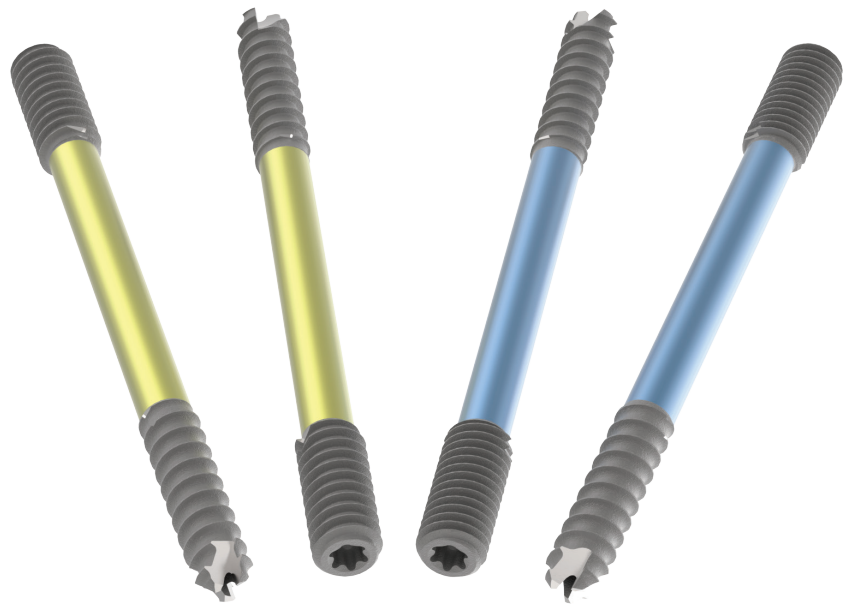




TWIN CF Screw System



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Note:

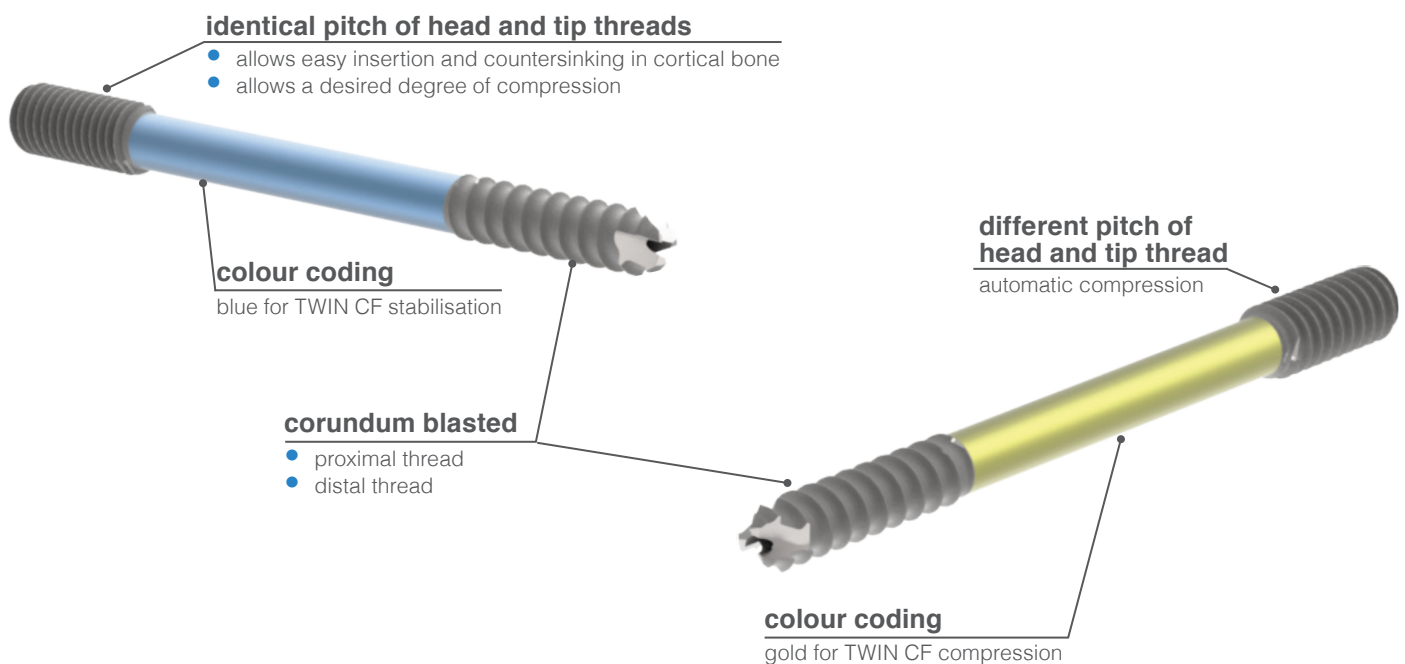
The surgical technique outlined below reflect the surgical procedure usually chosen by the clinical advisor. However, each surgeon must decide which surgical method and which approach is the most successful for his patient.

