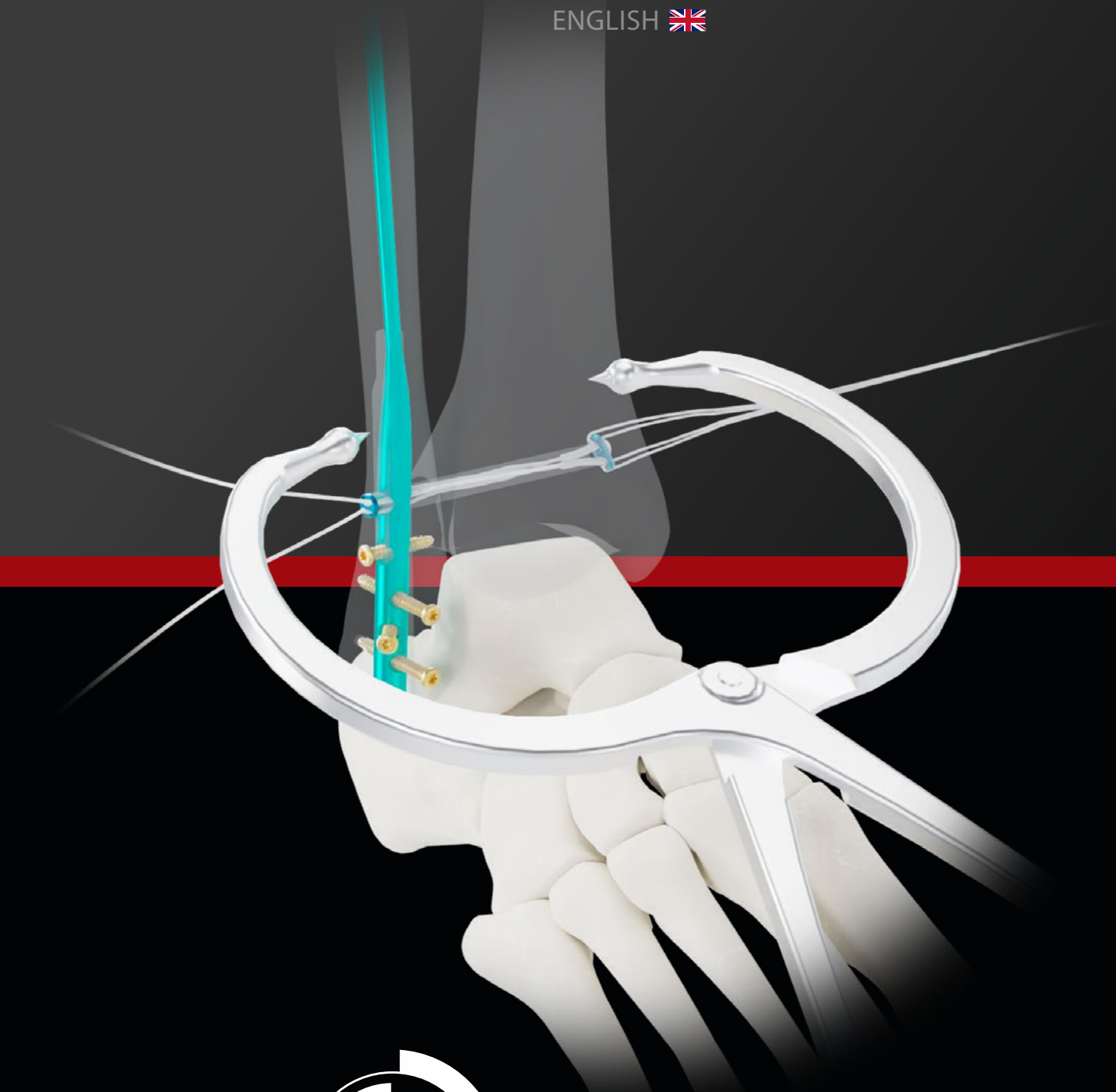
FIBULA NAIL

INTRAMEDULARY FIBULAR LOCKING NAIL

ENGLISH



GMREIS

Qualidade para Vida

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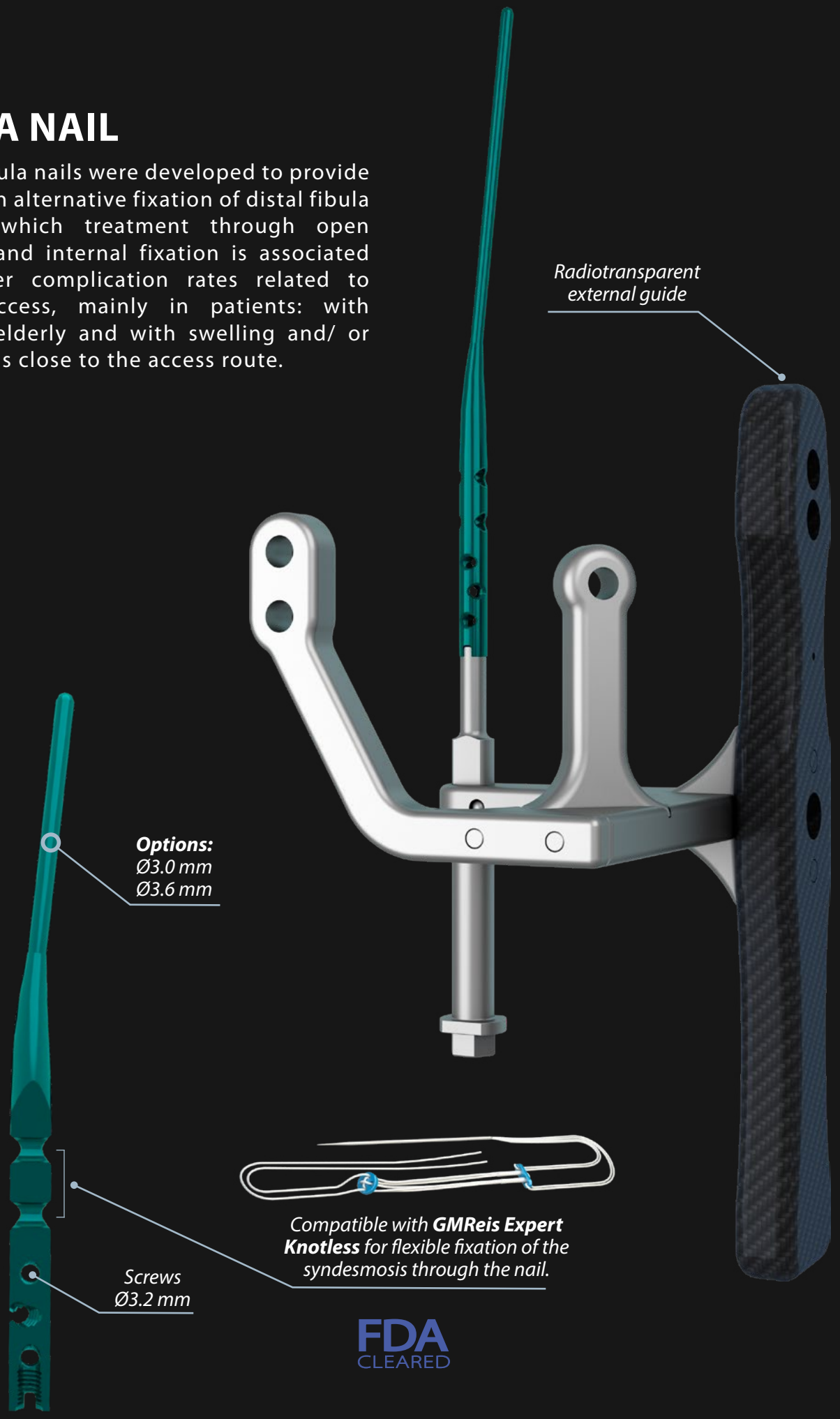
2024

