

MEDIN  
ORTHOPAEDIC  
IMPLANTS



# C-NAIL

■ STAINLESS STEEL

→ SURGICAL TECHNIQUE



C-Nail together with six locking screws provides stable fixation of calcaneus fractures. Minimally invasive subtalar approach can be used for reduction. High biomechanical stability of the nail in combination with the minimally invasive approach indicates good functional outcomes and lower complication rate.

For posterior articular surface fixation, one or two compression screws are inserted (e.g. cancellous screws). The screws are inserted under the posterior articular surface towards the sustentaculum tali. These screws, together with the nail, form a stable unit and ensure the final fixation of all fragments.

End cap prevents tissue ingrowth into the inner thread of the nail and at the same time, allows the nail to be extended by 5 to 20 mm.



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## IMPLANT SYSTEM FEATURES

- > Two side variants: left and right
- > Material: stainless steel (ISO 5832-1)
- > Nail length: 65 mm
- > Nail diameter: 8 mm
- > Six 3.5 mm locking screws with flat head; for stable fixation
- > Cancellous screws HB 4 (lag): interfragmentary compression
- > Washers 4.6x8.8 mm: support of interfragmentary compression with cancellous screws in osteoporotic bone
- > End cap length: 0, 5, 10, 15 a 20 mm



## INDICATIONS

- > Extra-articular calcaneal fractures
- > Intra-articular calcaneal fractures according to Sanders I-IV
- > Joint depression type calcaneal fractures
- > Tongue type calcaneal fractures



## CAUTION

1. The information provided in this procedure is not sufficient for immediate use of the implant. Always familiarize yourself with all the information provided by the manufacturer, which is given in this surgical technique, on the product label, and in the instructions for use before using any MEDIN, a.s. product.

2. The use of this device is limited exclusively to physicians specialized in traumatology, orthopedics, and surgery, who have completed product training for the device provided by MEDIN, a.s.

3. Implants of the „C-Nail“ system are made of stainless steel (ISO 5832-1). A list of all implants and instruments is given in the relevant section of this surgical technique. The compatibility of individual implants and instruments was tested and verified. The use of the nail in combination with implants or instruments from other manufacturers is not allowed, as it may result in damage to the implants or the patient.

The MEDIN, a.s. company, is not responsible for possible complications resulting from non-compliance with this instruction.

4. The C-Nail system contains two types of screwdrivers – conical screwdriver and locking screwdriver. The locking screwdriver is intended only for insertion and manual tightening of the screws. If the locking screwdriver is used to insert the end cap or to loosen individual screws, there is a high risk of its irreversible damage and, as a result, prolongation of the surgery or the impossibility of completing it. The conical screwdriver is intended for loosening screws and for inserting and loosening the end cap.

5. Individual screws may only be tightened by hand using a locking screwdriver and adequate force.

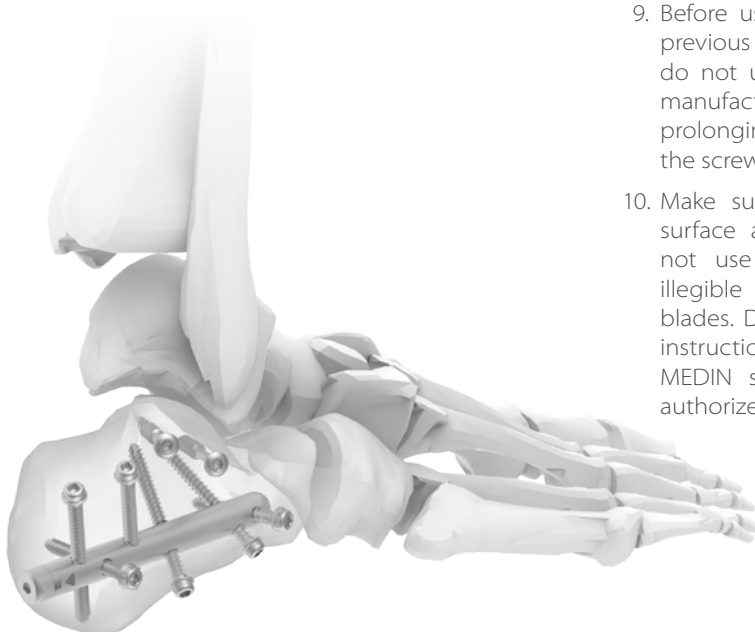
6. Throughout the operation, check that the sleeves inserted through the aiming device holes are tightly pushed against the bone during drilling, measuring and extraction. Otherwise, there is a risk of drilling off the planned direction, incorrect depth measurement, or difficult or impossible insertion or extraction.

7. We recommend performing the surgery under X-ray guidance. Wherever the X-ray symbol ☸ is shown, an X-ray check in several projections.

8. The implants are supplied non-sterile and are intended for sterilization before use. Instructions for the implant processing can be found in the instructions for use.

9. Before using a drill bit, always verify the number of its previous uses, which is set at 30. If this number is exceeded, do not use the drill bit dispose of it or send it to the manufacturer for sharpening. Otherwise, there is a risk of prolonging the surgery or making it impossible to insert the screws.

10. Make sure that the instruments have an undamaged surface and are properly adjusted and functional. Do not use instruments that are badly damaged, have illegible markings, show signs of corrosion or have dull blades. Dispose of such instruments. For further detailed instructions on functionality inspection, contact your MEDIN sales representative. Only the manufacturer is authorized to perform service interventions.





## C-NAIL OSTEOSYNTHESIS PRINCIPLE

- > The C-Nail intramedullary nail combines the advantages of an angularly stable intramedullary osteosynthesis with the benefits of a minimally invasive approach. Angularly stable fixation is achieved by inserting the nail into the calcaneal cavity and its locking with six locking screws with flat head 3.5 mm. Reduction of calcaneal fracture is performed before the actual osteosynthesis.
- > After insertion of all locking screws and after the removal of the aiming device, the nail is closed with an end cap. The end cap provides closing of the nail and eventually its extension. The end cap prevents tissue ingrowth into the inner thread of the nail. There are 0 mm, 5 mm, 10 mm, 15 mm and 20 mm end caps to choose from. The length of the end cap must be chosen so that the nail is not completely submerged and that the end of the nail does not extend outside the calcaneus.