► Introduction

System Characteristic

The **TWIN CF Screw System** is dedicated to address the unique demands of advanced mid/hint foot reconstruction. It is designed to specifically address these patients, while providing easy to use instrumentation that assists in attaining reproducible results. The TWIN CF system offers two types of cannulated screws:

- TWIN CF Compression screw for automatic compression based on different thread pitches of the tip and the head.
- TWIN CF Stabilisation screw for manual compression with a specific instrumentation maintaining a desired compression by a stabilization screw.



Indication

Fracture fixation, osteotomies, reconstruction procedures, non-unions, and fusions of bones in the foot and ankle including: Metatarsals, Cuneiforms, Cuboid, Navicula, Calcaneus and Talus. Medial and Lateral Column fusion resulting from neuropathic osteoarthropathy (Charcot).

Please note:

The TWIN CF screw is to be used with additional fixation across the arthrodesed joints.

► Surgical Technique

Preparation

- A gastrocnemius slide or percutaneous tendo-achilles lengthening can help to minimize stress across the midfoot.
- Make a medial incision along the axis of the medial column to allow access to the medial column joints.
- Expose and prepare the joints to be fused.
- Identify and avoid the tibialis anterior tendon, during the procedure.

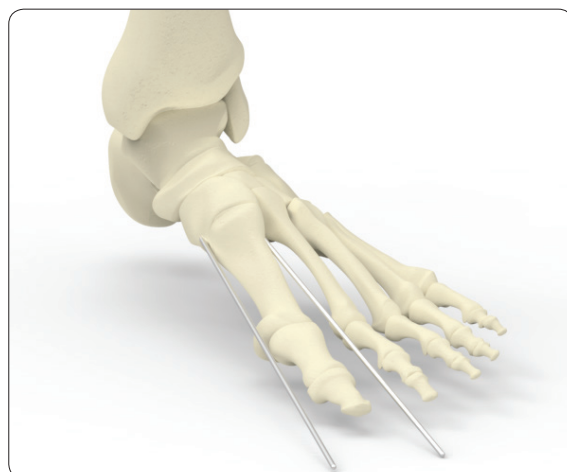
TWIN CF Stabilisation Screw Insertion

Prepare Joints

Instruments

REF 11.90020.150 Kirschner Wire Ø 2.0 mm, L 150 mm

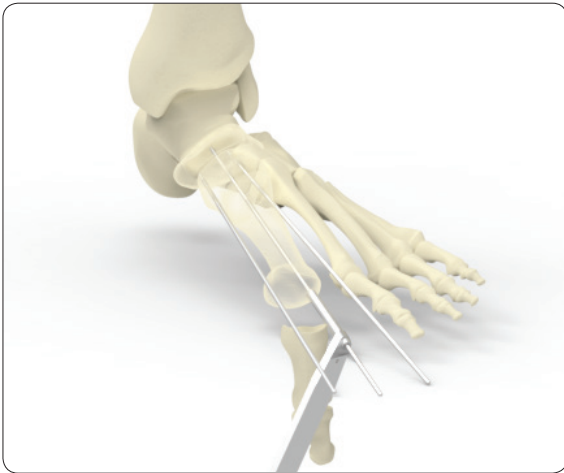
- Correct deformities with resections, where necessary.
- These corrections should be performed to the estimated final shape of the foot.
- Place temporary K-wires to hold the joints in place, taking care not to place them in the path of the final implant.



Prepare Metatarsal

- The first metatarsal phalangeal joint is exposed with an incision from dorsal.