FIBULA NAIL

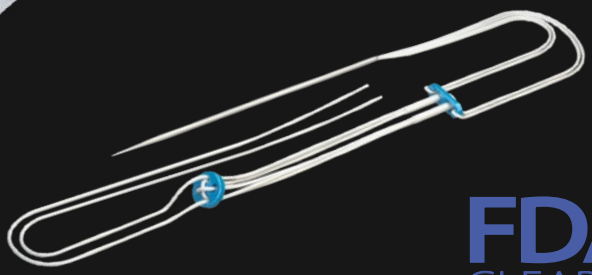
GMReis Fibula nails were developed to provide surgeons an alternative fixation of distal fibula fractures; which treatment through open reduction and internal fixation is associated with higher complication rates related to surgical access, mainly in patients: with diabetics, elderly and with swelling and/ or skin wounds close to the access route.



SYNDESMOSIS FIXATION WITH EXPERT KNOTLESS

Expert Knotless GMReis is a flexible fixator developed for the treatment of syndesmosis injuries. Syndesmosis holes were designed in the nail to be compatible with Expert Knotless Fixation.

With the "**Knotless**" technology, the application of knots to lock the **Expert** is unnecessary, avoiding soft tissue irritation and patient discomfort.



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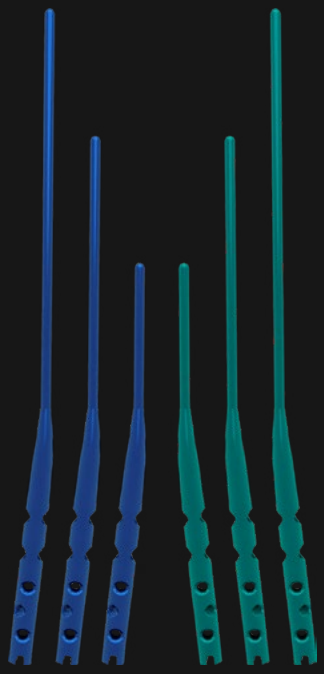
CODE	DESCRIPTION
312-2000	*Expert Knotless - Knotless Flexible Fixator*

SURGICAL TECHNIQUE

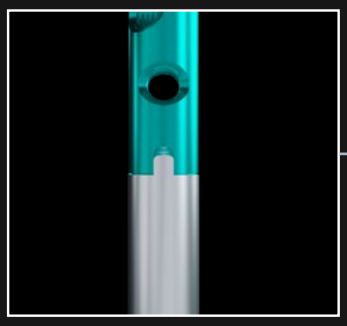
1. IMPLANT CHOICE

Choice the Fibula Nail suitable for the patient needs considering: laterality (left or right), proximaldiameter (3.0 or 3.6 mm) and length (110.0, 145.0 or 180.0 mm).

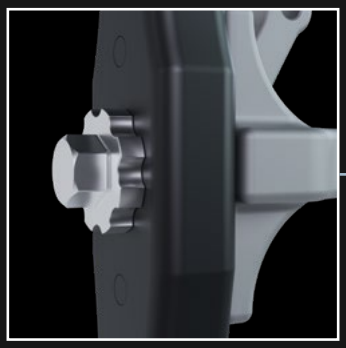


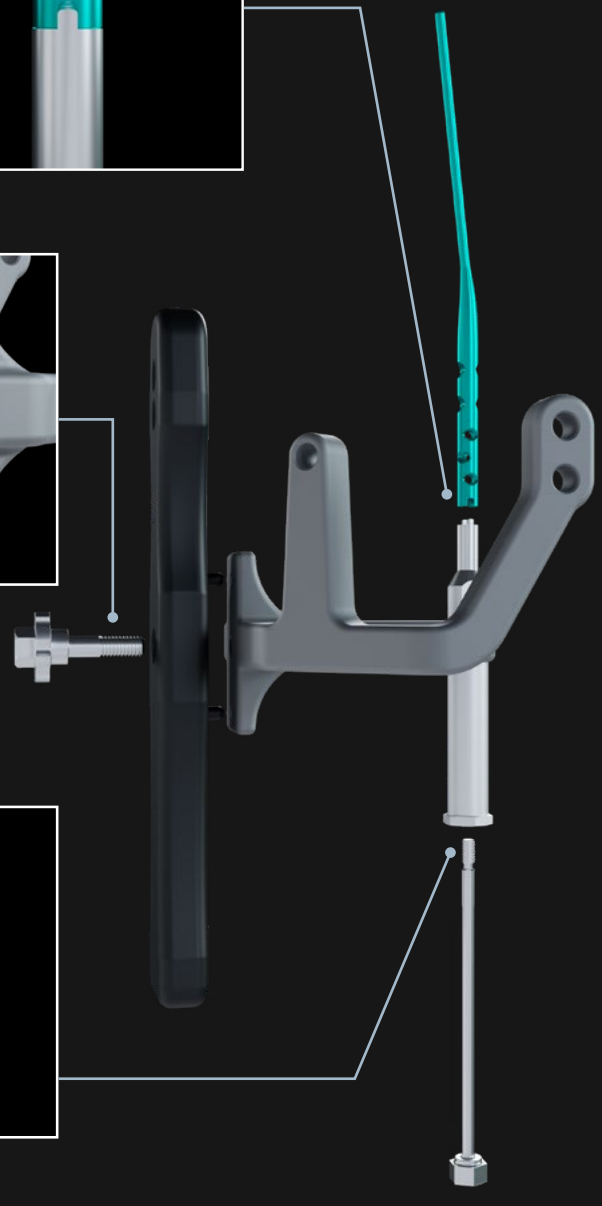
2. GUIDE ASSEMBLY

The guide and nail coupling is only possible when the nail is in the correct position, but it is important to check if connection between cannulas and nail holes are precisely matched.



