

TarsiTree System

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Note:

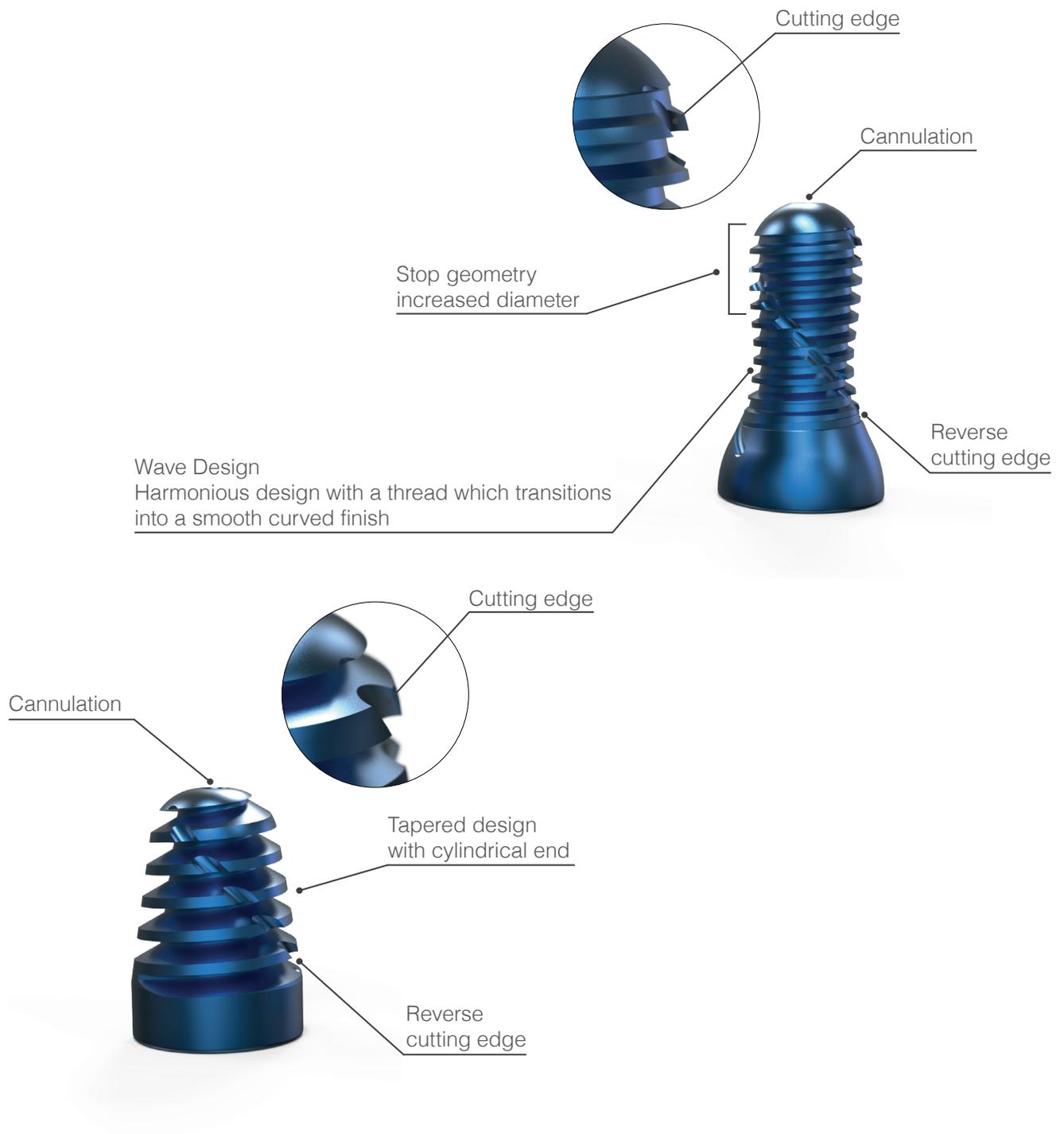
The surgical technique outlined below reflect the surgical procedure usually chosen by the clinical advisor. However, each surgeon must decide which surgical method and which approach is the most successful for his patient.

TarsiTree System

► Introduction

Product Specification

The **TarsiTree System** offers two different design variants for stabilising the subtalar joint.