Insert K-wire

Instruments

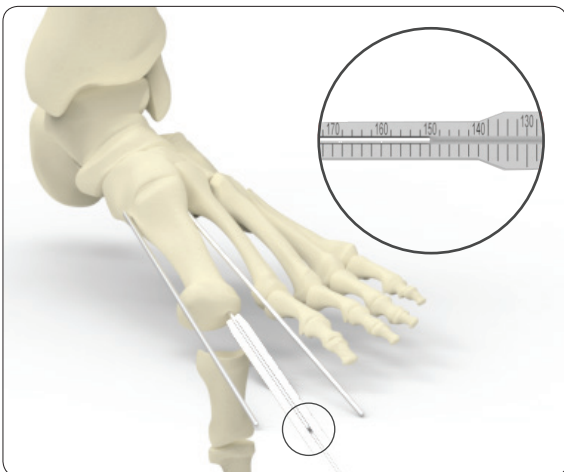
REF 11.90220.230

Kirschner Wire Ø 2.0 mm, L 230 mm

REF 12.20060.070

Double Drill Guide

- The Ø2.0 mm K-wire is inserted using the double drill guide during plantarflexion of the first phalanx.
- The K-wire is inserted across the cuneiform, navicular into the talus under image intensifier control.
- Advance the K-wire until the tip is in the desired implant position in the talus.



Measuring Implant Length

Instruments

REF 08.20100.070

Direct Measuring Device

- The required screw length is determined using the direct measuring device for the Kirschner wire.
- The end of the Kirschner wire indicates the length of the required screw.

Please note:

For final implant length the space between joints, compression and countersinking should be considered.



Pre-Drill

Instruments

REF 12.20010.069

TWIN CF Step Reamer

- Remove the direct measuring device and pre-drill over the K-wire with the step reamer.
- Ensure under image intensification that the step reamer is not advanced further than the K-wire.

Please note:

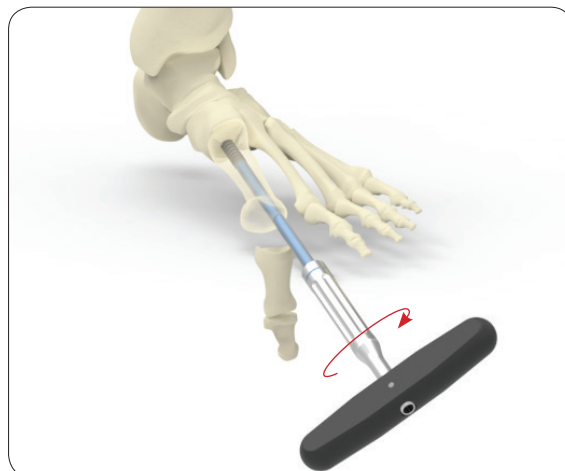
It should be verified with the help of image intensifier that the step reamer follows the desired path and does not penetrate the end of the talus.

Insertion TWIN CF Stabilisation Screw

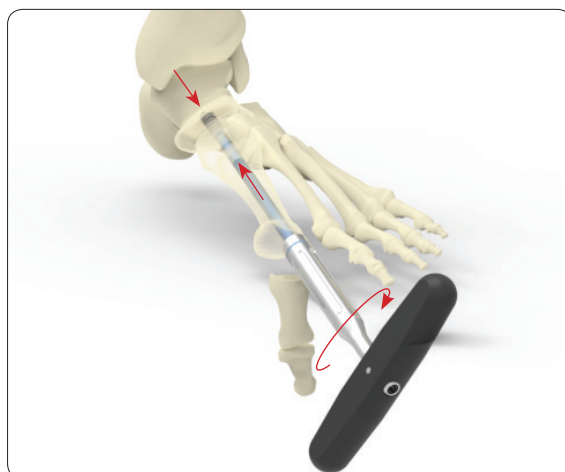
Instruments

REF 12.20040.050 TWIN CF Compression Screwdriver

- The distal thread of the TWIN CF Stabilisation Screw is connected to the compression screwdriver.
- Insert the TWIN CF Stabilisation Screw over the K-wire into the metatarsal head.
- Control screw insertion with an image intensifier.