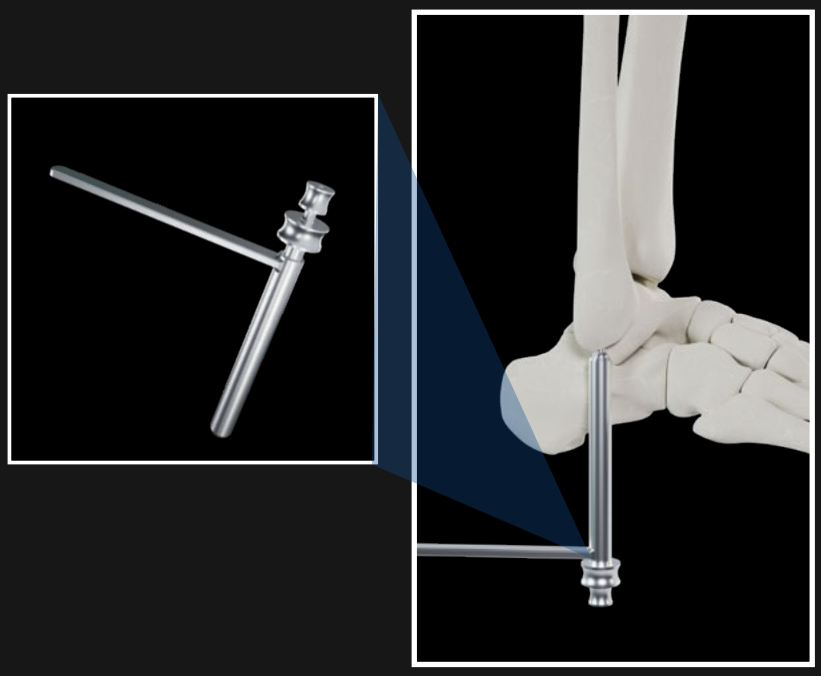
Use the Guide Connection Device (302-113) to fix Lateral Guide (302-100) with the Anterolateral Guide observing its laterality options (C: 302-133 left / C: 302-132 right).



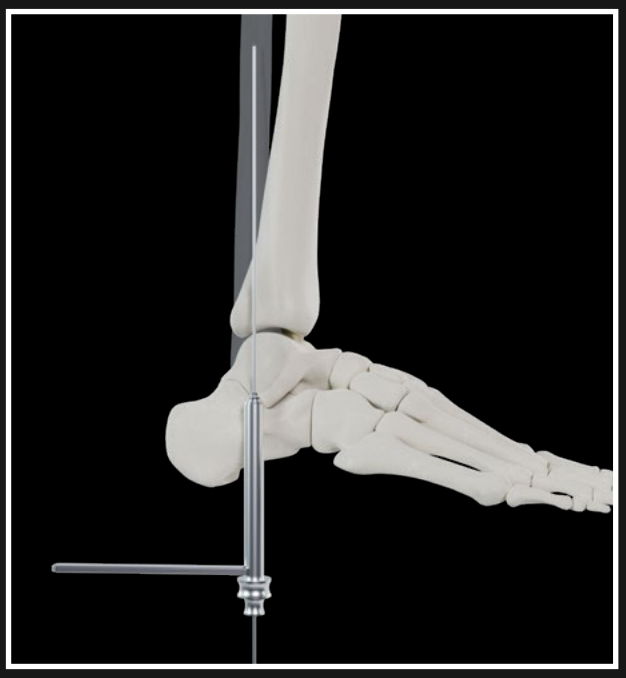


Use the Nail Connector Device (302-107) through the Anterolateral Guide to fix the Fibula Nail. It is important to use de Fixed Wrench (C: 226-300-99) to correct nail/ guide fixation.

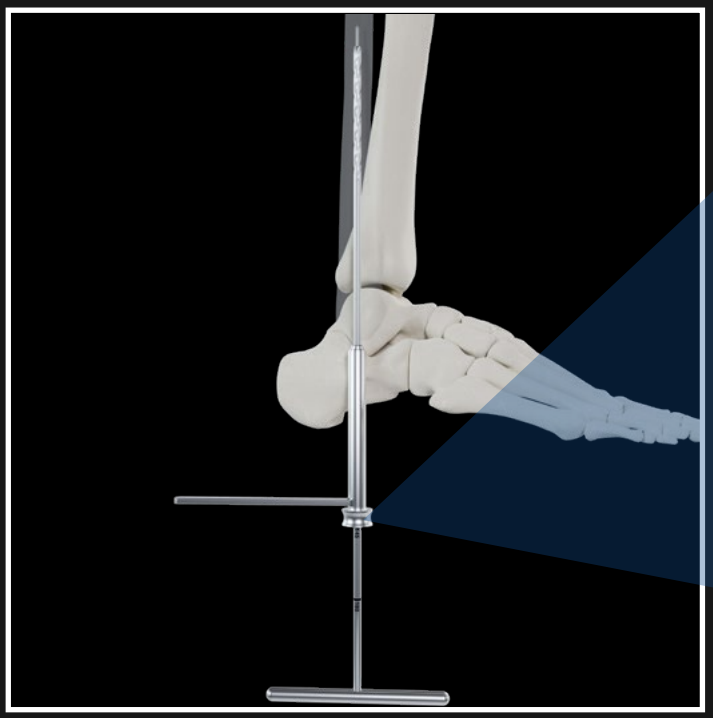
3. PERFORM THE NAIL PERFORATION



Assemble the access cannulas (C: 302-125, 302-123 and 302-124), and position it at the point of nail insertion in the distal end of the fibula.