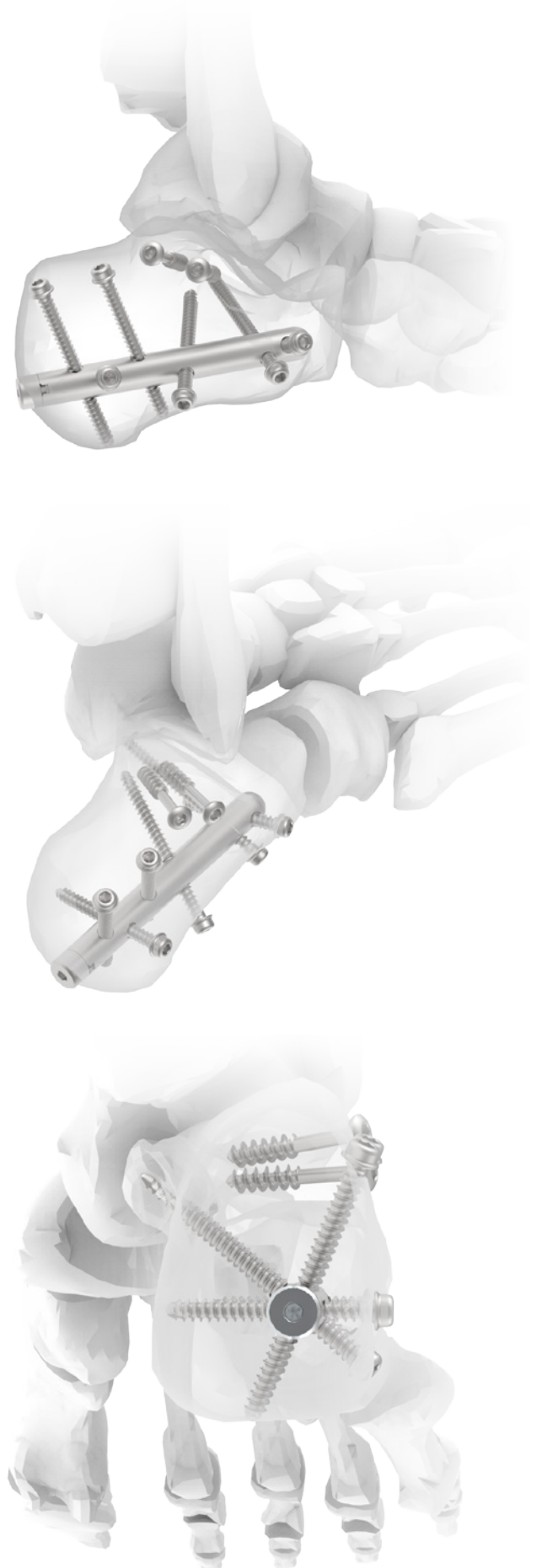


## PREOPERATIVE PLANNING

- > Preoperative planning requires high-quality imaging of the calcaneus using multimodality imaging methods. Standard X-ray images of the calcaneus are performed in two projections (axial, lateral). Standard projections of the calcaneus can be supplemented with AP projection of the foot. To assess the individual size of Böhler angle, it is advisable to take an X-ray image of a healthy calcaneus for comparison.
- > The Broden projections allow a sequential view of the entire posterior articular surface. CT scanning (possibly with 3D reconstruction) is essential for accurate classification of the fracture and for understanding the complexity of intraarticular fractures.
- > Preoperatively check the length of the calcaneus, which must not be shorter than 65 mm!

### **i** Note

Measure the length of the calcaneus from an X-ray image in lateral view from the tip of tuber calcanei to the middle of the calcaneocuboid joint.



# 01

## ASSEMBLY OF THE AIMING DEVICE

### ⚠ Caution

At the beginning of the surgery, assemble the aiming device and check its functionality.

- Aiming device for C-Nail is designed for the insertion of nail and locking screws. Holes in the aiming arms correspond exactly with holes in the nail. Locking screws inserted through these holes are locked in individual fragments and ensure their stable fixation.
- The aiming device consists of three arms, the aiming device body and screws. The aiming arms are marked: LATERAL, SUPERIOR and SUSTENTACULUM. Aiming arm marked LATERAL is firmly attached to the aiming device and it is not removable.
- Attach the aiming arms marked SUPERIOR and SUSTENTACULUM to the aiming device body in the right position (according to the operated limb L/R) and secure with two screws (red). [fig. 1.1] [Detail 1.1]

### i Note

Connect the aiming arms in a way that the mark on the aiming device body (L, R) corresponds to the side of the operated limb (left, right).

- Connect the nail to the aiming device so the arrows point towards each other and their grooves fit precisely into each other. The right position for insertion of the nail is marked with position arrows. Attach the nail to the aiming device using the longest screw. [fig. 1.2] [Detail 1.2].

### ⚠ Caution

Assemble the aiming device prior to the surgery and check its functionality.

- Tighten all aiming device screws adequately using a wrench rod 4.5x150 mm. Then check the strength of the connections.

## → TESTING FUNCTIONALITY OF THE AIMING DEVICE

- After assembling the aiming device, check the functionality of all the holes of the aiming device. Use a guide sleeve 8/6x110 mm (blue-blue), a drill sleeve 6/2.7x128 mm (blue-red) and a drill 2.7x230 mm (red). [fig. 1.3]

### ⚠ Caution

If, after following all the instructions for assembling the aiming device and connecting the nail, the holes in the nail do not match the holes in the aiming device, stop the surgery! Inaccuracy of the aiming device or incorrect nail connection can cause: drilling deviation, insertion of screws outside the nail, damage to the instruments or the patient, instability or failure of the osteosynthesis.

## → INSTRUMENTS



REF	Name
397 129 69 4910	Aiming device for C-Nail
397 129 69 6100	Wrench rod; 4.5x150 mm
397 129 69 6340	Sleeve; guide, 8/6x110 mm
397 129 69 6350	Sleeve; drill, 6/2.7x128 mm
397 129 69 6291	Drill; 2.7x230 mm, AO coupling



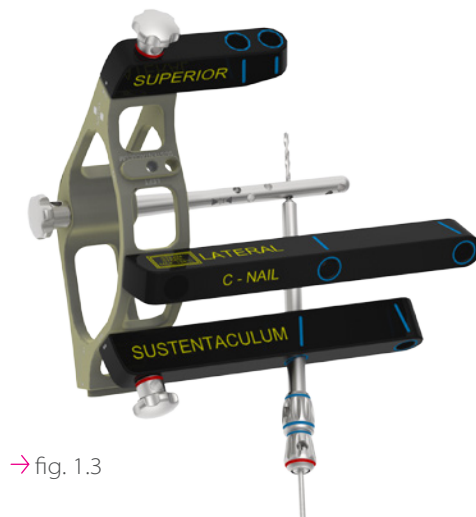
→ Detail 1.1

→ fig. 1.1



→ Detail 1.2

→ fig. 1.2



→ fig. 1.3

## 02

### PATIENT POSITIONING

- Place the patient on the radiolucent operating table in a position on the side contralateral to the injured limb. Keep the healthy limb in slight knee flexion and support the operated limb to avoid summation of the perioperative radiographs. The operated limb should be supported at the predilection sites to prevent soft tissue bruising. Preferably, perform the procedure with tourniquet applied to the thigh of the operated limb. [fig. 2.1]



→ fig. 2.1

## 03

### ANATOMICAL REDUCTION

#### INCISION FOR POSTERIOR ARTICULAR SURFACE REDUCTION

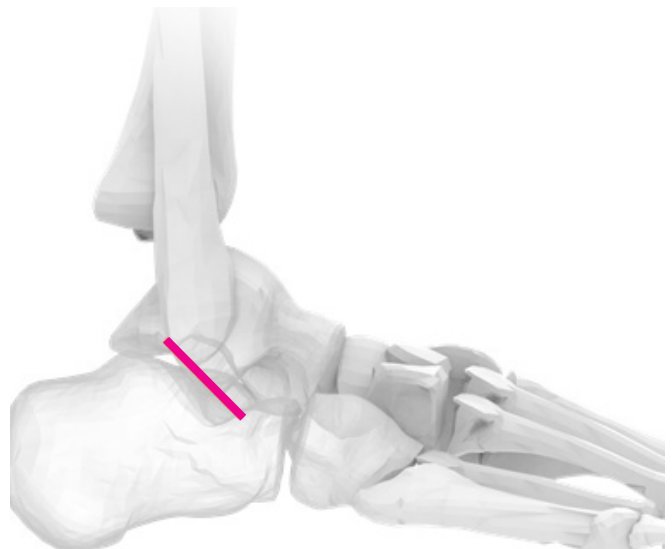
- For posterior articular surface reduction, perform a short incision under the apex of the fibula towards the base of the IV-V metatarsus. Protect the n. suralis and peroneal tendons when preparing to the subtalar joint. [fig. 3.1]

