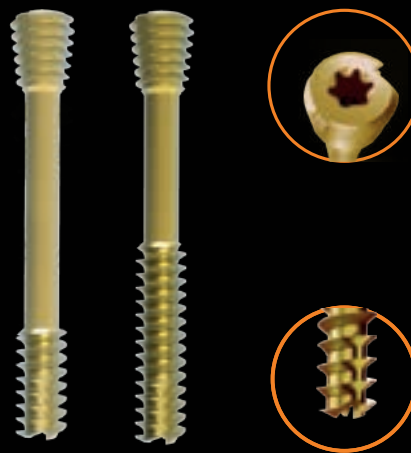




**M3MED**

# Surgical technique **TOOL SCREWS**

The choice of compression



Intra-articular tarsal and metatarsal fractures  
Intra-articular carpal and metacarpal fractures  
Scaphoid, olecranon and malleolus fractures  
Mono and bi-cortical osteotomies in the foot or hand  
Phalangeal, interphalangeal and metatarsal arthrodeses



The following guidelines are indicative; it is responsibility of the surgeon to evaluate the adequacy and the use of this technique according to his experience and his medical skills.

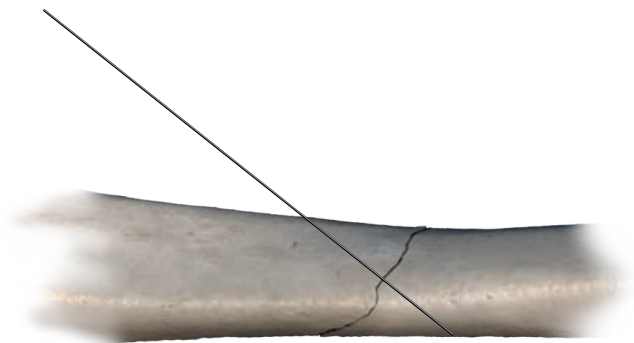


①

Evaluate the fracture and select the proper diameter and design of the screw. Place the patient according to the technique chosen by the surgeon who is also responsible for the choosing of the operational access. After the temporary reduction of the fracture or osteotomy (performed according to the surgeon's technique and eventually with Kirschner wires), the surgeon has to choose the design and the diameter of the screw he wants to implant.

②

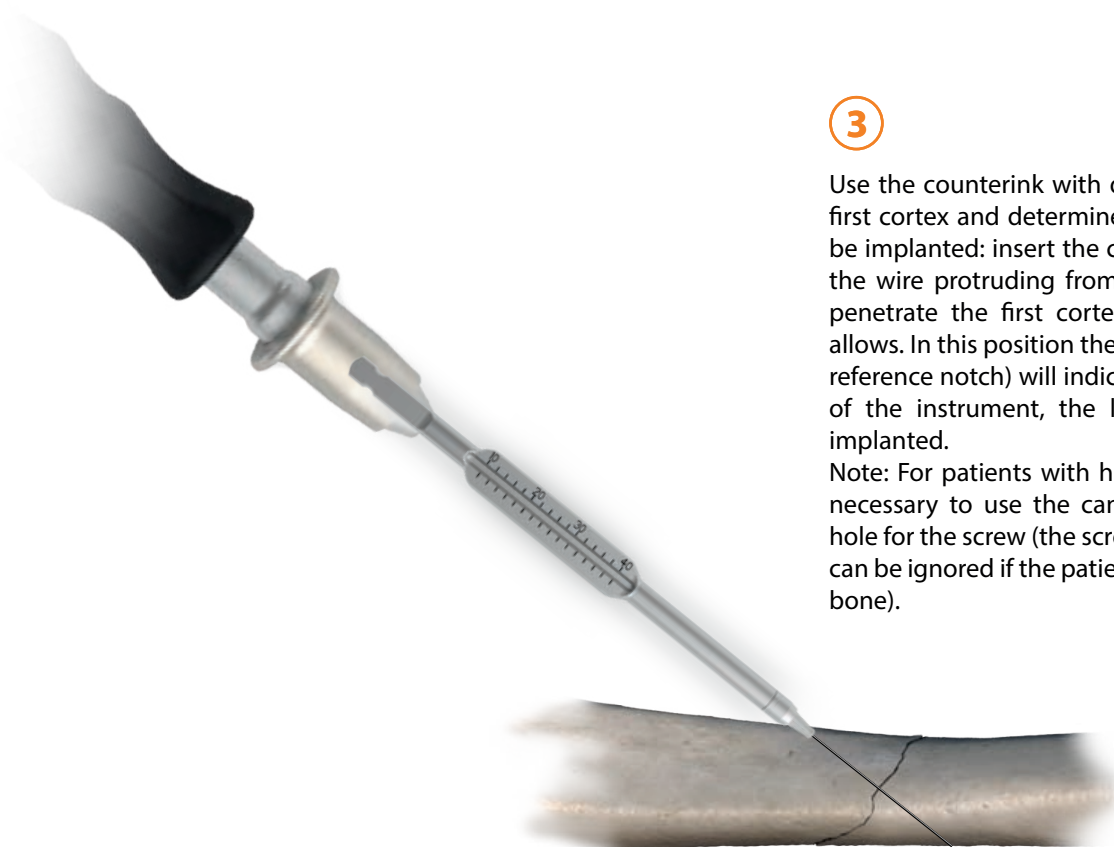
Insert the Kirschner guide wire in the position that allows the surgeon to get the chosen screw position. Check with fluoroscopy if the position is correct.