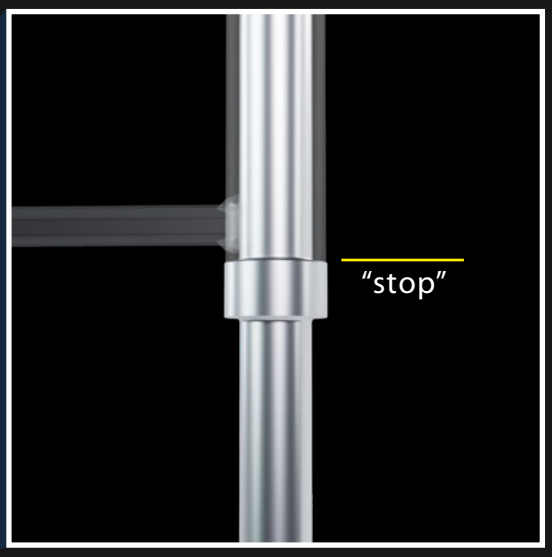


Apply the Ø1.6 x 310.0 mm Guide Wire (C: 241-32) through the Guide Wire Cannula (C:302-124) until find the fibula medullary canal. After, remove the Guide Wire Cannula.



Drill the metaphyseal part of the fibula and mill the medullary canal using the cutter corresponding to the diameter of the stem to be implanted. Then remove the cannula from the cutter. For Ø3.2 mm stems - Ø3.3 mm cutter (C: 302-117); and for Ø3.6 mm stems - Ø3.9 mm cutter (302-118).

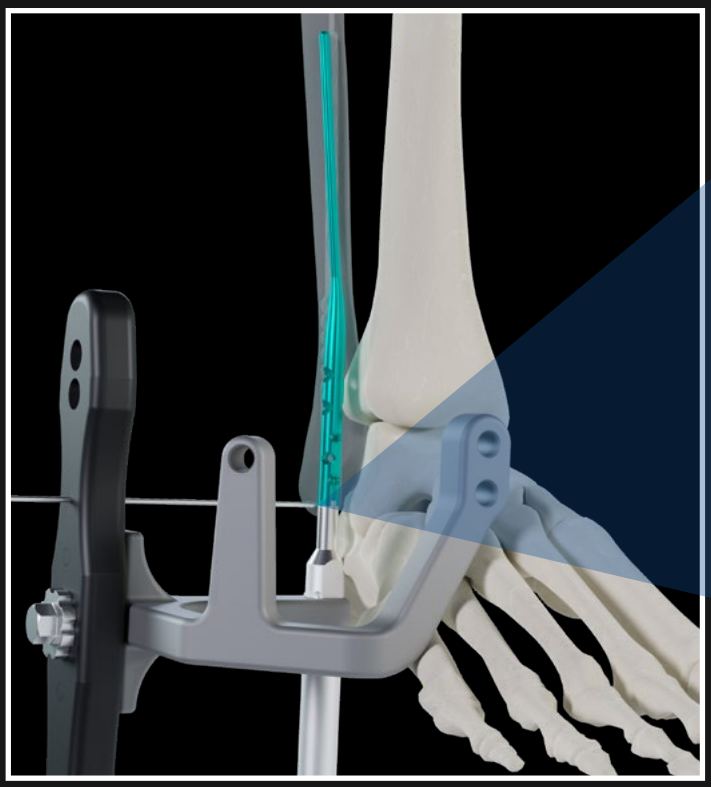
The intramedullary reaming must be applied up to the depth corresponding to nail length that will be implanted.



Reaming up to the depth stop limit between the reamer and the cannula.

Use the Ø3.8 - Ø6.5 x 158.0 mm Metaphyseal Reamer (C: 302-25) to enlarge the distal part of the perforation to suit the dimensions of the nail.

4. FIBULA NAIL AND SCREWS IMPLANTATION



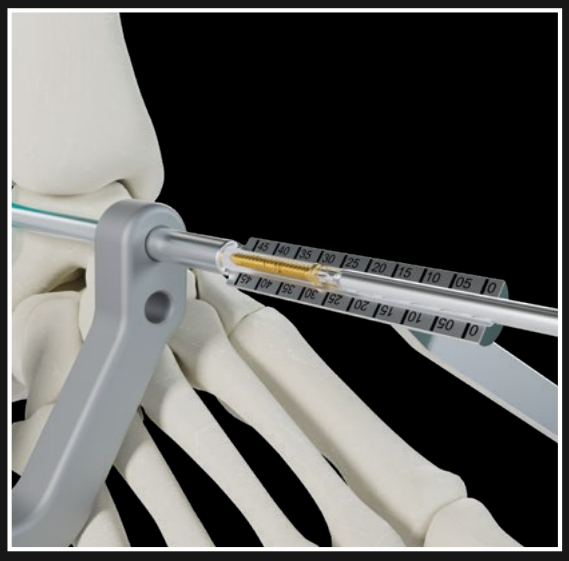
Remove the Guide Wire, and use the nail guide to position the implant until it is fully positioned within the fibula. To check the correct positioning of the implant in scopy, use a Ø1.6 x 155.0 mm Guide Wire (302-119) through the specific hole of the Lateral Guide,which will demonstrate the connection point between the guide and the nail end.

Assemble the Ø3.8 x 143.0 mm Drill Cannula (L:302-109) with the Ø3.8 x 152.0 mm Trocar Tip (C:302-120), and position it in one of the Anterolateral Guide holes to perform the distal perforation.

Remove the Trocar Tip and use the Ø2.0 x 235.0 mm Drill Bit (C: 302-134) to perform a distal perforation.

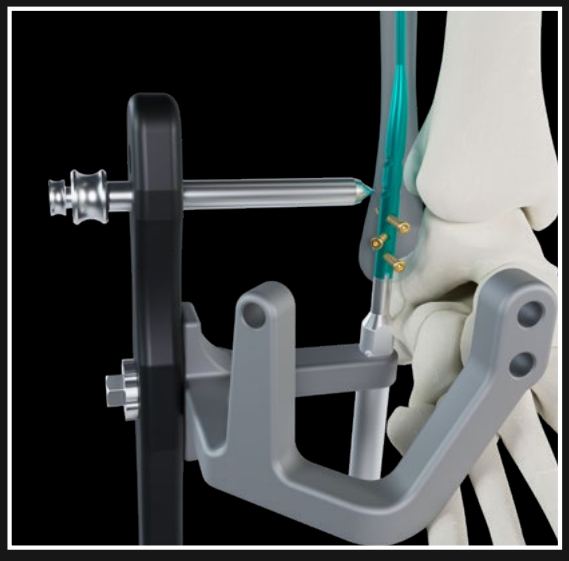
Position the drill end at the depth that want to implant the screw, and use the laser marks of drill and the cannula to measure the screw length.

If it is the surgeon choice, the perforation length can be made using the Depth Gauge (C:302-116).