#### POSTERIOR ARTICULAR SURFACE REDUCTION

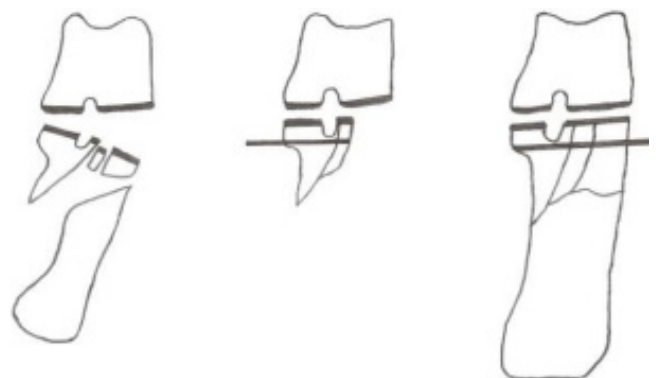
- Reduce the posterior articular surface fragments by direct manipulation from medial to lateral side. For multi fragmentary fractures, the “inside-out-inside” method can be used. [fig. 3.2]
- Gradually transfix the fragments of the posterior articular surface with K-wires 1.5 mm parallel and perpendicular to the articular surface.

#### ⚠ Caution

K-wires are not part of the instruments set. Check the correct position of fragments in the Broden projection.



→ fig. 3.1



→ fig. 3.2

**BÖHLER ANGLE AND CALCANEUS AXIS RECONSTRUCTION**

> To restore the Böhler angle and the axis of the calcaneus, perform a closed reduction using a bone screw elevator 6.0x160/40 mm. Make a stab incision at the entry point and insert the elevator into the tuber calcanei.

**i Note**

Check the position of the elevator using X-ray in lateral and axial view. It is essential that its position is correct in both projections, also with regard to the depth of its insertion.



- > The elevator can also be used to correct lateral translation, varus or valgus deformity of the calcaneus, or to restore the Böhler angle.
- > Temporarily fix the reduced fragments with two 2.0 mm K wires from the tuber calcanei towards the talus. Insert the first wire medially and the second laterally so that the C-Nail can be inserted between them in the next step. [fig. 3.3]

→ fig. 3.3

**i Note**

The calcaneal distractor can be used to restore the Böhler angle and spatial reduction. The procedure for its use is described in IFU51781.

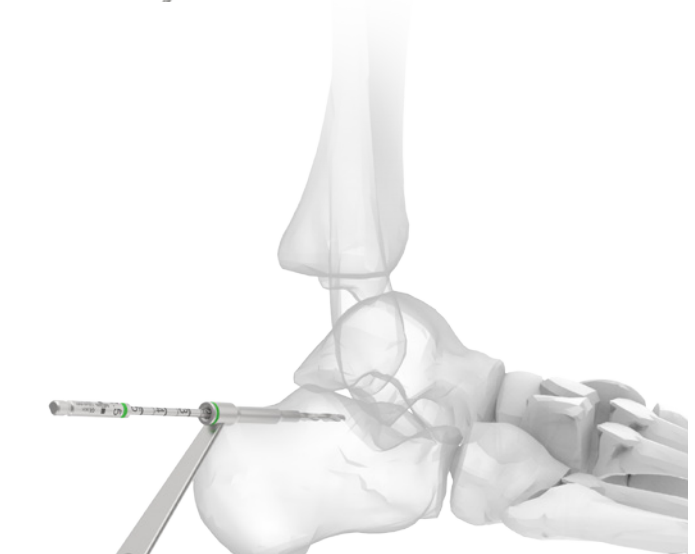
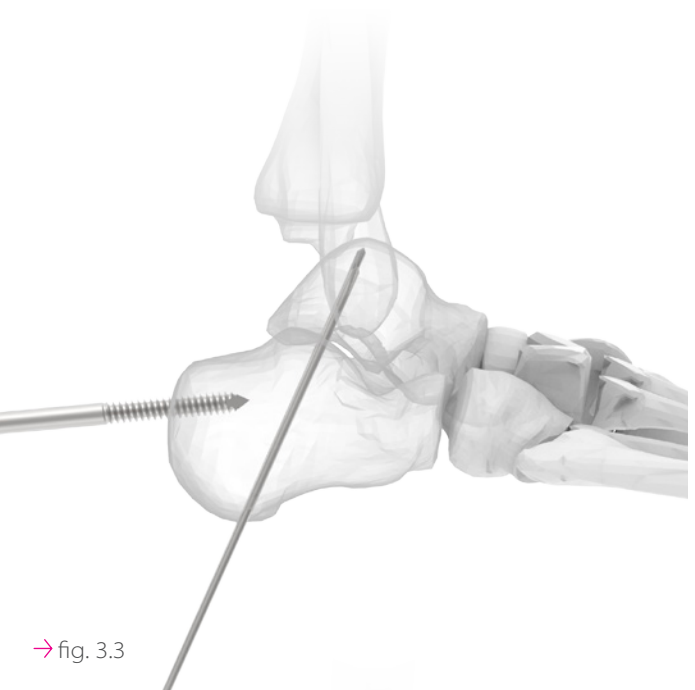
→ ORDERING INFORMATION

REF	Name
397 139 09 1070	Set for calcaneal distractor
397 129 68 0560	Calcaneal distractor

**FIXATION WITH INDEPENDENT CANCELLOUS SCREWS HB 4**



- > It is necessary to predrill the hole for insertion of cancellous screws.
- > Insert the drill 2.5x125 mm (green) into the drill sleeve 2,5x40 mm mm (green). Insert them together under the posterior articular surface and point the drill at the sustentaculum tali. Use the drill to pre-drill holes in the bone for one or two cancellous screws. The position of the drill should be checked via X-ray in axial projection. [fig. 3.4] [Detail 3.1]
- > Estimate the depth of the drilled hole directly from the drill scale or measure with a depth gauge 1.8x80 mm. [fig. 3.5], [Detail 3.2]
- > Insert the screws using exclusively the locking screwdriver. [fig. 3.5] [Detail 3.3]
- > The cancellous screw must always be selected 2 mm longer than the length measured with the depth gauge.



→ fig. 3.4



→ Detail 3.1

**⚠ Caution**

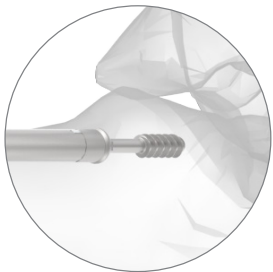
Check the correct direction of inserted cancellous screws continuously with X-ray in lateral and axial projection. If the screws are inserted incorrectly, there is a risk of prominence into the joint.



→ Detail 3.2



→ fig. 3.5



→ Detail 3.3



→ fig. 3.6

> In the case of osteoporotic bone, we recommend the use of washers 4.6x8.8.



