

 **comete**
control

 **comete**
extraplate

 **amplitude**



**Surgical technique
IN-OUT**

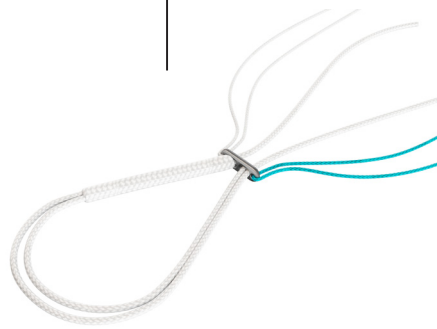


Summary

Concept and range	5
Surgical technique overview	9
Etape 1 - Harvesting.....	10
Etape 2 - Graft preparation.....	11
Etape 3 - Tibial placement.....	12
Etape 4 - Tibial drilling.....	13
Etape 5 - Femoral placement	14
Etape 6 - Femoral drilling	15
Etape 7 - Suture loop positionning	16
Etape 8 - COMETE Control positionning on femoral side.....	17
Etape 9 - Femoral fixation by COMETE Control.....	18
Etape 10 - Femoral fixation by COMETE Control and Extra plate.....	19
Instrumentation.....	21
Appendix A Tibial guide: Assembly.....	23
Appendix B Tibial guide: Modification of the angulation	24



Concept and range



Concept and range

Adjustable cortical fixation

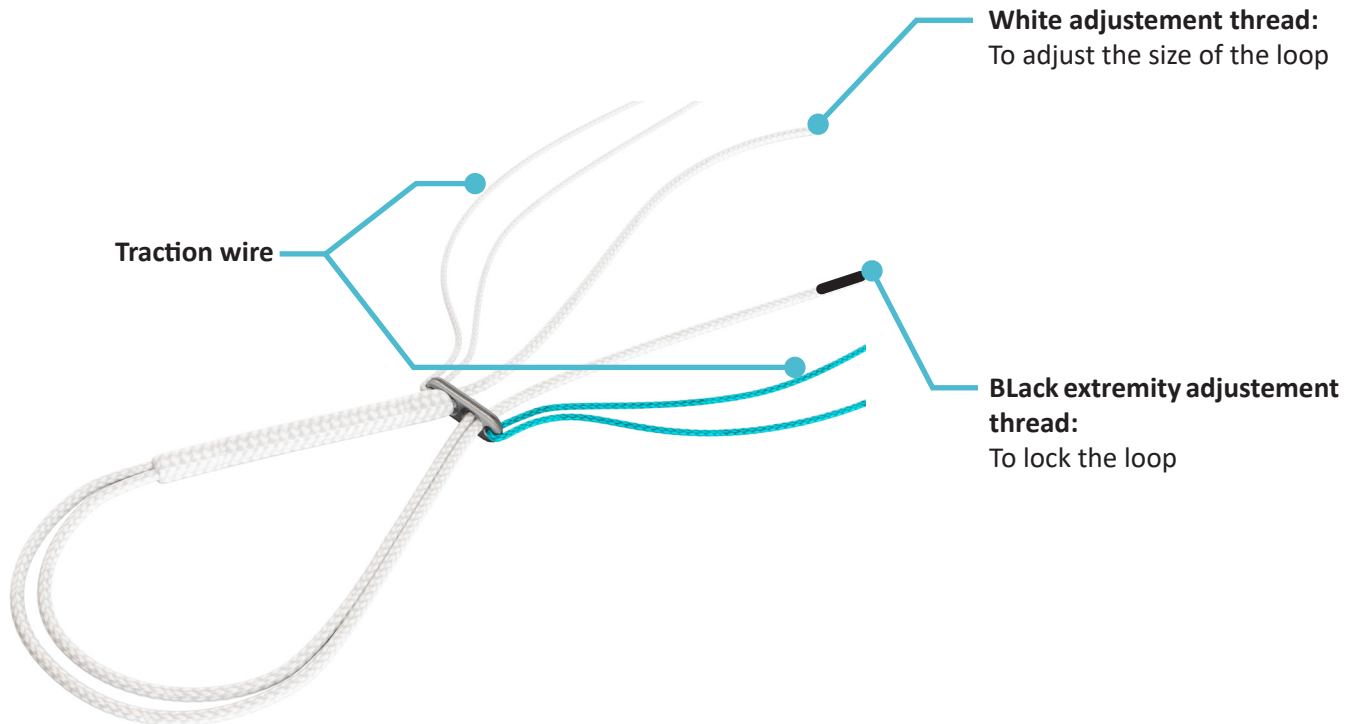


Plate for 6 to 11 mm tunnel



COMETE CONTROL and COMETE Extra plate are a medical devices manufactured by COUSIN BIOTECH S.A.S. The evaluation of EC conformity has been assessed by the notified body SGS Belgium NV (CE1639). The quality management system of COUSIN BIOTECH S.A.S is compliant with ISO 13485 standard. Please read carefully the instructions for use before using the device.

Non contractual pictures and texts. Specifications likely to be modified without notice.