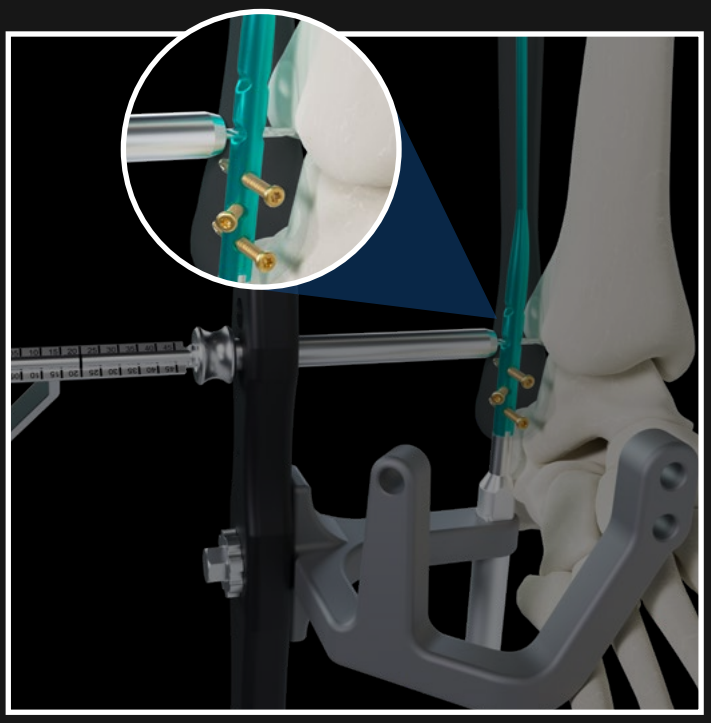


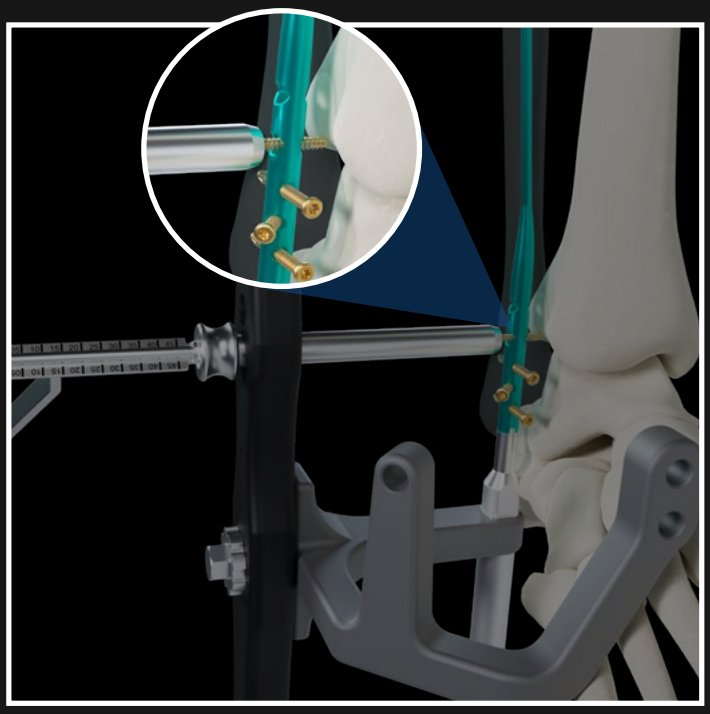
Conect the self-retain Screw Driver Shaft T7 (C: 302-122) with the Quick Coupling Handle (C: 223-310) to apply the nail locking screw.

Apply the screw through the same cannula used for drilling; and repeat the steps for the other distal locking screws.

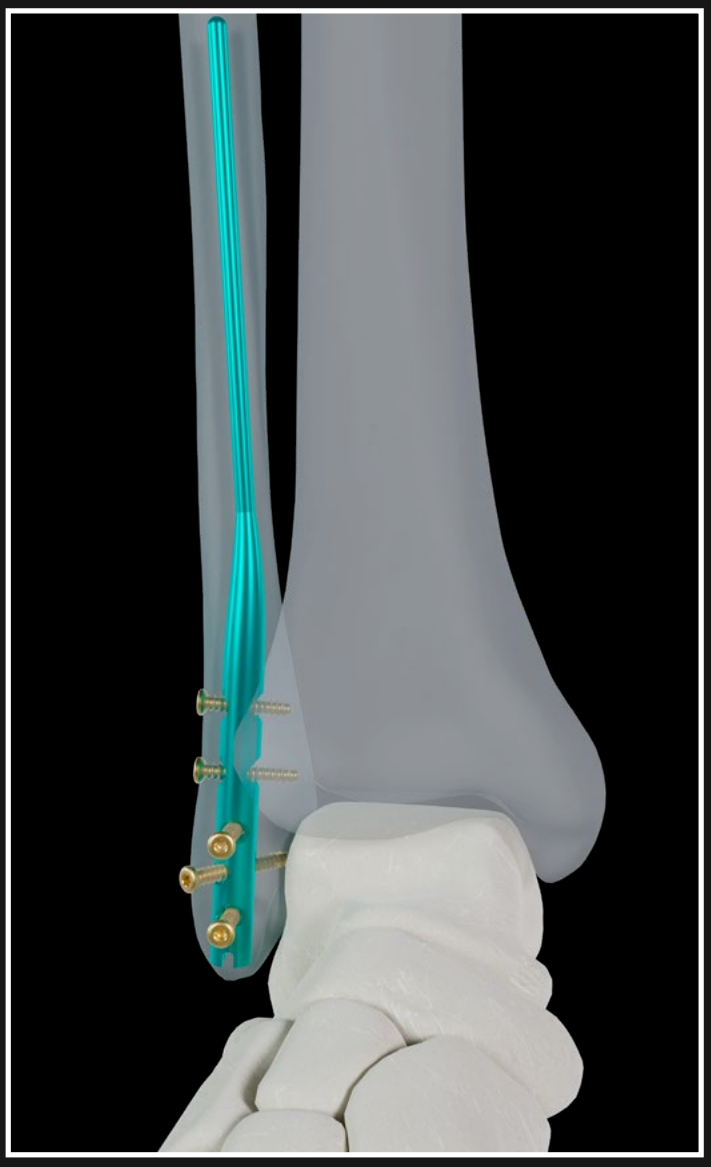


Assemble the Ø6.5 x Ø9.0 x 80.0 mm Cannula (C: 302-126) with the Ø6.3 x 152.0 mm Trocar Tip (C: 302-131) and position it in one of the Lateral Guide holes to perform a proximal nail fixation.





Repeat the steps to perform the perforation and proximal screw implantation.