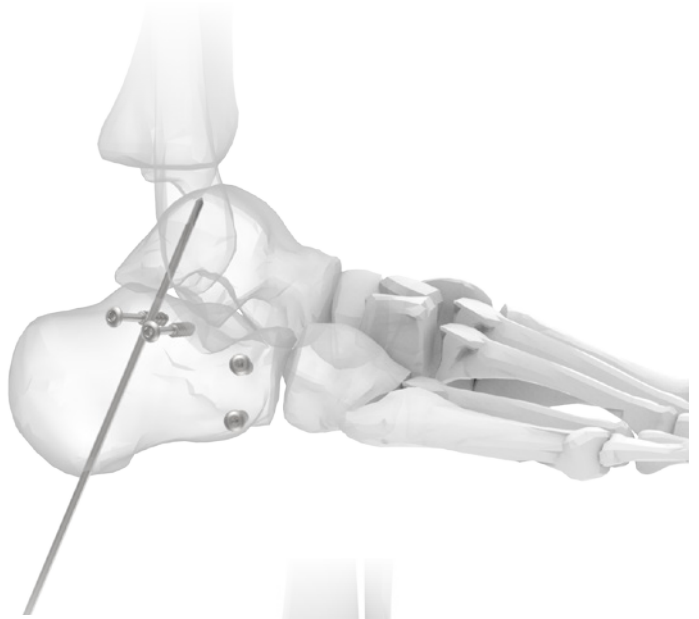
**CALCANEOCUBOID JOINT REDUCTION**

> In case of a processus anterior fracture, it is advisable to first reduce the fragments in the anterior part of the calcaneus by an extended subtalar approach. Combination of different diameter compression screws can be used for fixation. The appropriate site for the insertion of the screws is the line at the dorsal and plantar level of the calcaneus. Insertion of the compression screws to this site does not interfere with further insertion of the nail. [fig. 3.7]

→ INSTRUMENTS



REF	Name
397 129 68 0620	Bone screw elevator; 6.0x160/40 mm
397 129 68 1730	Locking screwdriver; AO, hex, 2.5x160 mm
397 129 68 0480	Handle; AO, 30x152 mm
397 129 68 0640	Drill sleeve; 2.5x40 mm
397 129 68 0650	Drill; 2.5x125 mm, AO coupling
397 129 68 2810	Depth gauge; 1,8x80 mm, type 1



→ fig. 3.7

04

NAIL INSERTION

**INCISION**

> After reducing the fragments, make a short incision horizontally under the Achilles tendon insertion at the highest point of the tuber calcanei. [fig. 4.1]

**GUIDE WIRE INSERTION**

- > Insert the guide sleeve 8/2.5x49 mm into the drill sleeve 8x40 mm. Insert the guide wire 2.5x300 mm centrally through the sleeves into the calcaneus.
- > Check the position of the guide wire with X-ray in two projections, lateral and dorsoplantar. The guide wire has to be placed in the middle of calcaneocuboid joint in both lateral and dorsoplantar projections. [fig. 4.2], [Detail 4.1]

**i Note**

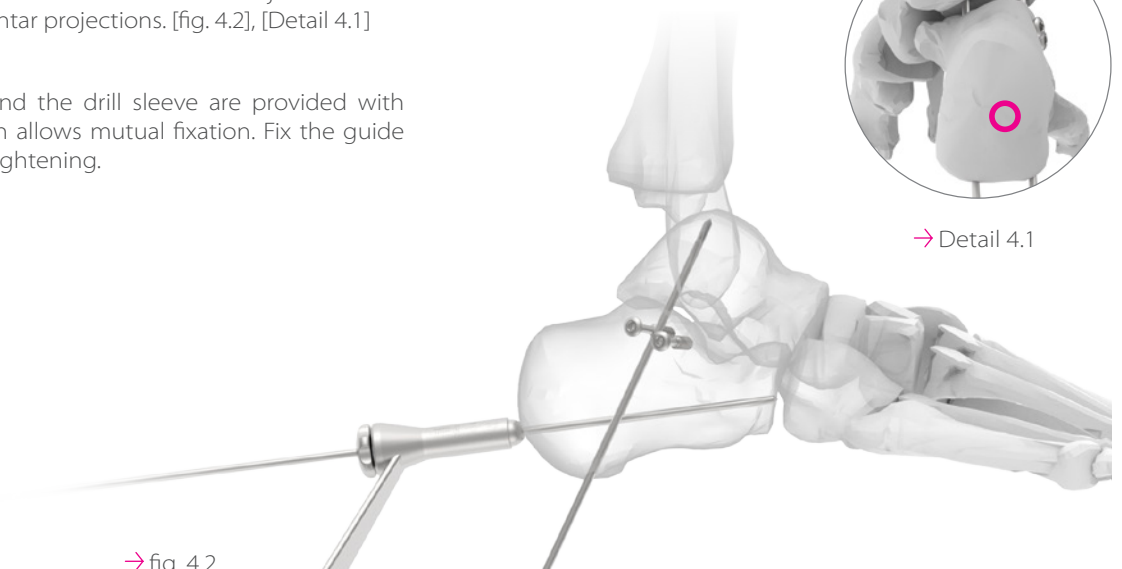
The guide sleeve and the drill sleeve are provided with a M11 thread, which allows mutual fixation. Fix the guide sleeve with gentle tightening.



→ fig. 4.1



→ Detail 4.1



→ fig. 4.2

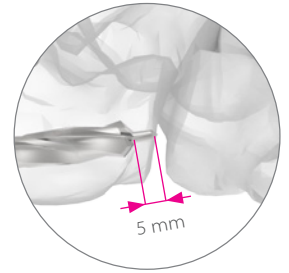
**DRILLING A HOLE FOR THE NAIL**

- > Remove the guide sleeve from the drill sleeve and leave the guide wire in place. Then insert the cannulated drill 8/2.5x240 mm along the guide wire. [fig. 4.3]
- > Check the drilling progress via X-ray in lateral projection. Stop drilling when the tip of the drill is approximately 5 mm from the calcaneocuboid joint. [Detail 4.2]

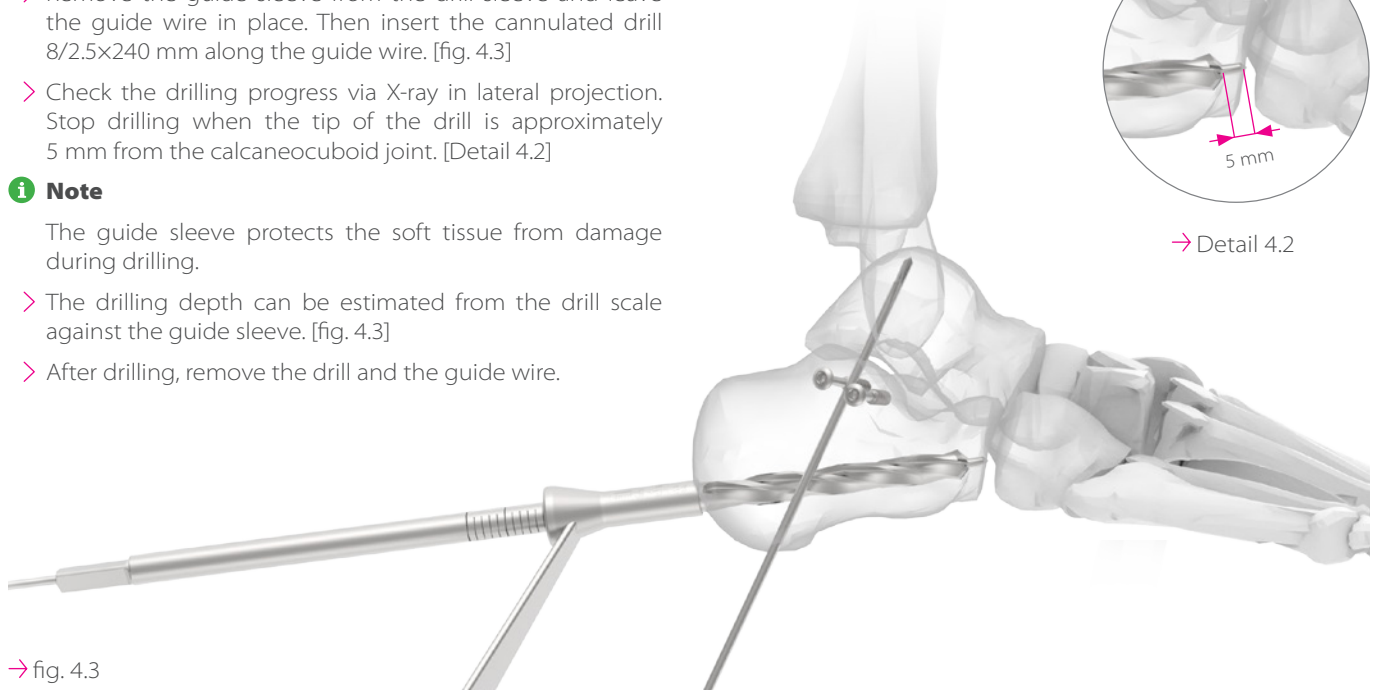
**i Note**

The guide sleeve protects the soft tissue from damage during drilling.