- Advance the TWIN CF Stabilisation Screw until the compression screwdriver contacts the articular surface of the metatarsal.
- Continue to advance the compression screwdriver to compress the medial column until desired compression is achieved.

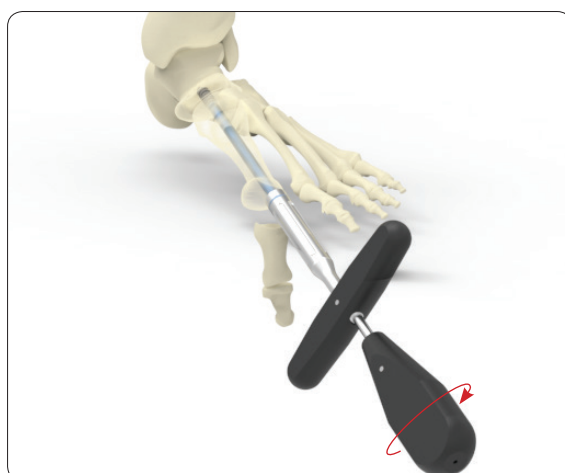


Countersink TWIN CF Stabilisation Screw

Instruments

REF 12.20040.027 Screwdriver T27

- To countersink the screw and to disconnect it from the compression screwdriver use the screwdriver T27 through the cannulation of the T-handle.
- The compression screw driver is kept in position and the screwdriver is used to screw the head of the implant into the metatarsal.
- When the stop of the screwdriver shaft reaches the T-handle, it indicates that the top end of the TWIN CF Stabilisation Screw thread is even with the articular surface.





- Check the position of the TWIN CF Stabilisation Screw in two planes with the image intensifier, to ensure that it is well inserted into the body of the talus.

Please note:

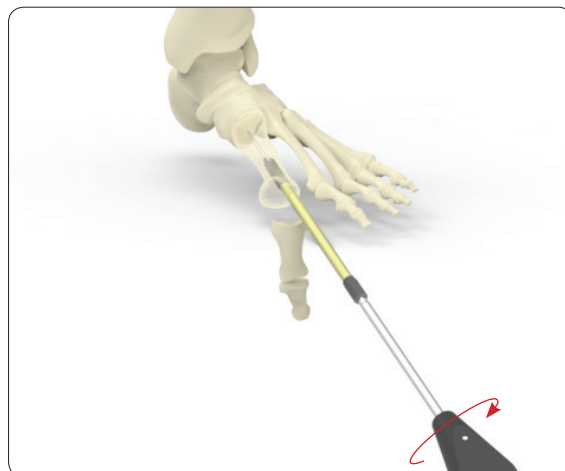
It is important to use the right length of the TWIN CF Screw to avoid cut-outs along the plantar aspect of the distal talus.

TWIN CF Compression Screw Insertion

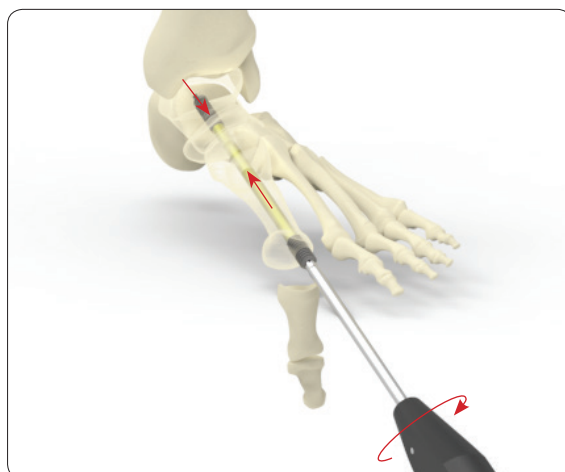
Instruments

REF 12.20040.027 Screwdriver T27

- Apply steps „Insert K-wire, Measuring Implant Length and Pre-Drill“ as described before.
- Insert the TWIN CF Compression Screw over the K-wire into the metatarsal head using the screwdriver.
- Use image intensification to visualize and control screw insertion.



- Turn the screwdriver until the head of the TWIN CF Compression Screw is seated below the articular surface of the metatarsal.



- Check the position of the TWIN CF Stabilisation Screw in two planes with the image intensifier, to ensure that it is well inserted into the body of the talus.

Please note:

It is important to use the right length of the TWIN CF Screw to avoid cut-outs along the plantar aspect of the distal talus.