Cousin Biotech S.A.S capital : 340 656 €- 398 460 261 RCS Lille – N°TVA FR 34 398 460 261

Concept and range

COMETE Control

- COMETE Control is made of a green and a white traction wire.
To pass the COMETE CONTROL plate through the tunnel, tract the white or the green traction wire. Pull the other traction wire and adjustment threads without applying tension.
- COMETE Control two adjustment threads:
 - White Adjustable thread to adjust the loop.
 - Black Adjustable thread to lock the loop.
- To adjust the loop: start pulling the white adjustment thread and pull the same length with the black thread. Reproduce the movement until adjust the loop to the desired length.
- Do not force on the locking thread during the loop adjustment time.
- Lock the COMETE CONTROL: Hold a tension on the white adjustable thread and pull tightly the black adjustment thread to lock the loop.

COMETE Extra plate

- Dimension:

Length	20 mm
Width	7 mm
Thikness	1.50 mm

Implant COMETE Control and Extra plate

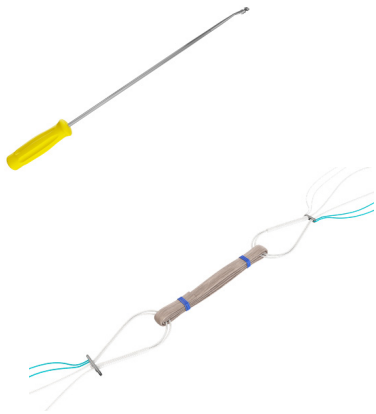
- Remove one of the two traction wire. Slide the extended plate under the button. Make sure that the remaining traction wire is on the slot side to avoid hindering the interlocking.

NOTE

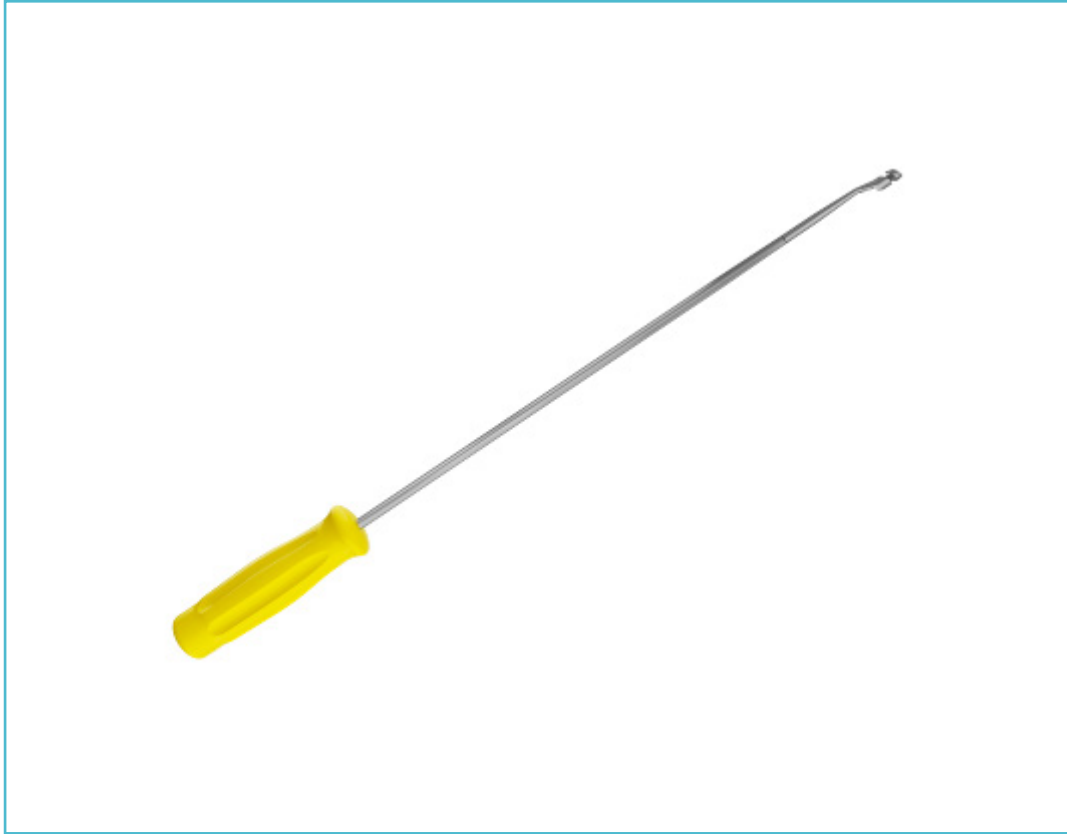
This document is aimed to have a correct use of instrumentation set. Anatomical acces and surgical technique are under responsibility of surgeon.