- > The drilling depth can be estimated from the drill scale against the guide sleeve. [fig. 4.3]
- > After drilling, remove the drill and the guide wire.



→ Detail 4.2



→ fig. 4.3

**NAIL INSERTION**

- > Insert the nail attached and secured to the aiming device into the drilled hole.
- > Alternate between gentle pressure and rotational movement during insertion. [fig. 4.4]

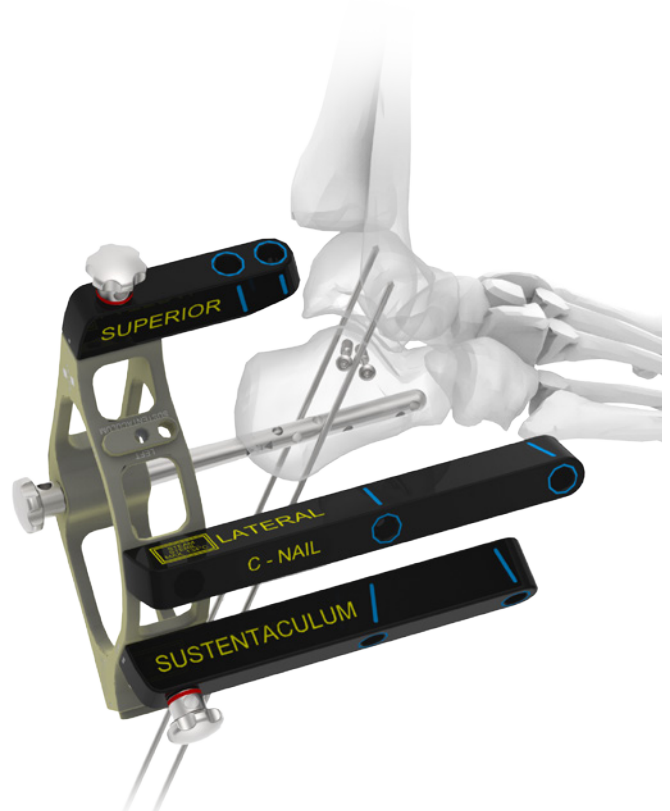
**⚠ Caution**

Avoid any strikes on the body or plastic parts of the aiming device during the nail insertion. There is a risk of their damage.

→ INSTRUMENTS



REF	Name
397 129 69 4910	Aiming device for C-Nail
397 129 78 6750	Guide wire; 2.5x300 mm
397 129 69 5810	Drill sleeve; 8x40 mm
397 129 69 5840	Guide sleeve; 8/2.5x49 mm
397 129 69 5851	Drill; 8/2.5x240 mm, triangular coupling



→ fig. 4.4

# 05

## NAIL POSITION SETTING

- > First determine the depth and rotation of the nail attached to the aiming device relative to the calcaneus.

### INSERTION OF THE DRILL WITH STOPPER INTO THE SUSTENTACULAR FRAGMENT

- > Insert the trocar 6x120 mm (blue) into the guide sleeve 8/6x110 mm (blue-blue). Guide both instruments through the aiming arm "SUSTENTACULUM". Guide the sleeve with the trocar to the bone through a small incision. Remove the trocar and check if the guide sleeve is firmly pressed to the bone. [fig. 5.1]
- > Insert the drill sleeve 6/2x128 mm (blue-yellow) and the drill with stopper through the guide sleeve into the sustentacular fragment. Verify the correct position of the drill with stopper in the sustentacular fragment in two projections, lateral and axial.

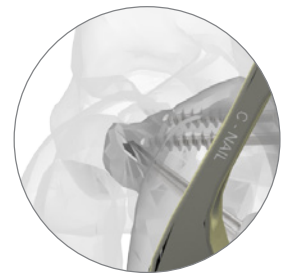
**⚠ Caution**

If the correct position of the drill with stopper in the sustentacular fragment is not achieved, remove the drill. Correct the position of the nail and reinsert the drill with stopper as described above.

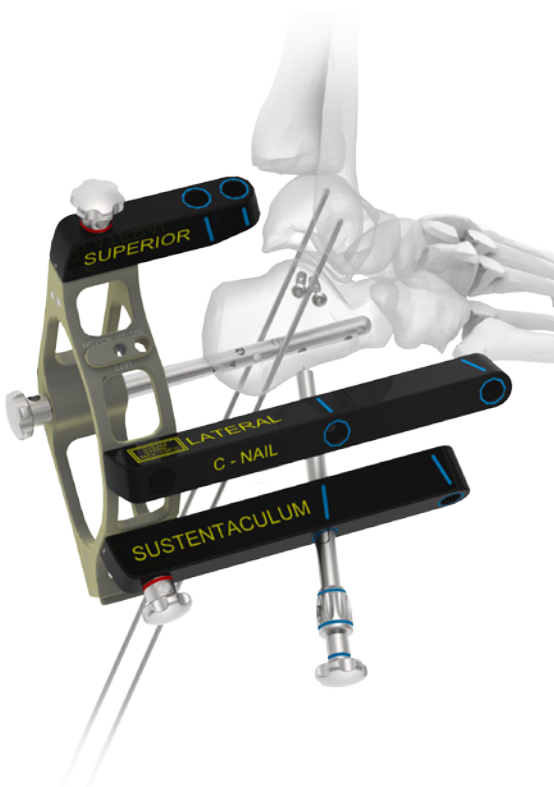
- > Insert the drill with the stopper into the second sustentacular hole of the aiming device in the same way. If the position of the two drills is correct, you can proceed to drill the holes for the screws. [fig. 5.2] [fig. 5.3] [Detail 5.1]



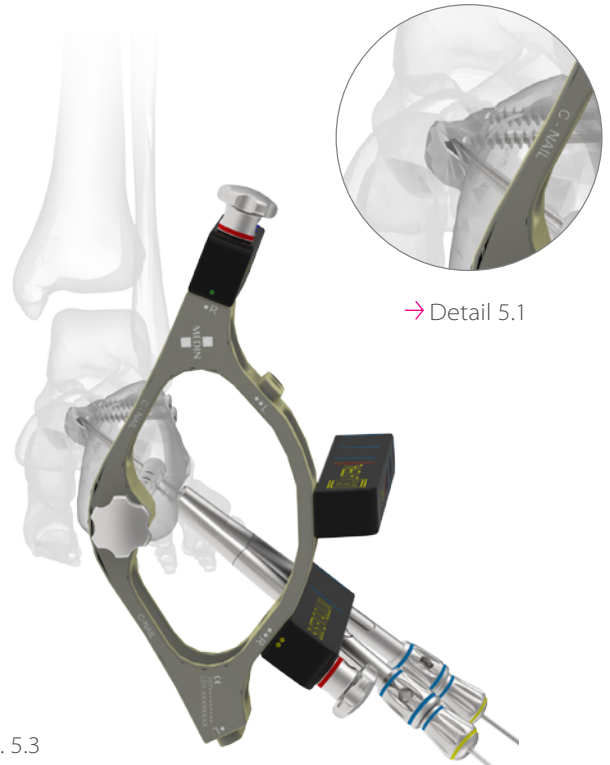
→ fig. 5.2



→ Detail 5.1



→ fig. 5.1



→ fig. 5.3

## → INSTRUMENTS



REF	Name
397 129 69 6340	Guide sleeve; 8/6x110 mm
397 129 69 6300	Trocar; 6x120 mm
397 129 69 6670	Drill sleeve; 6/2x128 mm
397 129 69 6680	Drill; with stopper 2.0x300 mm