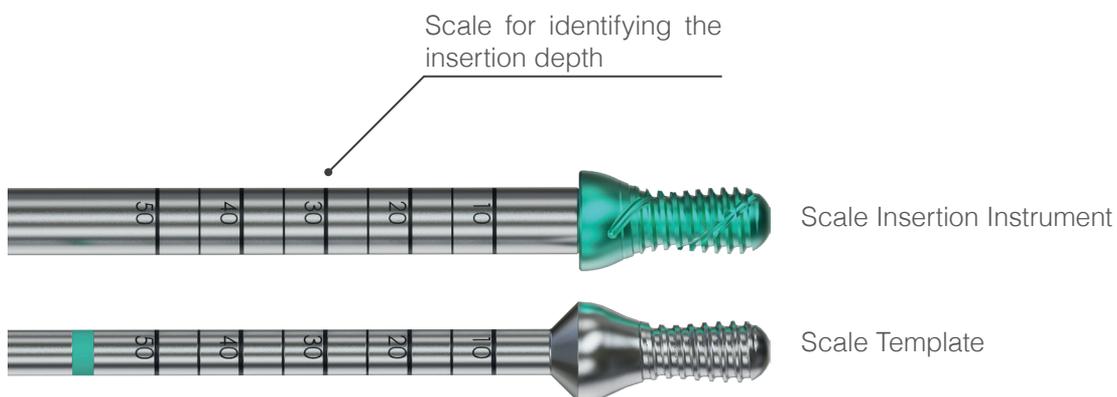
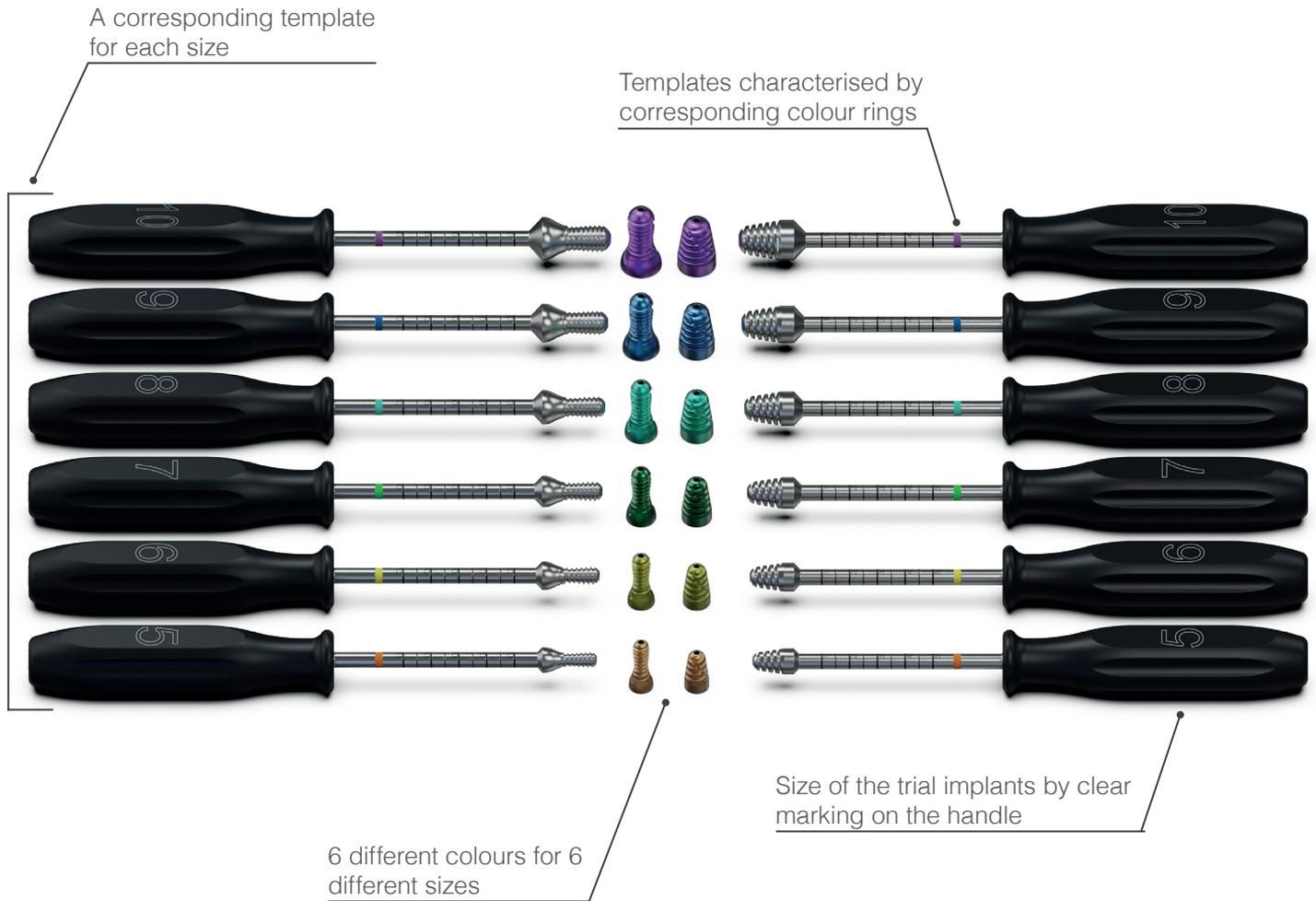