Surgical technique overview

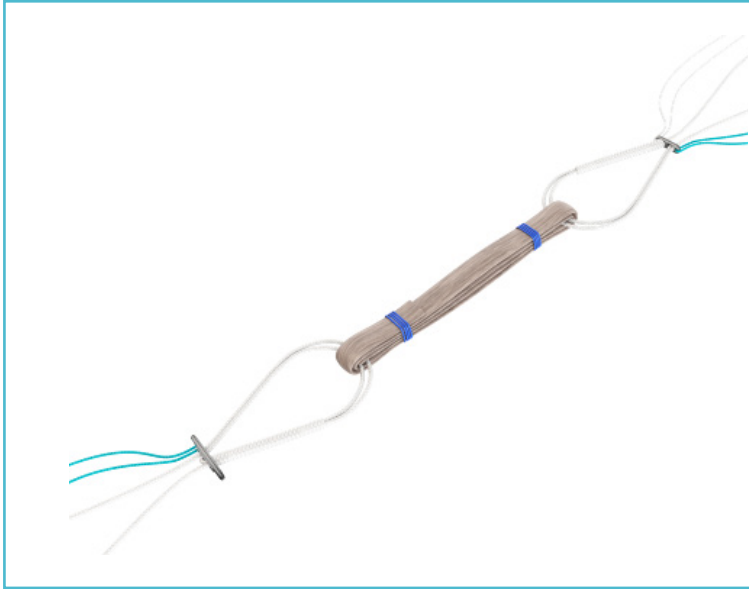
1**Harvesting and graft preparation****2****Tibial preparation****3****Femoral preparation****4****Graft fixation**

1 Harvesting



Harvest the semi tendinosus with the open stripper.

2 Graft preparation

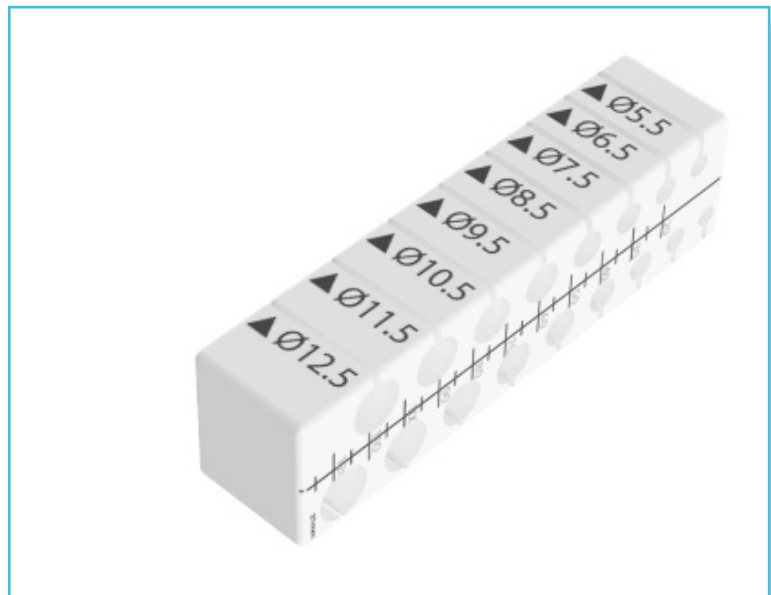


Pass the semi tendinosus through the femoral and tibial adjusted loops.

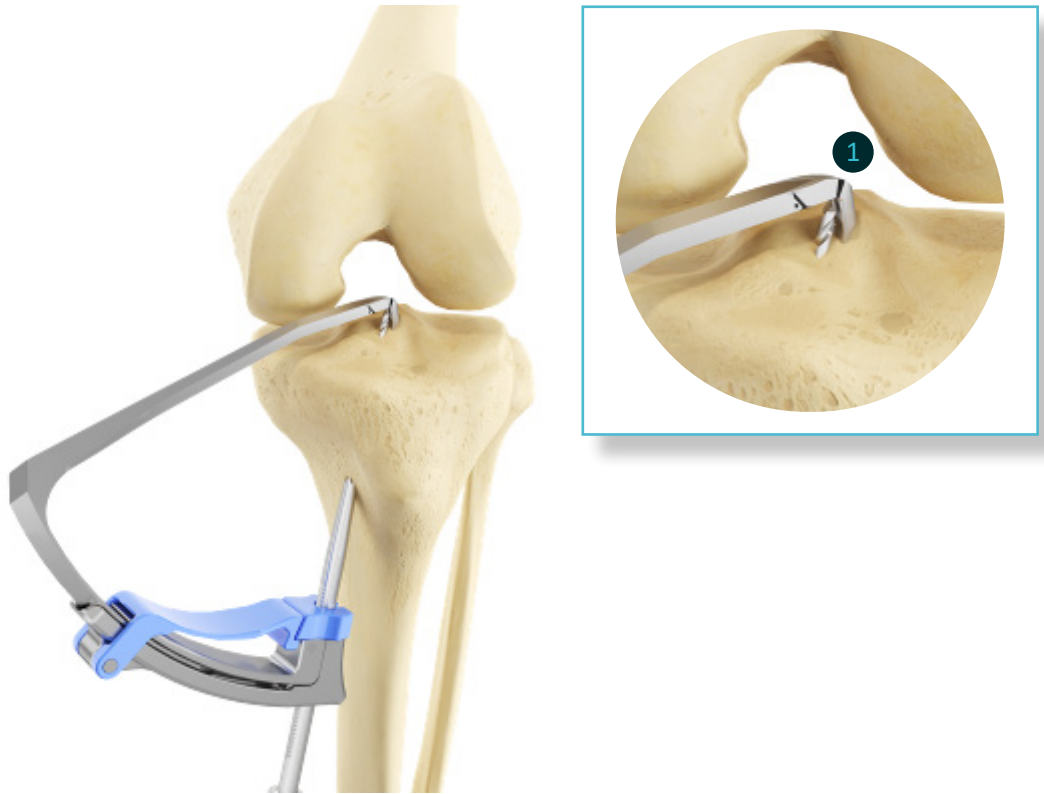
Obtain a four-bundle graft of sufficient length.