# 06

## NAIL FIXATION

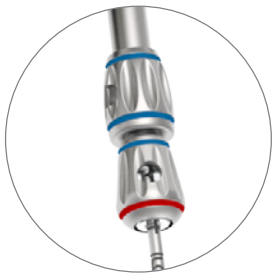
### SUSTENTACULAR FRAGMENT FIXATION

- Remove the drill and the drill sleeve (blue-yellow). Insert the drill sleeve 6/2.7 (blue-red) and the drill 2.7x230 mm (red) into the guide sleeve. [fig. 6.1] [Detail 6.1]

**⚠ Caution**

The drilling depth can be estimated directly from the drill scale.

- Remove the drill and the drill sleeve (blue-red). Measure the screw length using a depth gauge 2.6x80 mm. [fig. 6.2] [Detail 6.2] [Detail 6.3]
- Insert the screw of the selected length through the guide sleeve using a hex 2.5x160 mm locking screwdriver and tighten adequately. Insert the locking screws bicortically.



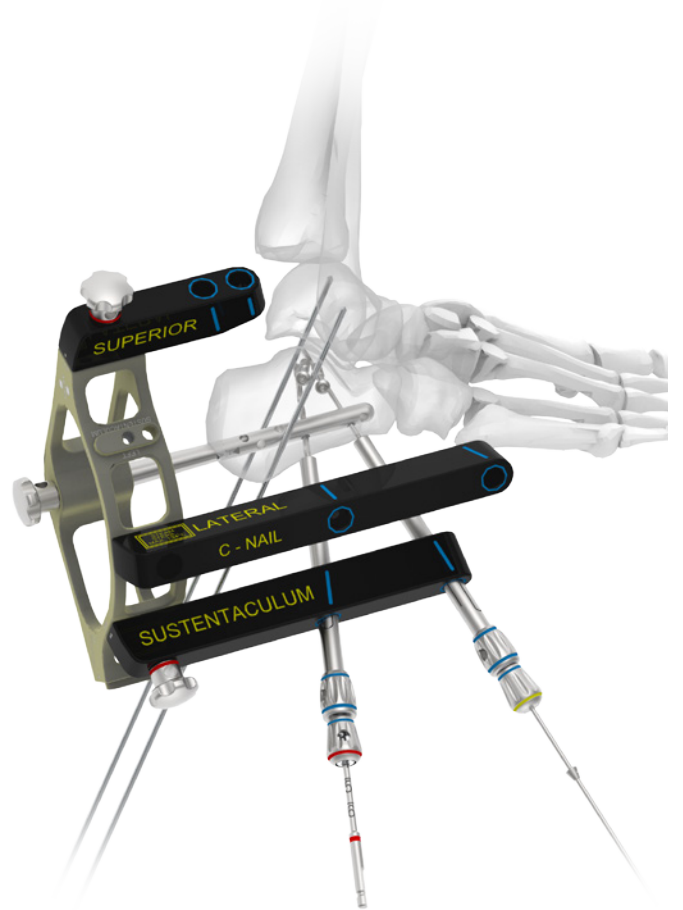
→ Detail 6.1



→ Detail 6.2



→ Detail 6.3



→ fig. 6.1



→ fig. 6.2

- > Check the depth of insertion in two projections. With the guide sleeve in the correct position firmly pressed to the bone, the insertion depth can be checked with a screwdriver scale. [fig. 6.3]

**⚠ Caution**

The screws must not protrude too far through the opposite cortex to minimize irritation or injury to soft tissue.

- > Use Locking screws with flat head 3.5 mm for the nail fixation.



**INSERTION OF REMAINING LOCKING SCREWS**

- > Insert the remaining locking screws according to the previous procedure with the guide sleeve through the "SUPERIOR" arm, this fixes the posterior tuber calcanei fragment to the nail or fixes the tongue type fragment.
- > Fix the anterior fragment and tuber with screws from the lateral side using guide sleeves and the "LATERAL" aiming arm. [fig. 6.4]
- > The auxiliary K-wires can then be removed.

**FIXATION CHECK**

- > After inserting all locking screws, check the fixation using Broden, lateral, axial and dorsoplantar projections.

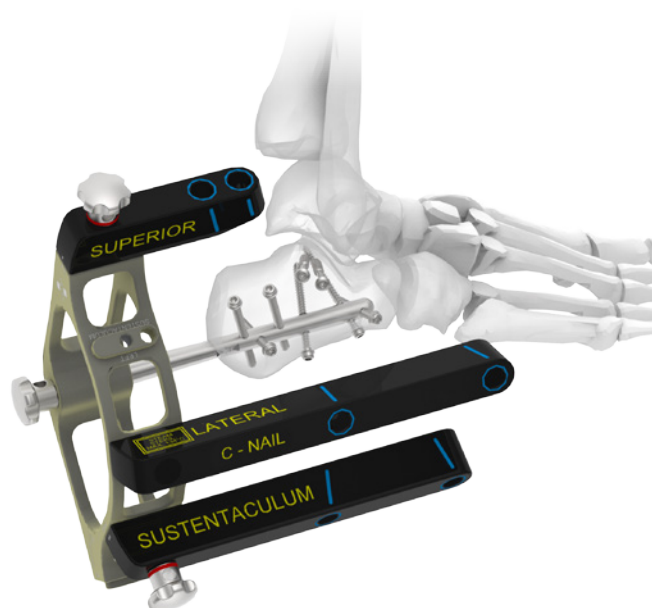
→ INSTRUMENTS



REF	Name
397 129 68 1730	Locking screwdriver; AO, hex, 2.5x160 mm
397 129 68 0480	Handle; AO, 30x152 mm
397 129 69 6350	Drill sleeve; 6/2.7x128 mm
397 129 69 6291	Drill; 2.7x230 mm, AO coupling
397 129 69 5830	Depth gauge; 2.6x80 mm



→ fig. 6.3.

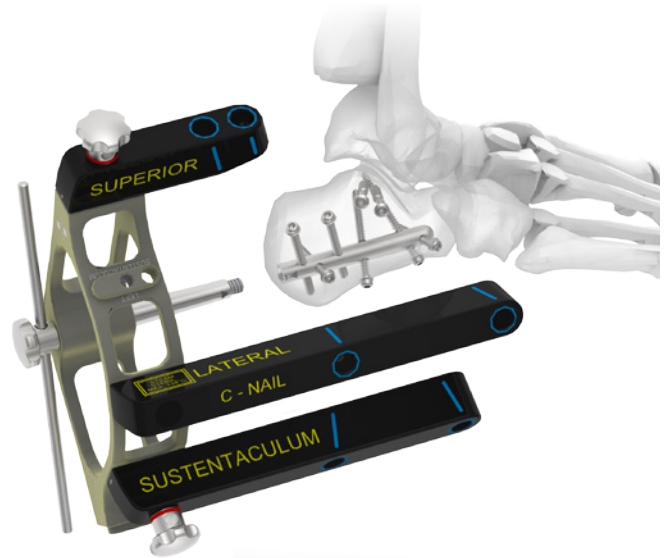


→ fig. 6.4.