Indication

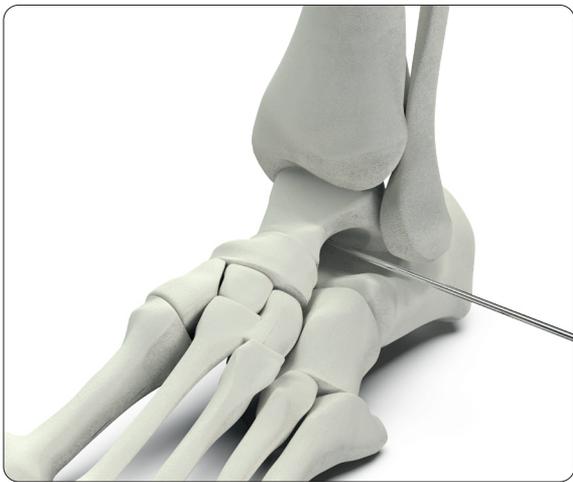
- Stabilization of the subtalar joint during hyperpronation of the foot

Colour Coding

The colour coding of the **TarsiTree System** describes different implant sizes to ensure faster and clearer identification of the selected size during surgery.



► Surgical Technique



Access

- Make a skin incision at a length of 2-3 cm directly above the sinus tarsi (soft spot) along the splitting lines, followed by hemostasis.
- Protection of the nervus peroneus superficialis.
- The subcutaneous fat tissue of the sinus tarsi is spread slightly using blunt scissors or clamps.

Positioning of the Guide Wire

Instruments

REF 12.20120.015 Guide Wire Ø 2.0 mm

- Advance the blunt guide wire over the sinus tarsi from anterolateral into the canalis tarsi to dorsomedial until it lies against the skin on the medial side of the foot below the medial malleolus.

Determination of the Implant Size

Instruments

REF 12.20100.005-010 Template, wave-shaped (Size 5 - 10)

REF 12.20200.005-010 Template, tapered (Size 5 - 10)

- Advance the smallest template (size 5) over the guide wire through the sinus tarsi and deep into the canalis tarsi until the head of the trial implant engages the talocalcaneal bone surface.
- The complete range of motion of the joint is then checked.
- Repeat the points described above using larger templates until the correct size is determined.
- The colour ring of the template determines the correct implant colour and therefore the correct implant size.
- The scale on the template is for orientation and corresponds to the scale on the insertion instrument.
- The correctly dimensioned template is removed.

Insertion of the Implant

Instruments

REF 12.20120.010 *Insertion Instrument*

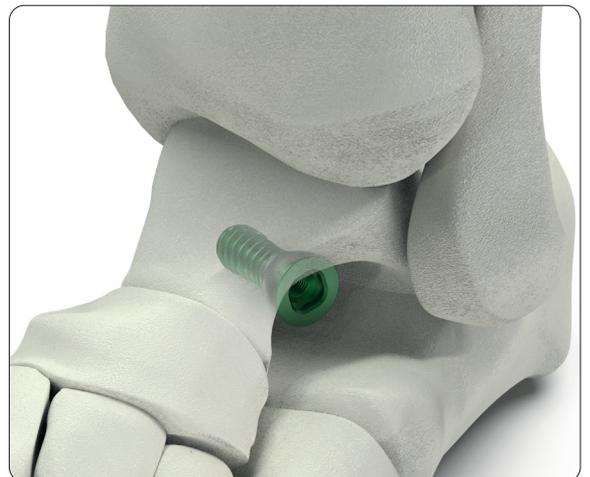
REF 12.20120.011 *Fixation Screw*

- The implant is screwed to the insertion instrument using the fixation screw.
- The implant is advanced into the sinus tarsi via the guide wire.
- Turn the insertion instrument clockwise while advancing the implant into the canalis tarsi.