③

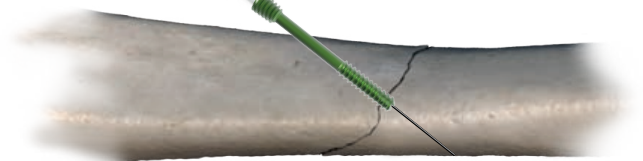
Use the counterink with depth gauge to prepare the first cortex and determine the length of the screw to be implanted: insert the counterink on the portion of the wire protruding from the bone and, in rotation, penetrate the first cortex as far as the instrument allows. In this position the back end of the wire (or the reference notch) will indicate, on the graduated plane of the instrument, the length of the screw to be implanted.

Note: For patients with high bone density, it may be necessary to use the cannulated tip to prepare the hole for the screw (the screw is self-drilling so this step can be ignored if the patient does not have a very hard bone).



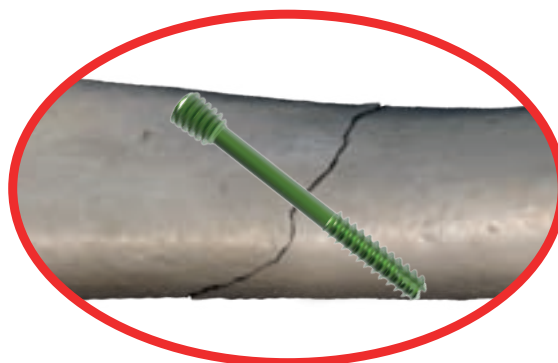
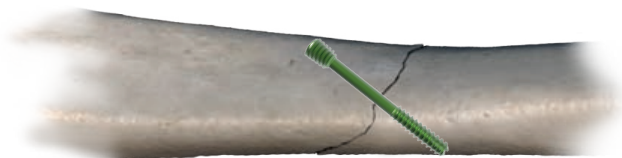
4

Using the cannulated screwdriver, insert the screw with the correct length and diameter into the bone. It is important to select the right screw length, so that once inserted, the tip does not protrude from the bone fragment and that the screw head remains slightly below the surface of the bone, in order to avoid problems related to the screw prominence. After the insertion, it is possible to check with fluoroscopy if the screw and fractures are properly fixed.




5


Remove the Kirschner wire and close the wound.




If the screw removal is required, it is possible to remove the devices using the proper surgical instruments. Uncover the head of the screws and extract them using the proper extractor screwdriver.




Handles




Countersink




Cannulated Tips




Screwdrivers with or without depth gauge



Wires tube



Instruments box ( empty)



INSTRUMENTS SET

| CODE   | DESCRIPTION  |
|--|--|
| UAOI0MA000   | Quick coupling handle  |
| STOI222000K<br>STOI232000K<br>STOI240000K  | Countersink Ø2.2-2.6<br>Countersink Ø3.2<br>Countersink Ø4.0   |
| STOI217000P<br>STOI222000P<br>STOI227000P  | Cannulated Tip Ø1.7mm<br>Cannulated Tip Ø2.2mm<br>Cannulated Tip Ø2.7mm  |
| STOI100007<br>STOI100007P<br>STOI100007C<br>STOI100008<br>STOI100008P<br>STOI100008C<br>STOI100009<br>STOI100009P<br>STOI100009C | Screwdriver with Depth Gauge BTX7<br>Solid Screwdriver BTX7<br>Cannulated Screwdriver BTX7<br>Screwdriver with Depth Gauge BTX8<br>Solid Screwdriver BTX8<br>Cannulated Screwdriver BTX8<br>Screwdriver with Depth Gauge BTX9<br>Solid Screwdriver BTX9<br>Cannulated Screwdriver BTX9 |
| UKWI00080T<br>UKWI00120T   | Tube for K-wire L80mm<br>Tube for K-wire L120mm  |
| STOI022040BP   | TOOL 2.2-4.0 small instruments box   |
| SET.TOOL2240P  | TOOL Screws Ø2.2- 4.0 instruments box  |