# 07

## REMOVAL OF THE AIMING DEVICE AND CLOSURE OF THE NAIL

- > Release the aiming device by loosening the clamping screw using a wrench rod. [fig. 7.1]
- > Fit the end cap of the appropriate length onto a conical screwdriver, AO, hex, 2.5x160 mm, and use it to insert the end cap into the nail and tighten adequately. [fig. 7.2]
- > Perform an X-ray check.. The end cap should end at the dorsal cortex of the calcaneus.



→ fig. 7.1

### → INSTRUMENTS



REF	Name
397 129 69 6100	Wrench rod; 4.5x150 mm
397 129 69 5231	Screwdriver; AO, hex, 2.5x160 mm, conical
397 129 68 0480	Handle AO; 30x152 mm



→ fig. 7.2

# 08

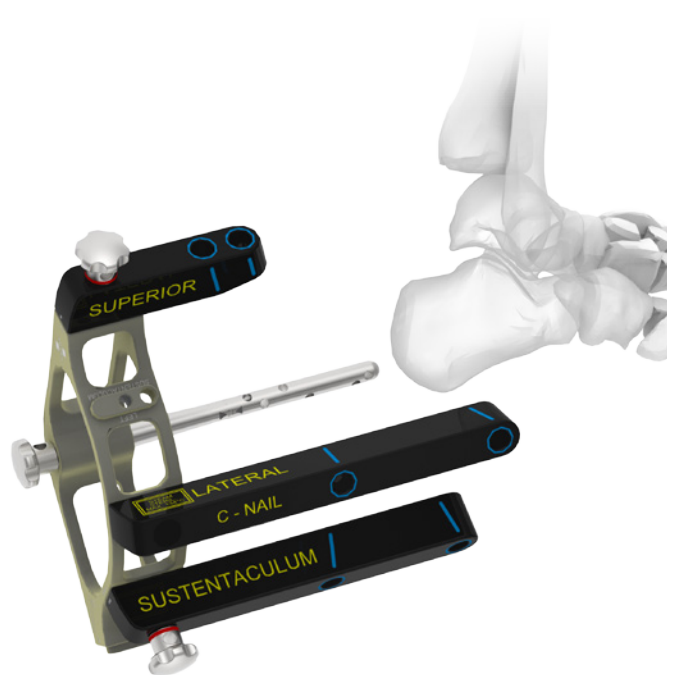
## IMPLANT REMOVAL

- > First, create access to the screws and the end cap by making small incisions. Orient yourself by the previous insertion scars.
- > Clean the screws and end cap of any ingrown tissue.
- > Use a hex 2.5x232 mm conical screwdriver to extract the screws and end cap.
- > Place the aiming device on the nail and secure with the screw. Remove the nail from the calcaneus with a gentle pulling and rotating motion. [fig. 8.1] [fig. 8.2]

### → INSTRUMENTS



REF	Name
397 129 69 5231	Screwdriver; AO, hex, 2,5x160 mm, conical
397 129 68 0480	Handle; AO, 30x152 mm
397 129 69 4910	Aiming device for C-Nail
397 129 69 6100	Wrench rod; 4.5x150 mm



→ fig. 8.1

→ C-NAIL



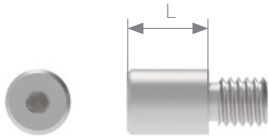
C-Nail, right

REF	RxL [mm]
397 129 78 4160	8x65

C-Nail, left

REF	RxL [mm]
397 129 78 4170	8x65

→ END CAP



REF	L [mm]
397 129 77 2210	0
397 129 77 2220	5
397 129 77 2230	10
397 129 78 8880	15
397 129 78 8890	20

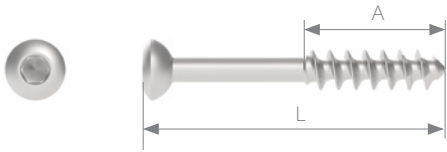
→ LOCKING SCREWS WITH FLAT HEAD 3.5xL MM



REF	L [mm]
397 129 78 5651	22
397 129 78 5661	24
397 129 78 5671	26
397 129 78 5681	28
397 129 78 5691	30
397 129 78 5701	32
397 129 78 5711	34
397 129 78 5721	36
397 129 78 5731	38
397 129 78 5741	40
397 129 78 5751	42
397 129 78 5761	44
397 129 78 5771	46
397 129 78 5781	48
397 129 78 5791	50
397 129 78 5801	55
397 129 78 5811	60
397 129 78 5821	65
397 129 78 5831	70

Technical data	Dimension [mm]
Thread diameter	3.5
Core diameter	2.4
Head diameter	6.0
Drill for thread	2.7
Screwdriver	hex, 2.5

→ CANCELLOUS SCREWS HB 4xL/A MM



Technical data	Dimension [mm]
Thread diameter	4.0
Shaft diameter	2.4
Core diameter	1.9
Head diameter	6.0
Drill for thread	2.5
Screwdriver	hex, 2,5

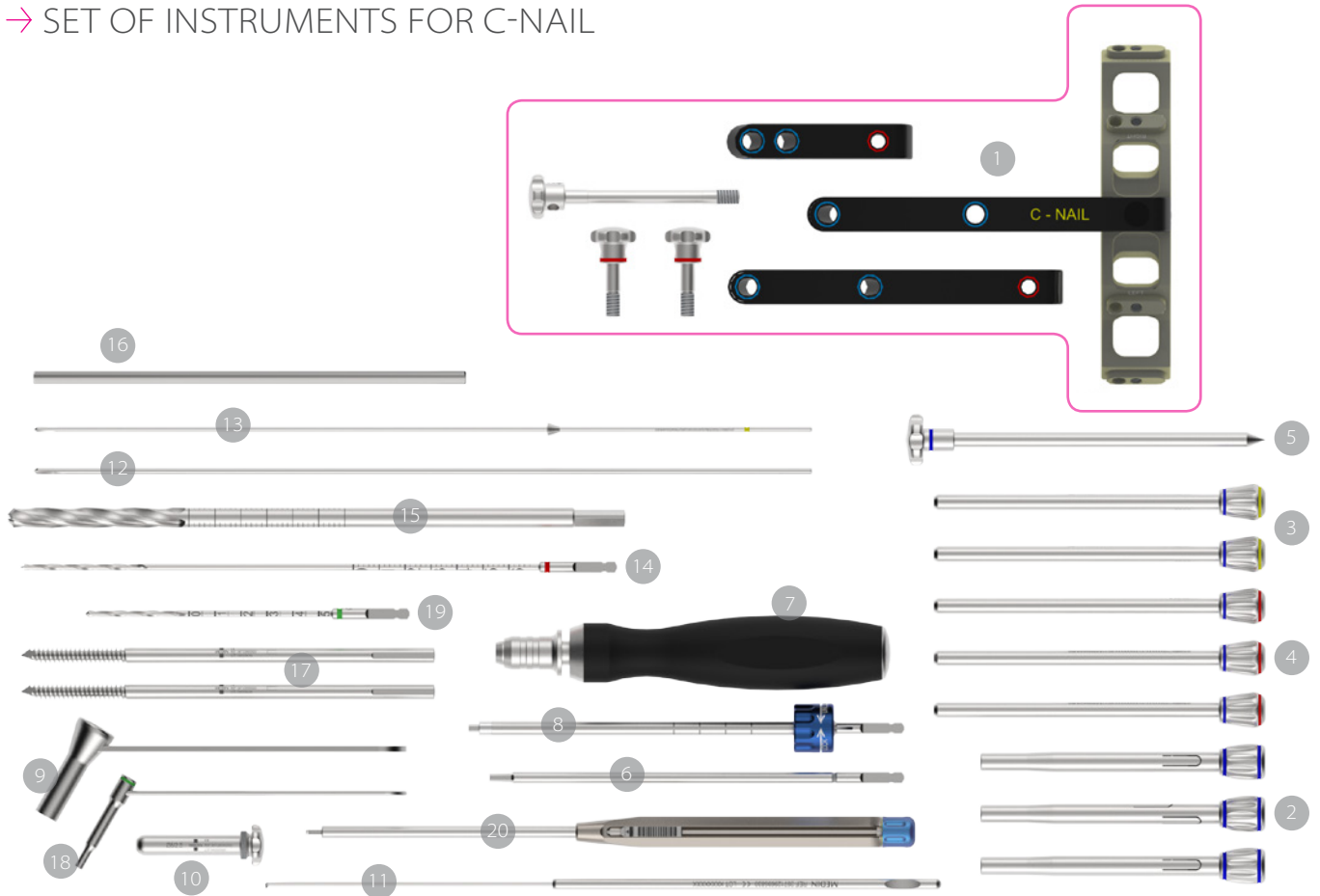
REF	L [mm]	A [mm]
397 129 79 6260	22	9
397 129 79 6270	24	10
397 129 79 6280	26	12
397 129 79 6290	28	14
397 129 79 6300	30	14
397 129 79 6310	32	14
397 129 77 4200	34	14
397 129 77 4210	36	14
397 129 77 4220	38	14
397 129 79 6330	40	14
397 129 77 4230	42	15
397 129 77 4240	44	15
397 129 77 4250	46	15
397 129 77 4260	48	15
397 129 79 6350	50	15