Control of the Implant Position

- Check the dimensioning, placement and range of movement of the joint in all planes.
- Finally, remove the guide wire and disconnect the fixation screw and the insertion instrument from the implant.



Removal of the Implant

Instruments

REF 12.20120.010 *Insertion Instrument*

REF 12.20120.011 *Fixation Screw*

- To remove the implant, insert the guide wire into the implant.
- Attach the insertion instrument to the implant using the fixation screw and unscrew the implant counter-clockwise.



► Product Information

Implants

TarsiTree, wave-shaped

- Material: Ti6Al4V
- Anodisation: Type III



Article Number	Size
12.30100.005S	5
12.30100.006S	6
12.30100.007S	7
12.30100.008S	8
12.30100.009S	9
12.30100.010S	10

TarsiTree, tapered

- Material: Ti6Al4V
- Anodisation: Type III



Article Number	Size
12.30200.005S	5
12.30200.006S	6
12.30200.007S	7
12.30200.008S	8
12.30200.009S	9
12.30200.010S	10

Intruments

12.20120.015 Guide Wire Ø 2.0 mm, L 280mm, steel



12.20120.010 Insertion Instrument



12.20120.011 Fixation Screw



Templates

TarsiTree Template, wave-shaped



Article Number	Size
12.20100.005	5
12.20100.006	6
12.20100.007	7
12.20100.008	8
12.20100.009	9
12.20100.010	10

TarsiTree Template, tapered



Article Number	Size
12.20200.005	5
12.20200.006	6
12.20200.007	7
12.20200.008	8
12.20200.009	9
12.20200.010	10



MRI Safety Information

Non-clinical testing has demonstrated that the screw range from Marquardt Medizintechnik is MR Conditional in accordance with the ASTM F2503 standard definitions. A patient with this device can be safely scanned in an MR system meeting the following conditions:

- Cylindrical-bore
- Horizontal magnetic field (B_0)
- Spatial field gradient lower than or equal to
 - **1.5 T:** 23.45 T/m (2345 G/cm)
 - **3.0 T:** 11.75 T/m (1175 G/cm)
- Radiofrequency (RF) field exposure:
 - RF excitation: Circularly Polarized (CP)
 - RF transmit coil: whole-body transmit coil
 - RF receive coil type: whole-body receive coil
 - Maximum permitted whole-body averaged specific absorption rate (SAR):
Normal Operating Mode, 2 W/kg.
 - Scan duration and wait time:
 - 1.5 T:** 2 W/kg whole-body average SAR for **10min and 55s** of continuous RF (a sequence or back-to-back series/scan without breaks) followed by a wait time of **10min and 55s** if this limit is reached.
 - 3.0 T:** 2 W/kg whole-body average SAR for **7min and 54s** of continuous RF (a sequence or back-to-back series/scan without breaks) followed by a wait time of **7min and 54s** if this limit is reached.
- The screws are expected to produce a maximum temperature rise of 6.2 °C at 1.5 T and 6.5 °C at 3 T both after the scanning periods presented above.
- The presence of this implant may produce an image artifact. Some manipulation of scan parameters may be needed to compensate for the artifact. In non-clinical testing, the image artifact caused by the device extends approximately 83 mm from the device edge when imaged with a spin echo pulse sequence and 65 mm with a gradient echo, both at 1.5 T.
- Patients with uncompromised thermoregulation and under uncontrolled conditions or patients with compromised thermoregulation (all persons with impaired systemic or reduced local thermoregulation) and under controlled conditions (a medical doctor or a dedicated trained person can respond instantly to heat induced physiological stress).

Note:

Undergoing an MRI scan, there is a potential risk for patients with a metallic implant. The electromagnetic field created by an MRI scanner can interact with the metallic implant, resulting in displacement of the implant, heating of the tissue near the implant, or other undesirable effects.



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