



## Indications

- Displaced intra-articular fractures of the calcaneus;
- Subtalar arthrodesis following comminuted fractures of the calcaneus, posttraumatic osteoarthritis and/or poor function resulting from calcaneal fracture sequelae, osteoarthritis of the subtalar joint, or valgus flatfoot deformities.

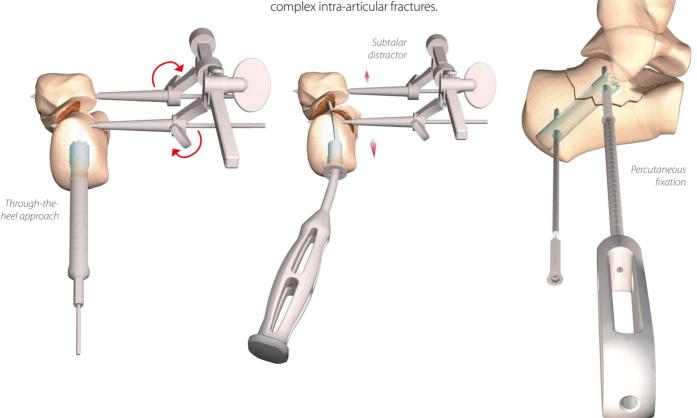
## Contra-indications

- Heel infection, patients with immature skeleton, extra-articular fracture of the calcaneus;
- Relative contraindications due to increased risk of surgical failure:
  - Patients who are non-cooperative or suffering from neurological disorders, unable to follow instructions, or with metabolic disorders;
  - Factors affecting wound healing (decubitus ulcer, diabetes, severe protein deficiency and/or malnutrition).

## How does it work?

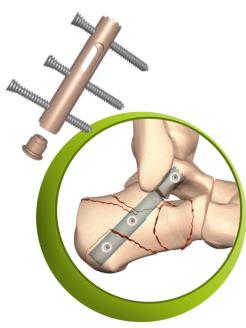
• A through-the-heel approach should be used, using a hollow reamer to tunnel into the calcaneus. When used with a subtalar distractor, this method provides direct intrafocal access to the articular fragments. • This technique makes it possible to correct calcaneal tuberosity displacements and obtain good reduction of the joint for intra-articular fractures that are composed of large fragments, or to perform arthrodesis right away in cases of more complex intra-articular fractures.

•The reduced joint and calcaneus are held in place by percutaneous fixation with the CALCAnail® system.





FRACTURE NAIL Ø10mm



ARTHRODESIS NAIL **Ø12mm** 

# CALCAnail ADVANTAGES

- No wound healing probelms <sup>1,3</sup>
- Stable restoration of bohler's angle <sup>1,3</sup>
- Average AOFAS ankle hindfoot score of 86.5 3
- Restoration of rear foot axis <sup>3</sup>
- Stable reduction with restoration of global shape <sup>1,3</sup>
- Greater than 90% of patients achieve normal gait <sup>3</sup>
- Ability to treat Sander's fracture classifications I IV <sup>3</sup>
- Minimally invasive, minimal hardware minimal risk for sural nerve injury <sup>1</sup>
- Reduced potential for infection <sup>1</sup>
- Easy conversion to arthrodesis using the same instrumentation 1,3
- Enhanced primary fixation stability vs ORIF plate <sup>2,4</sup>
- Reduced risk of loss of reduction during partial weight bearing<sup>2</sup>
- Varus malalignment corrected with innovative distractor <sup>1</sup>

#### **CALCAnail® key articles**

- 1. Locked nailing for the treatment of displaced articular fractures of the calcaneus: description of a new procedure with CALCAnail®. Goldzak, Mario et al, EJOST, 2012.
- 2. Primary stability of an intramedullary calcaneal nail and an angular stable calcaneal plate in a biomechanical testing model of intraarticular calcaneal fracture. Goldzak, Mario et al, INJURY, 2014.
- 3. Reduction and internal fixation of displaced intra-articular calcaneal fractures with a locking nail: a prospective study of sixty nine cases. Simon, Patrick et al, INTERNATIONAL ORTHOPEDICS, 2015.
- 4. Interlocking Nailing Versus Interlocking Plating in Intra-articular Calcaneal Fractures: A Biomechanical Study. Reinhardt, Sophia et al, Foot & Ankle International, 2016.



# Implants (provided sterile)

### Fracture

Reference	Fracture Nail Ø10
268 311	Calcanail® Nail Ø10 L 45 + cap
268 312	Calcanail <sup>®</sup> Nail Ø10 L 50 + cap
268 313	Calcanail® Nail Ø10 L 55 + cap
	268 311 268 312

## Arthrodesis

	Reference	Arthrodesis Nail Ø12
	268 314	Calcanail® Nail Ø12 L 65 + cap
	268 315	Calcanail® Nail Ø12 L 75 + cap
	268 316	Calcanail® Nail Ø12 L 85 + cap

Screw
Cannulated screw Ø5 L 24
Cannulated screw Ø5 L 26
Cannulated screw Ø5 L 28
Cannulated screw Ø5 L 30
Cannulated screw Ø5 L 32
Cannulated screw Ø5 L 34
Cannulated screw Ø5 L 36
Cannulated screw Ø5 L 38
Cannulated screw Ø5 L 40