Perform a distal and proximal suture combining the 4 strands of the graft.

Calibrate the graft (diameter and length) using graft sizer.



3 Tibial placement



Assemble the tibial guide and select the angulation.

Place the tip of the tibial guide in the tibial ACL Footprint.

Use the laser marking to estimate the exit of the wire pin guide. 1

Insert the tibial guide sleeve, flat surface facing upware. Just apply a single « clic » after the contact with the cortex.

Drill the 2.4 mm wire pin guide through the tibial guide sleeve.

Control the wire pin guide positioning, remove the tibial guide from the joint.

4 Tibial drilling



Select the reamer that matches the graft diameter.

Advance the reamer over the wire pin guide and drill the tibial tunnel.

5 Femoral placement



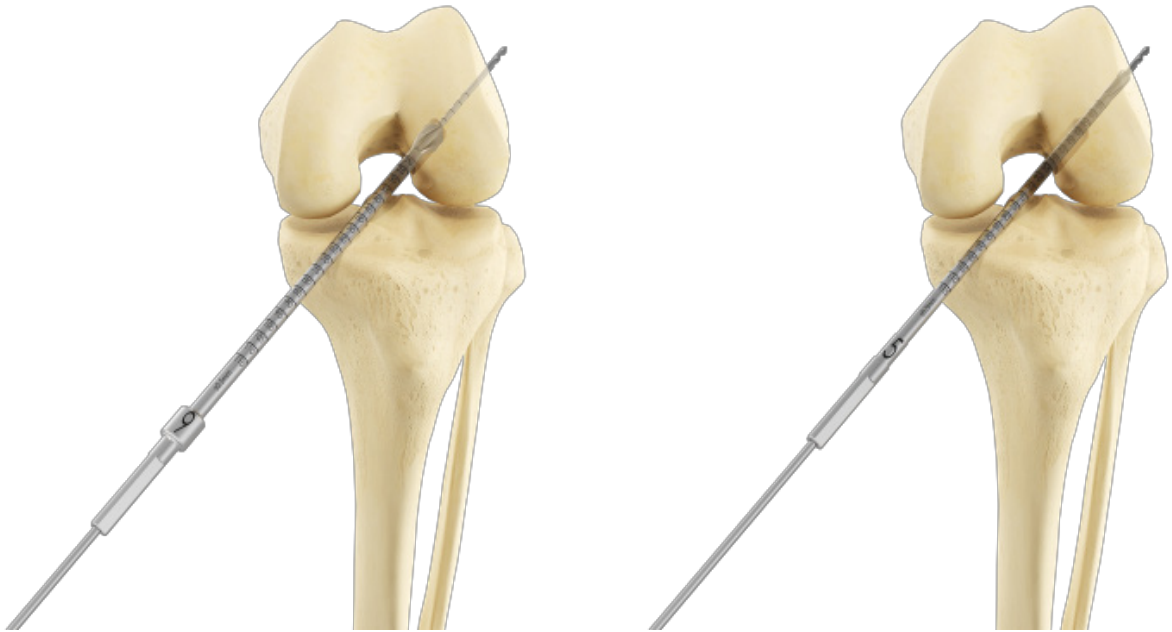
Select the appropriate offset : 1 mm more than the graft radius.

Place the hook of the femoral guide in the over the top position.

Place the eyelet pin through the femoral guide until it passes the lateral cortex and skin. You can determine the total length of total femoral tunnel (or intraosseous tunnel) with the threaded graduated eyelet pin.

Control the eyelet pin position.

6 Femoral drilling



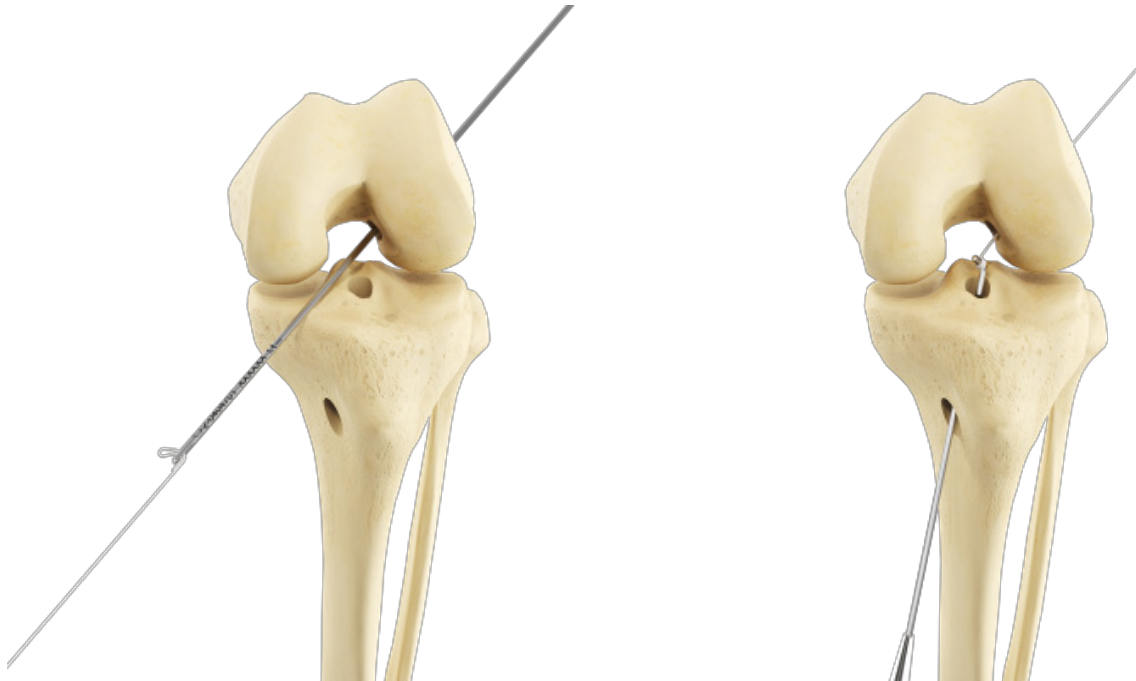
Select the reamer that matches the graft diameter.