5. SYNDESMOSIS FIXATION

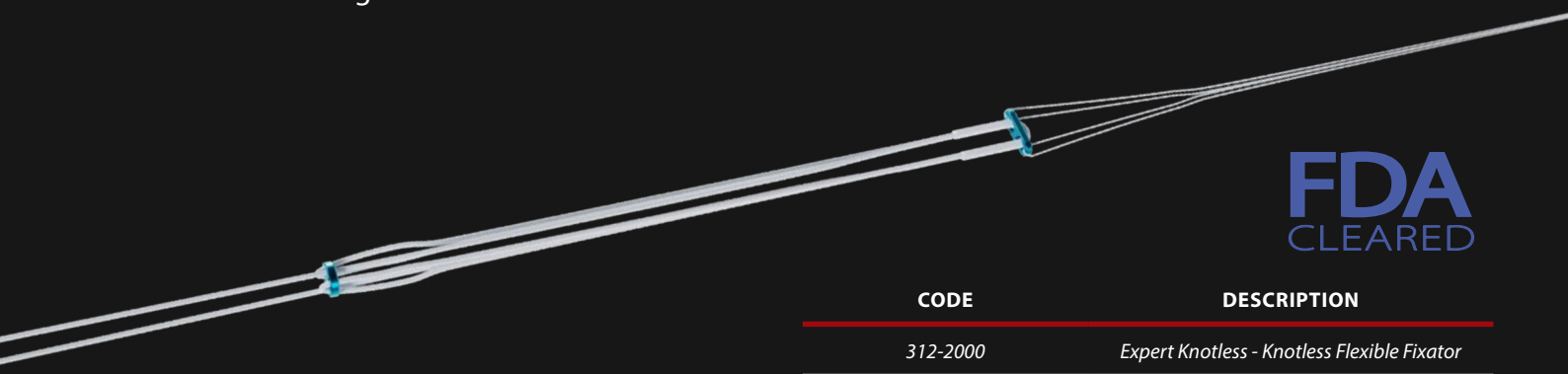
After fracture fixation, if the tibiofibular joint is unstable, the proximals nail´s holes can be used for syndesmosis rigid or flexible fixation. The Syndesmosis Reduction Forceps (C: 314-100) provides articular reduction and temporary fixation.

SYNDESMOSIS RIGID FIXATION

To perform syndesmosis rigid fixation, repeat the perforation steps to implant a long tricortical screw in the proximal nail´s hole.

SYNDESMOSIS FLEXIBLE FIXATION

Through the same cannulas used to perform a screw drilling, in the proximal hole of the Lateral Guide, use the Ø3.8 x 200.0 mm Drill Bit (C: 308-128) to perform a four cortex tunnel through the fibula and the tibia.



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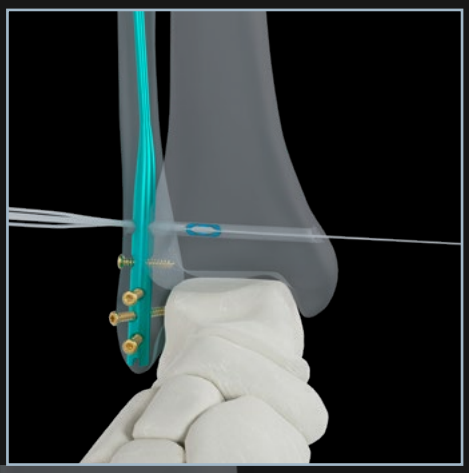
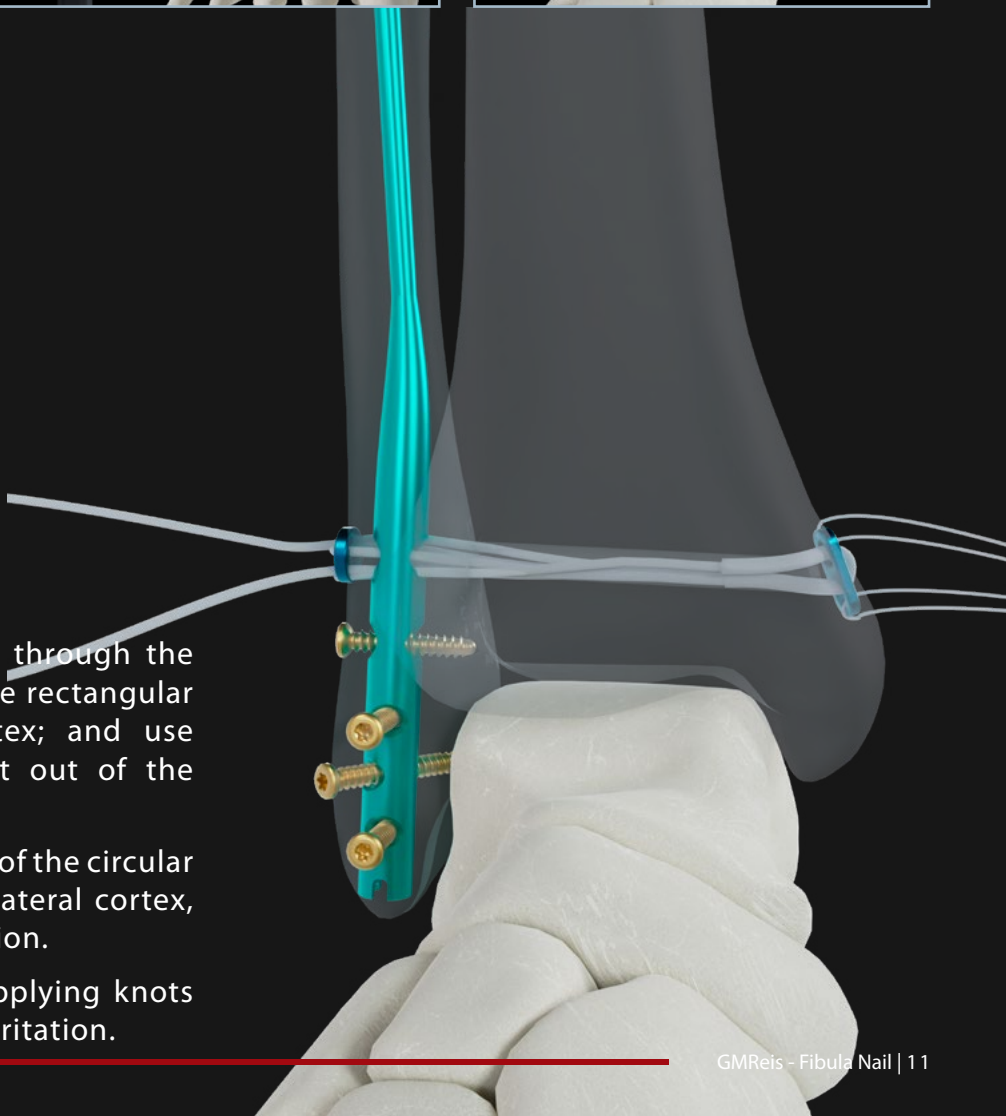
CODE	DESCRIPTION
312-2000	*Expert Knotless - Knotless Flexible Fixator*

