-32530	Large Metacarpal Implant - 6.0 x 30mm
120-42530	Extra Large Metacarpal Implant - 7.0 x 30mm

Reusable Instruments

Part #	Description
102-00003	Small Implant Guide
102-00009	3.0mm Screwdriver
102-00017	AO Quick Connect Handle
102-00020	Removal Screwdriver
102-00021	Removal Tool
102-00022	Slap Hammer
113-00003	Depth Gauge
120-03000	Dorsal Window Reamer
120-01250	Small Metacarpal Trial
120-02250	Medium Metacarpal Trial
120-03250	Large Metacarpal Trial
120-04250	Extra-Large Metacarpal Trial

Disposable Instruments

Part #	Description
101-00006	Single-Ended Guidewire - 1.6mm
101-00023	Cleaning Brush - 1.6mm
102-00002	Cannulated Drill - 3.0mm
120-01000	Metacarpal Reamer
120-02012	12mm Dorsal Window Rasp
120-02016	16mm Dorsal Window Rasp
120-04012	12mm Lag Screw Rasp
120-04016	16mm Lag Screw Rasp

XMCP™
Fusion Fixation

Delivering
a smarter approach for MCP Fusion
Period.

Real change ***starts*** here™

EXTREMITY® MEDICAL

Real change ***starts*** here™

888.499.0079
973.588.8980
ExtremityMedical.com
customerservice@ExtremityMedical.com

300 Interpace Parkway, Suite 410 | Parsippany, NJ 07054

CE 2797

LBL 120-99102-EN Rev F 12/2020