Drill the femoral tunnel over the eylet pin at the desiderated depth.

Select the 5 mm canulated reamer.

Drill the intraosseous tunnel and note the lenght when the femoral distal cortex is felt to get the intraosseous tunnel length.

7 Suture loop positionning

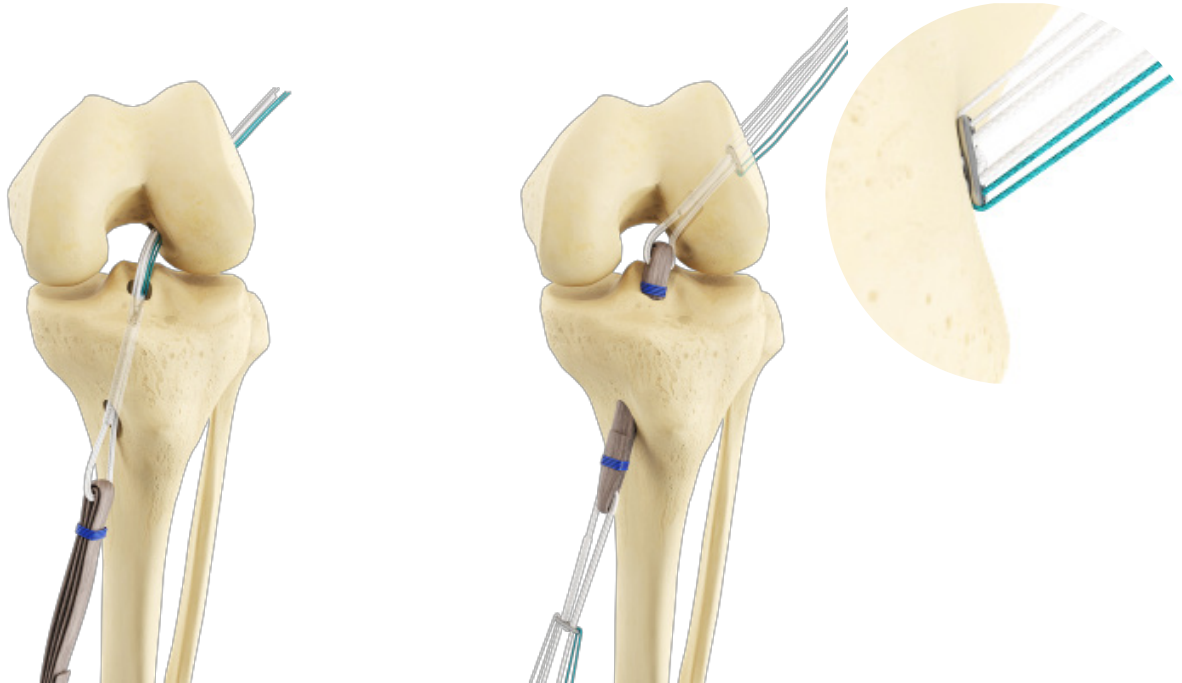


Pass a suture loop trough the eylet pin and pull the eylet pin while holding the loop to the antero medial arthroscopic portal.

Pass the loop on the joint.

Retrieve the loop through the tibial tunnel.

8 COMETE Control positionning on femoral side



Pass the COMETE tractions wires and the adjustables threads through the suture loop and tract it until the COMETE Control wires and threads take out from the skin surface.

Pull the white COMETE Control traction wire to orientate the COMETE titanium plate in the tunnel. Pass the COMETE control and the graft through the tibial and femoral tunnels. Stop pulling when the titanium plate pass the femoral cortex.

To lock the plate on the cortex, pull the green traction wire. To make sure the titanium plate is perpendicular to the femoral cortex, pull back the graft to control the fixation.