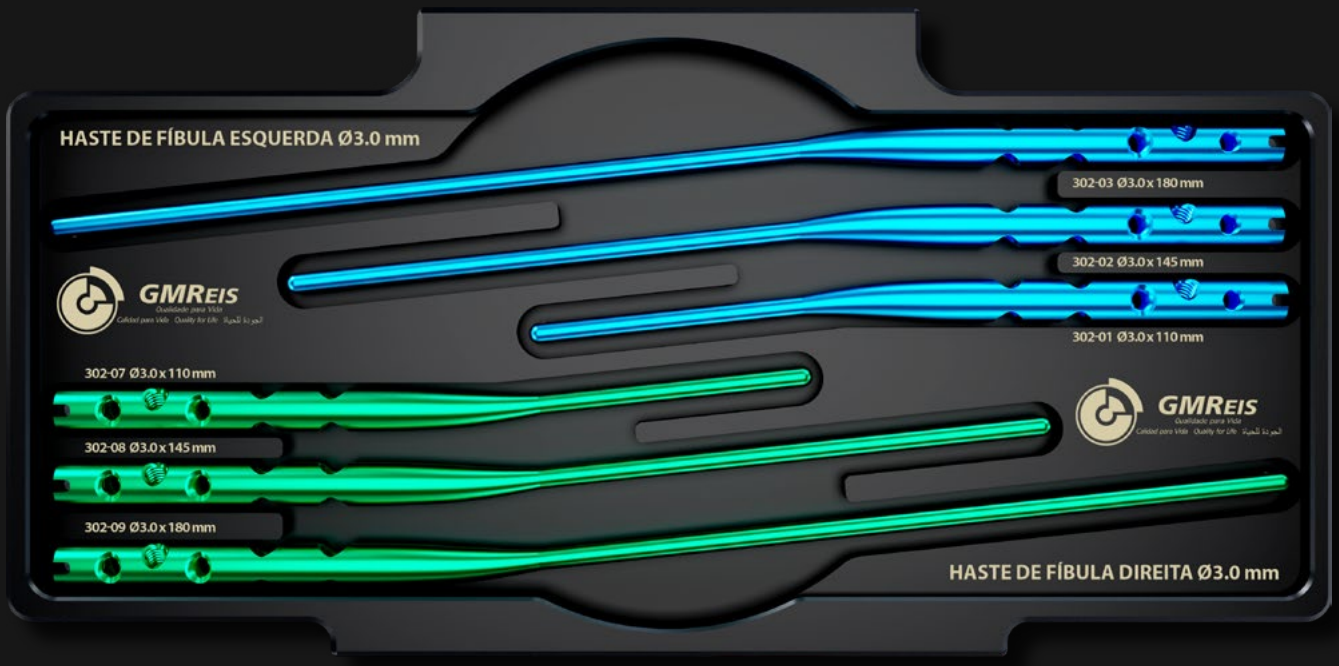


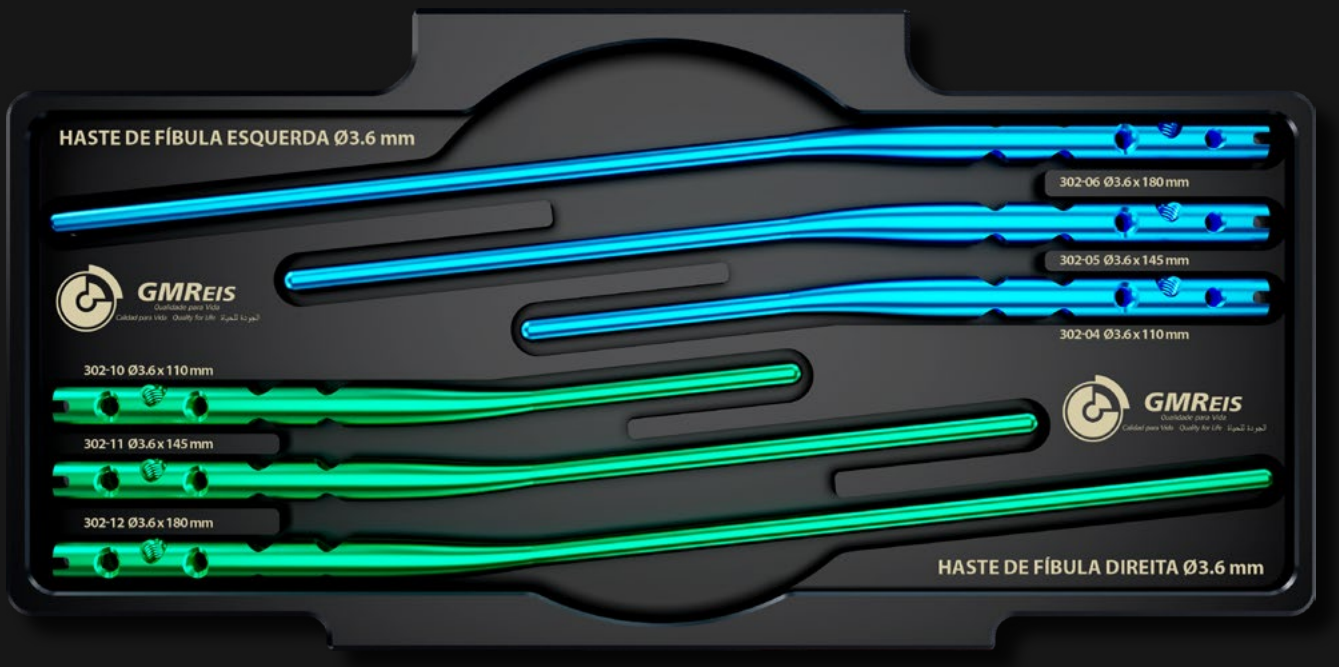


Apply the Expert Knotless needle through the four cortex tunnel, transporting the rectangular button to the tibia medial cortex; and use the needle sutures to position it out of the perforation.

Traction the Expert Knotless suture of the circular button, until approach the fibula lateral cortex, stabilizing the syndesmosis reduction.

The knotless technology makes applying knots unnecessary, avoiding soft tissue irritation.