► Product Information

Implants



TWIN CF Stabilisation Screw

- Screw diameter: 7.5 / 8.9 mm
- Core diameter: 5.7 / 6.8 mm
- Cannulation: 2.2 mm
- Pitch: 2.75 / 2.75 mm
- Hexalobe: T27
- Material: Ti6Al4V

Article Number	Length
12.03719.060(S)	60 mm
12.03719.065(S)	65 mm
12.03719.070(S)	70 mm
12.03719.075(S)	75 mm
12.03719.080(S)	80 mm
12.03719.085(S)	85 mm
12.03719.090(S)	90 mm
12.03719.095(S)	95 mm
12.03719.100(S)	100 mm
12.03719.105(S)	105 mm
12.03719.110(S)	110 mm
12.03719.115(S)	115 mm
12.03719.120(S)	120 mm
12.03719.125(S)	125 mm
12.03719.130(S)	130 mm
12.03719.135(S)	135 mm
12.03719.140(S)	140 mm
12.03719.145(S)	145 mm
12.03719.150(S)	150 mm
12.03719.155(S)	155 mm
12.03719.160(S)	160 mm
12.03719.165(S)	165 mm
12.03719.170(S)	170 mm

Article Number	Length
12.03718.060(S)	60 mm
12.03718.065(S)	65 mm
12.03718.070(S)	70 mm
12.03718.075(S)	75 mm
12.03718.080(S)	80 mm
12.03718.085(S)	85 mm
12.03718.090(S)	90 mm
12.03718.095(S)	95 mm
12.03718.100(S)	100 mm
12.03718.105(S)	105 mm
12.03718.110(S)	110 mm
12.03718.115(S)	115 mm
12.03718.120(S)	120 mm
12.03718.125(S)	125 mm
12.03718.130(S)	130 mm
12.03718.135(S)	135 mm
12.03718.140(S)	140 mm
12.03718.145(S)	145 mm
12.03718.150(S)	150 mm
12.03718.155(S)	155 mm
12.03718.160(S)	160 mm
12.03718.165(S)	165 mm
12.03718.170(S)	170 mm


TWIN CF Compression Screw

- Screw diameter: 7.5 / 8.9 mm
- Core diameter: 5.7 / 6.8 mm
- Cannulation: 2.2 mm
- Pitch: 1.80 / 2.75 mm
- Hexalobe: T27
- Material: Ti6Al4V




Instruments

11.90020.150 Kirschner Wire Ø 2.0 mm, trocar tip,
L 150 mm, stainless steel



11.90220.230 Kirschner Wire Ø 2.0 mm, threaded tip,
L 230 mm, stainless steel



12.20010.069 TWIN CF Step Reamer Ø 5.8 / 6.9 mm,
cannulated, calibrated, Jacobs Chuck



08.20120.170 Cleaning Wire Ø 2.0 mm, L 250 mm



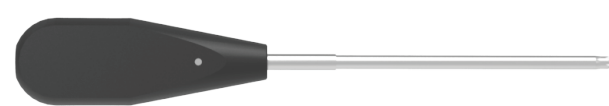
08.20100.070 Direct Measuring Device for
Kirschner Wires Ø 2.0 mm



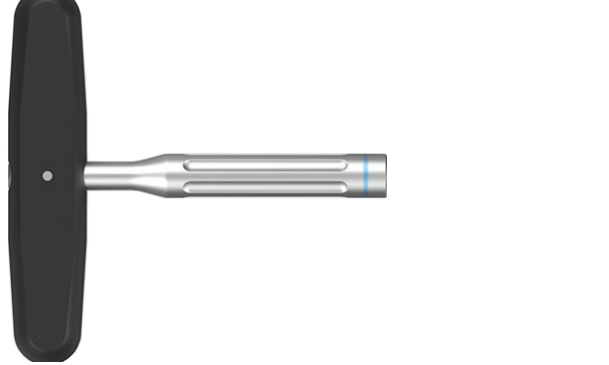
12.20060.070 Double Drill Guide 2.2 / 7.0



12.20040.027 Screwdriver, T27, cannulated,
L 233 / 123 mm



12.20040.050 TWIN CF Compression Screwdriver,
cannulated, T-Handle





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