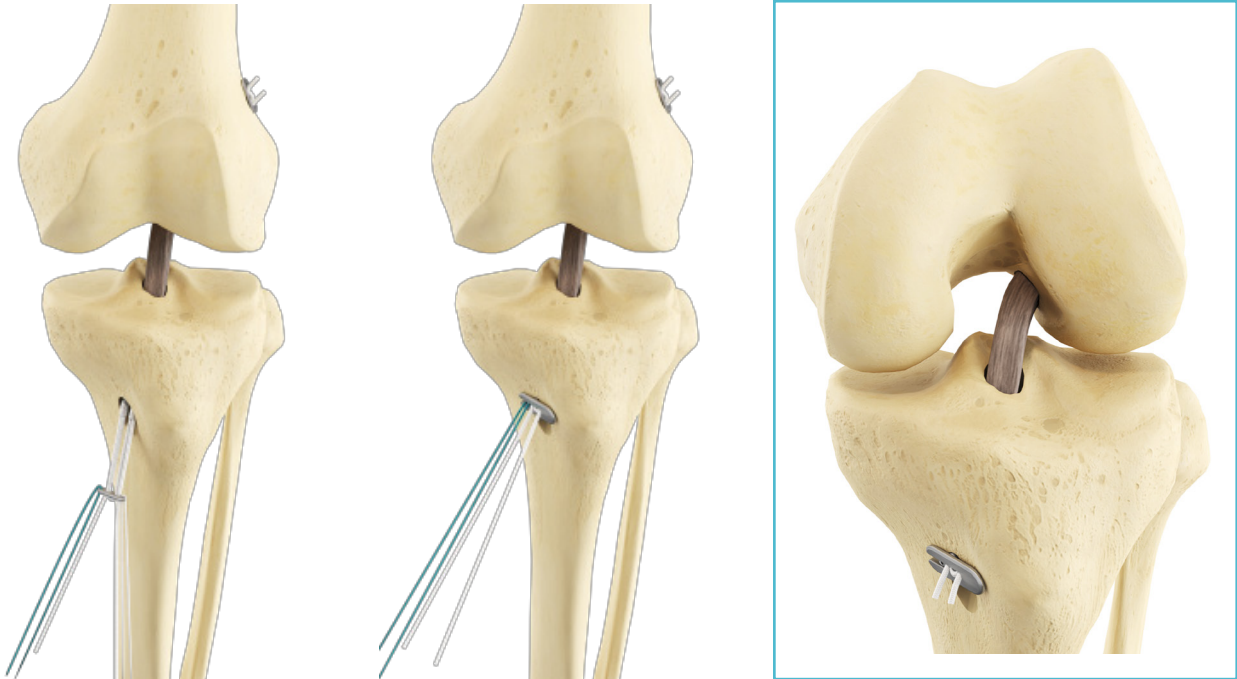
While maintaining tension on the graft on the tibial side, start pulling the white adjustment thread and pull the same length with the black adjustment thread. Repeat the movement until adjust the loop to the desired length.

Do not apply a tension on the locking thread (black extremity thread) during the loop adjustment time.

Lock the loop. hold a tension on the white adjustment thread and pull tightly the black adjustment thread.

Cycling the graft and COMETE Control. Hold the COMETE Control at the tibia. Perform several manual pull-ups using the traction wires.

10 Tibial fixation by COMETE Control and EXTRA Plate



Use COMETE Extra Plate to increase the cortical contact surface. Remove one of the two traction wire. Slide the extended plate under the button. Make sure that the remaining wire is on the slot side to allow a fully interlocking button on the Extra plate plate.

Begin to pull the white adjustment thread and pull the same length with the black thread. Reproduce the movement until adjust the graft to the desired tension.

Do not apply a tension on the black adjustment thread during the loop adjustment time.

Control the graft tensioning.

Lock the loop. hold a tension on the white adjustment thread and pull tightly the black adjustment thread.

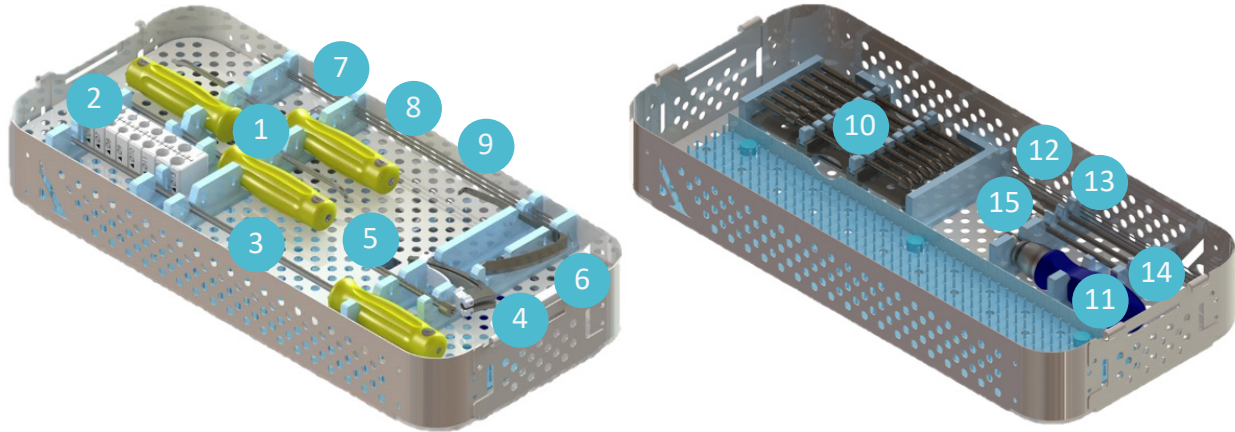
Control the graft tensioning.

