

# **Ulnar Osteotomy Compression Plate**

Surgical Technique | TriMed Ulnar Osteotomy System













#### **Plate Application**

- Expose the bone in the interval between the ECU and FCU.
- Apply the plate to the bone. Ensure that the two small instrument holes on the side of the plate are visible.
- Position the plate to avoid distal impingement during shortening.
- Drill using 2.3mm (red) drill and insert one non-locking 3.2mm screw in the slotted hole at the end farthest from the osteotomy site. Repeat with three 3.2mm screws on the opposite side of plate, starting with the end screw hole.

## **Pin Fixation**

- Place the Combination Drill Guide on the plate.
- Insert the short 1.6mm (0.062") K-wire flush along the back wall of the pin slot in the Combination Drill Guide and through one cortex.
- Repeat with the longer K-wire and remove the Combination Drill Guide.

## Osteotomy

- Select the appropriate 'A' Saw Guide based on the planned resection (2, 3, 4 or 5mm) and insert into the plate. Hold the guide with the Bone Clamp or 1.6mm K-wire (see Tips).
- Make the cut with a saw blade of 0.4mm thickness and irrigate liberally.
- Remove 'A' Saw Guide and insert 'B' Saw Guide. Make the second cut and remove bone wafer.

## **Compression Clamp Application**

- Insert the Compression Clamp into the hole on the fixed edge of the plate.
- Adjust the clamp so the K-wire sleeve is just below the central axis of the ulna and away from the osteotomy site.
- Insert a 1.6mm (0.062") K-wire through the sleeve and engage the far cortex.

## Ulnar Osteotomy Compression Plate







- Loosen the screw in the slotted hole 1/4 turn.
- Shorten the ulna with Compression Clamp. Use a Bone Clamp for added compression of the osteotomy site.
- Check both sides of the osteotomy site for bone coaptation.

#### **Lag Screw Hole Preparation**

- Re-apply the Combination Drill Guide and drill a lag screw hole using 2.3mm (red) drill and guide.
- Remove the Combination Drill Guide.
- Measure the long side of the hole with the Depth Gauge.
- Use the bone tap to ensure that the lag screw threads easily.

#### **Lag Screw Insertion**

- Insert lag screw ensuring purchase with the far cortex.
- Re-tighten the cortical screw in the slotted hole and ensure the osteotomy remains compressed.



#### **Final Fixation**

- Insert the remaining cortical screws.
- Remove K-wires and Bone Clamp.

#### TIPS

- A 1.6mm K-wire or the Bone Clamp can be used to stabilize the cutting guides to the plate while osteotomy cuts are made.
- Osteotomies larger than 5mm may be made by performing successive cuts.







The presently issued U.S. patents are: 6,113,603; 7,037,308; 7,044,951; 7,195,633; 7,540,874; 7,942,877; 8,177,822; 8,821,508; 8,906,070; 9,089,376; 9,283,010; 9,220,546; 9,237,911; 9,402,665; 9,636,157; 9,861,402. See trimedortho.com for all listed patents.

The technique presented is one suggested surgical technique. The decision to use a specific implant and the surgical technique must be based on sound medical judgment by the surgeon that takes into consideration factors such as the circumstances and configuration of the injury.