→ WASHER; 4.6x8.8 MM

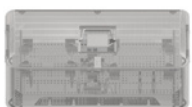


REF	Dimension [mm]	Thickness [mm]
397 129 99 0838	4.6x8.8	0.8

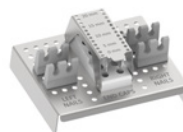
## → SET OF INSTRUMENTS FOR C-NAIL



No.	REF	Name	pcs
	397 139 09 0545	Basket; with instruments for C-Nail	1
1	397 129 69 4910	Aiming device for C-Nail	1
2	397 129 69 6340	Sleeve; guide, 8/6x110 mm	3
3	397 129 69 6670	Sleeve; drill, 6/2x128 mm	2
4	397 129 69 6350	Sleeve; drill, 6/2.7x128 mm	2
5	397 129 69 6300	Trocar; 6x120 mm	1
6	397 129 69 5231	Screwdriver; ao, hex, 2.5x160 mm, conical	1
7	397 129 68 0480	Handle AO; 30x152 mm	1
8	397 129 68 1730	Locking screwdriver; AO, hex, 2.5x160 mm	1
9	397 129 69 5810	Drill sleeve; 8x40 mm	1
10	397 129 69 5840	Guide sleeve; 8/2.5x49 mm	1
11	397 129 69 5830	Depth gauge; 2.6x80 mm	1
12	397 129 78 6750	Guide wire; 2.5x300 mm	2
13	397 129 69 6680	Drill; with stopper 2.0x300 mm	2
14	397 129 69 6291	Drill; 2.7x230 mm, AO coupling	2
15	397 129 69 5851	Drill; 8/2.5x240 mm, triangular coupling	1
16	397 129 69 6100	Wrench rod; 4.5x150 mm	1
17	397 129 68 0620	Bone screw elevator; 6.0x160/40 mm	2
18	397 129 68 0640	Drill sleeve; 2.5x40 mm	1
19	397 129 68 0650	Drill; 2.5x125 mm, AO coupling	2
20	397 129 68 2810	Depth gauge; 1,8x80 mm, type 1	1



REF	Name
397 129 68 0410	Basket; for instruments for C-NAIL - without instruments - 540x240x180 mm



REF	Name
397 129 68 0440	Stand for nails and end caps for C-NAIL - without implants



REF	Name
397 129 68 0430	Stand for screws for C-NAIL - without implants

> C-Nail

REF	Variant
397 129 78 4160	8x65 mm, right

> C-Nail

REF	Variant
397 129 78 4170	8x65 mm, left

> End cap

REF	Variant
397 129 77 2210	L0xM6 mm, hex 2.5
397 129 77 2220	D8xL5 x M6 mm, hex 2.5
397 129 77 2230	D8xL10 x M6 mm, hex 2.5
397 129 78 8880	D8xL15 x M6 mm, hex 2.5
397 129 78 8890	D8xL20 x M6 mm, hex 2.5

> Locking screw with flat head

REF	Variant
397 129 78 5651	3.5x22 mm
397 129 78 5661	3.5x24 mm
397 129 78 5671	3.5x26 mm
397 129 78 5681	3.5x28 mm
397 129 78 5691	3.5x30 mm
397 129 78 5701	3.5x32 mm
397 129 78 5711	3.5x34 mm
397 129 78 5721	3.5x36 mm
397 129 78 5731	3.5x38 mm
397 129 78 5741	3.5x40 mm
397 129 78 5751	3.5x42 mm
397 129 78 5761	3.5x44 mm
397 129 78 5771	3.5x46 mm
397 129 78 5781	3.5x48 mm
397 129 78 5791	3.5x50 mm
397 129 78 5801	3.5x55 mm
397 129 78 5811	3.5x60 mm
397 129 78 5821	3.5x65 mm
397 129 78 5831	3.5x70 mm

> Cancellous screw

REF	Variant
397 129 79 6260	HB 4x22/9 mm
397 129 79 6270	HB 4x24/10 mm
397 129 79 6280	HB 4x26/12 mm
397 129 79 6290	HB 4x28/14 mm
397 129 79 6300	HB 4x30/14 mm
397 129 79 6310	HB 4x32/14 mm
397 129 77 4200	HB 4x34/14 mm
397 129 77 4210	HB 4x36/14 mm
397 129 77 4220	HB 4x38/14 mm
397 129 79 6330	HB 4x40/14 mm
397 129 77 4230	HB 4x42/15 mm
397 129 77 4240	HB 4x44/15 mm
397 129 77 4250	HB 4x46/15 mm
397 129 77 4260	HB 4x48/15 mm
397 129 79 6350	HB 4x50/15 mm

> Washer

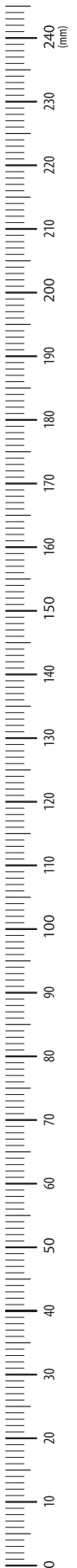
REF	Variant
397 129 99 0838	4.6x8.8 mm



A series of horizontal lines for writing, corresponding to the ruler scale on the left. The lines are evenly spaced and extend across the width of the page.



A series of horizontal lines for writing, aligned with the ruler scale on the left. The lines are spaced evenly down the page, providing a guide for handwriting practice.



A series of horizontal lines for writing, extending from the right side of the ruler scale across the page.



# MEDIN ORTHOPAEDIC IMPLANTS



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CE<sub>2460</sub>

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