Cut the adjustment threads on the femur and tibia at a minimum distance of 10mm from the cortical button.



Instrumentation

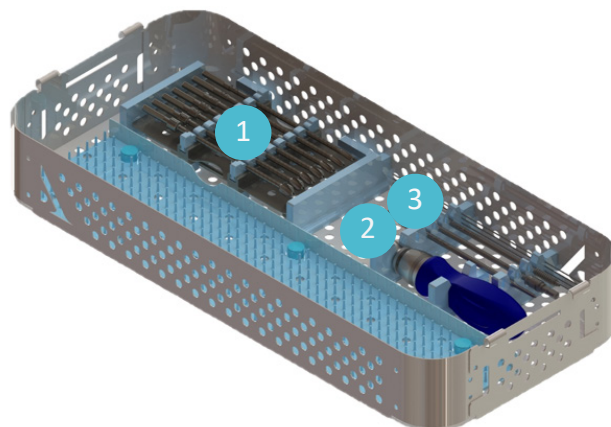
Inside-Out modular instrumentation set



Rep	Designation	Référence	Qté
1	5 mm IN/OUT femoral guide	2-0405305	1
	6 mm IN/OUT femoral guide	2-0405306	1
	7 mm IN/OUT femoral guide	2-0405307	1
2	Graft sizer	2-0401800	1
3	Open stripper Ø5 mm	2-0405505	1
4	Modular guide body / handle	2-0404800	1
5	Modular tibial guide sleeve	2-0404900	1
6	Modular tibial aimer	2-0405000	1
7	Threaded graduated Eyelet pin Ø 2,4 mm Lg300 mm	2-0404700	1
8	Trocard eyelet pin Ø 2.4 mm Lg 350 mm	2-0405400	1
9	Wire pin guide Ø 2,4 mm Lg 300 mm	2-0405600	1
10	Reamer D 5.0 mm	2-0405210	1
	Reamer D 5.5 mm	2-0405215	1
	Reamer D 6.0 mm	2-0405220	1
	Reamer D 6.5 mm	2-0405225	1
	Reamer D 7.0 mm	2-0405230	1
	Reamer D 7.5 mm	2-0405235	1
	Reamer D 8.0 mm	2-0405240	1
	Reamer D 8.5 mm	2-0405245	1
	Reamer D 9.0 mm	2-0405250	1
	Reamer D 9.5 mm	2-0405255	1
	Reamer D 10.0 mm	2-0405260	1
	Reamer D 11.0 mm	2-0405270	1
11	Ratcheting handle	2-0406400	1
12	Screw guidewire Ø 1.1 mm length 240 mm	2-0405700	1
13	Wire Nitinol Ø 1.1 mm length 300 mm	15INBR001F10	1
14	Shank screwdriver ECLIPSE BCP / Profil	2-0406200	1
15	Shank starter Ø 7mm	2-0406300	1

Instrumentation

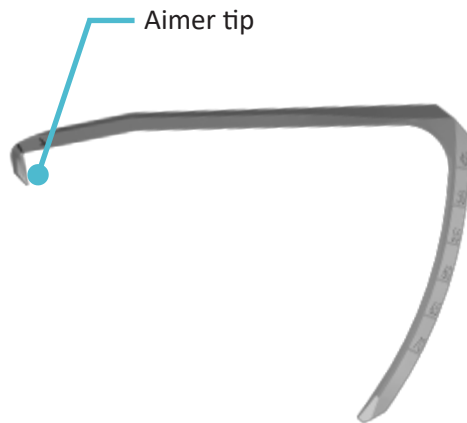
Inside-Out modular instrumentation set



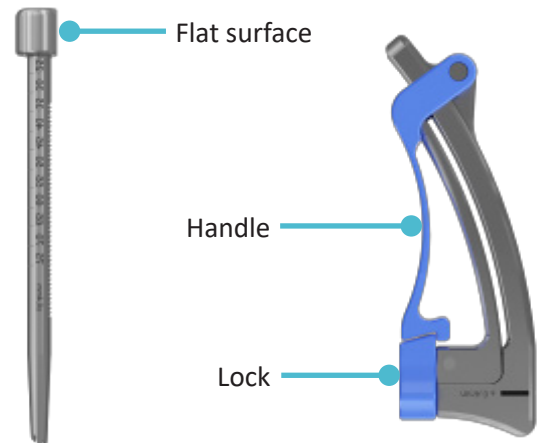
Rep	Designation	Référence	Qté
1	Short reamer D 5.0 mm	2-0406710	1
	Short reamer D 5.5 mm	2-0406715	1
	Short reamer D 6.0 mm	2-0406720	1
	Short reamer D 6.5 mm	2-0406725	1
	Short reamer D 7.0 mm	2-0406730	1
	Short reamer D 7.5 mm	2-0406735	1
	Short reamer D 8.0 mm	2-0406740	1
	Short reamer D 8.5 mm	2-0406745	1
	Short reamer D 9.0 mm	2-0406750	1
	Short reamer D 9.5 mm	2-0406755	1
	Short reamer D 10 mm	2-0406760	1
	Short reamer D 11 mm	2-0406770	1
2	Screwdriver for Screws – Diameter 7 to 12 mm	16INTO001	1
3	Starter tap for Screws	11INTA001	1