FIBULA NAIL

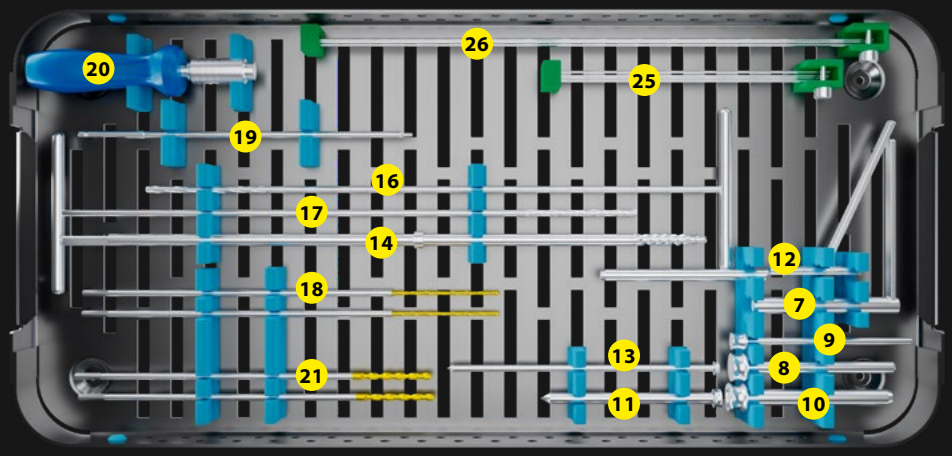
CODE	SIDE	Ø	LENGTH
302-01	*Left*	*3.0 mm*	*110.0 mm*
302-02	*Left*	*3.0 mm*	*145.0 mm*
302-03	*Left*	*3.0 mm*	*180.0 mm*
302-04	*Left*	*3.6 mm*	*110.0 mm*
302-05	*Left*	*3.6 mm*	*145.0 mm*
302-06	*Left*	*3.6 mm*	*180.0 mm*
302-07	*Right*	*3.0 mm*	*110.0 mm*
302-08	*Right*	*3.0 mm*	*145.0 mm*
302-09	*Right*	*3.0 mm*	*180.0 mm*
302-10	*Right*	*3.6 mm*	*110.0 mm*
302-11	*Right*	*3.6 mm*	*145.0 mm*
302-12	*Right*	*3.6 mm*	*180.0 mm*

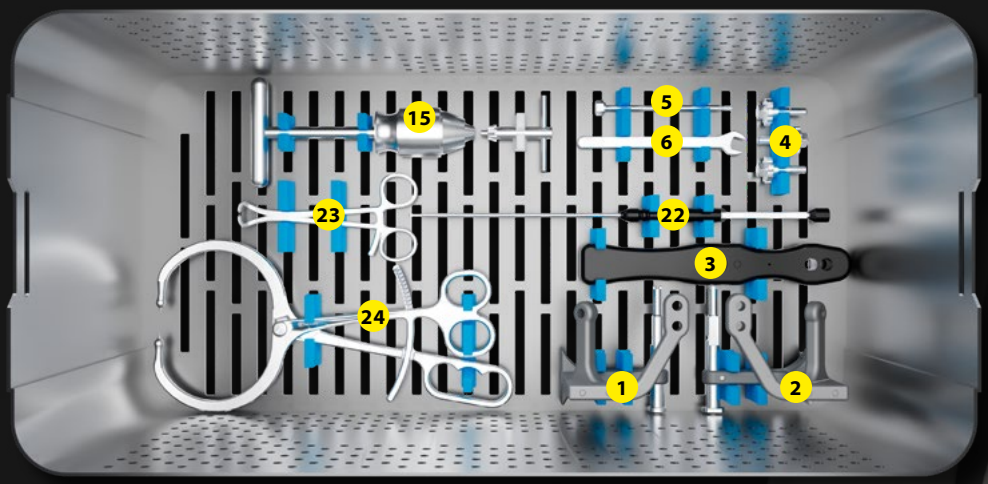
Ø3.2 mm LOCKING SCREW

CODE	LENGTH	QUANTITY
302-13-08	*8.0 mm*	*4*
302-13-10	*10.0 mm*	*4*
302-13-12	*12.0 mm*	*4*
302-13-14	*14.0 mm*	*4*
302-13-16	*16.0 mm*	*4*
302-13-18	*18.0 mm*	*4*
302-13-20	*20.0 mm*	*4*
302-13-22	*22.0 mm*	*4*
302-13-25	*25.0 mm*	*4*

CODE	LENGTH	QUANTITY
302-13-30	*30.0 mm*	*4*
302-13-35	*35.0 mm*	*2*
302-13-40	*40.0 mm*	*4*
302-13-45	*45.0 mm*	*2*
302-13-50	*50.0 mm*	*4*
302-13-55	*55.0 mm*	*2*
302-13-60	*60.0 mm*	*4*
302-13-65	*65.0 mm*	*2*

INSTRUMENTS SET





	CÓDIGO	DESCRIPTION	QUANTITY
1	302-101-03	Right Anterolateral Guide	1
2	302-101-04	Left Anterolateral Guide	1
3	302-100	Lateral Guide	1
4	302-113	Guide Connection Device	3
5	302-107	Nail Connection Device	1
6	226-300-99	Fixed Wrench	1
7	302-125	Ø6.7 x 80.0 mm Metaphyseal Reamer Cannula	1
8	302-123	Ø4.0 x 82.0 mm Proximal Reamer Cannula	1
9	302-124	Ø1.7 x 100.0 mm Guide Wire Cannula	1
10	302-126	Ø6.5 - Ø9.0 x 80.0 mm Cannula	1
11	302-131	Ø6.3 x 152.0 mm Trocar Tip	1
12	302-109	Ø4.0 x 140.0 mm Drill Cannula	1
13	302-120	Ø3.8 x 152.0 mm Trocar Tip	1
14	302-25	Ø3.8 - Ø6.3 x 158.0 mm Metaphyseal Reamer	1
15	900-160	Large Quick Coupling T Handle	1
16	302-117	Ø3.3 mm Proximal Reamer	1
17	302-118	Ø3.9 mm Proximal Reamer	1
18	302-105	Ø2.0 x 200.0 mm Drill Bit	2
19	302-122	Screwdriver Shaft T7	1
20	302-310	Quick Coupling Handle	1
21	223-128	Ø3.8 x 200.0 mm Drill Bit	2
22	302-116	Depth Gauge	1
23	223-301	Bone Reduction Forceps	1
24	314-100	Syndesmosis Reduction Forceps	1
25	302-119	Ø1.6 x 155.0 mm Guide Wire	4
26	241-32	Ø1.6 x 310.0 mm Guide Wire	4

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18 January 2024 11:20 am