Appendix A

Tibial guide: Assembly

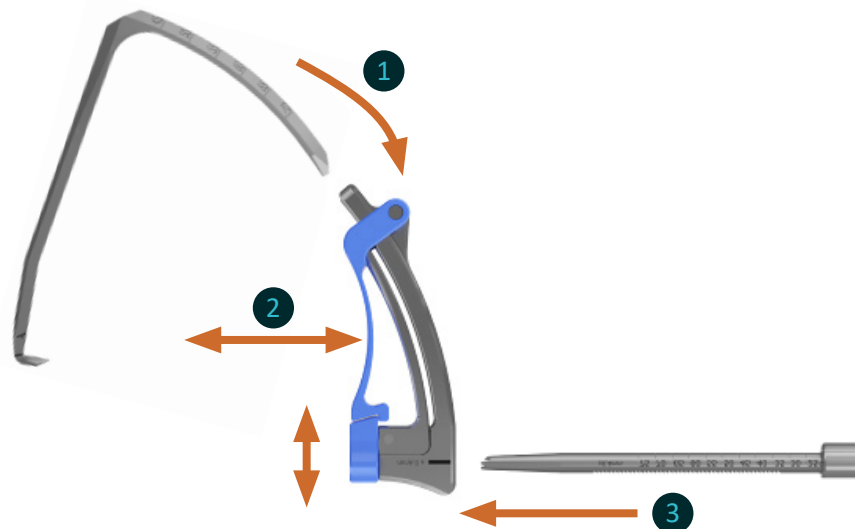


Modular tibial aimer



Modular tibial guide sleeve

Modular guide body / handle



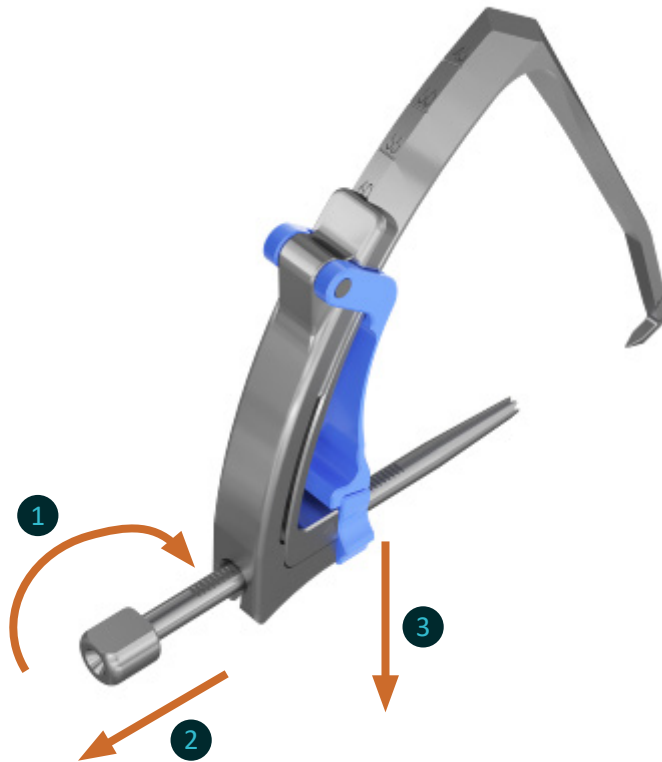
- Insert the modular aimer into the modular guide handle to select angulation (1).
- lock the guide (Modular tibial aimer + Modular guide handle) by pulling the blue handle towards the guide handle (2).

Working principle : Move the lock down press the blue handle and move the lock up to block the modular tibial guide sleeve.

- Insert the modular tibial guide sleeve into the Modular Guide Handle, flat surface facing upware (3).
- The modular tibial guide sleeve cannot be inserted if the modular guide handle and aimer are not locked correctly. If this occurs, remove the aimer from the guide handle. Reassemble the handle and aimer, then reinsert the guide sleeve.

Appendix B

Tibial guide: Modification of the angulation



- Turn the guide sleeve a quarter turn (1).
- Remove the Modular tibial guide sleeve (2).
- Unlock the tibial guide by pulling the lock downwards. This action releases the lock and the tibial guide sleeve (3).
- Change the angulation of the guide.
- Lock the guide then place the modular tibial aimer flat surface facing upware.



Products availability may vary depending on countries. Please check availability with your local representative.

Customer Service – France :

Porte du Grand Lyon,
01700 Neyron – France
Tél. : +33 (0)4 37 85 19 19
Fax : +33 (0)4 37 85 19 18
E-mail : amplitude@amplitude-ortho.com

Customer Service – Export :

11, cours Jacques Offenbach, ZA
Mozart 2,
26000 Valence – France
Tél. : +33 (0)4 75 41 87 41
Fax : +33 (0)4 75 41 87 42

www.amplitude-ortho.com



Instrument
COMETE

<https://eifu.amplitude-ortho.com/>
www.cousin-biotech.com/ifu