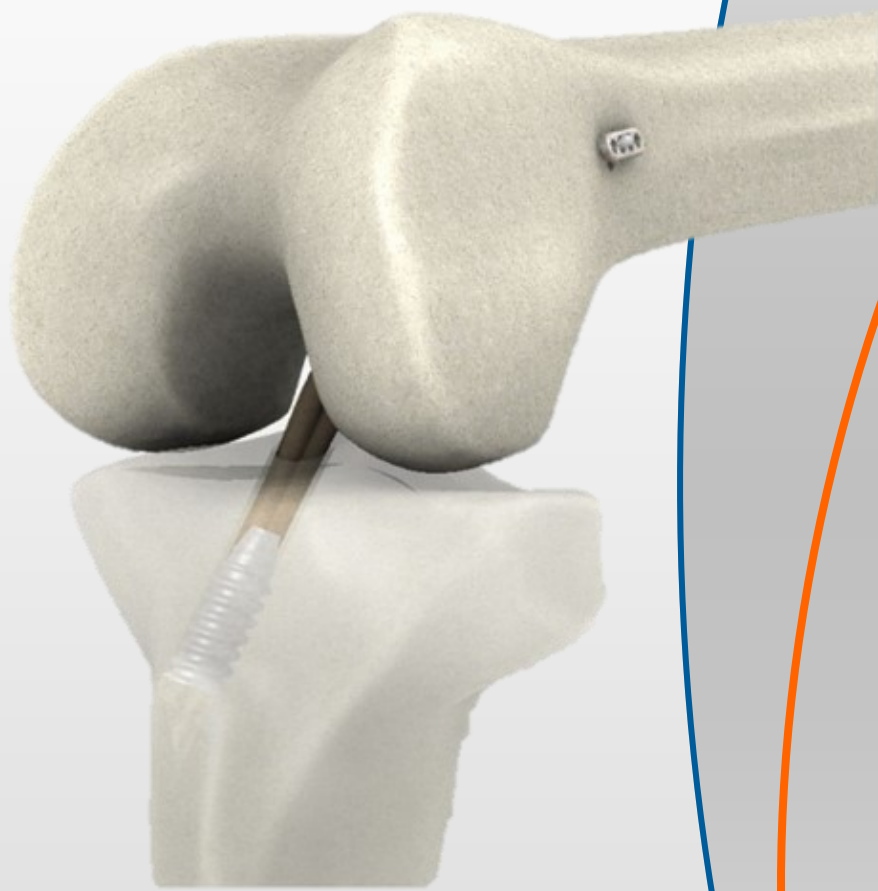


MODULAR INSIDE-OUT



SURGICAL TECHNIQUE
MECHANICAL
INSTRUMENTATION

Note:

The purpose of this surgical technique description is to provide instruction on how to use the instrumentation properly. The surgeon is fully responsible for choosing and performing the approach and surgical technique.

SURGERY TECHNIQUE SUMMARY

1

Tibial tunnel location

Assemble the modular tibial guide. Place the aimer tip into the ACL footprint. Pass the Wire pin guide through the tibial guide



2

Tibial drilling

Drill the tibial tunnel using the reamer that matches the graft diameter on the wire pin guide.



3

Femoral tunnel location

Select the appropriate offset: 1 mm more than the graft radius.
Place the hook of the femoral guide onto the over the top position, in contact with the bony cortex. .



4

Femoral drilling

Drill the femoral using the reamer that matches the graft diameter onto the eylet pin guide.

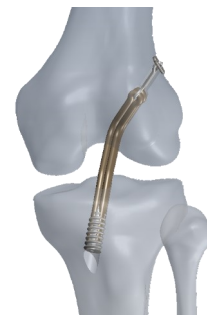
Drill the total femoral tunnel with the 5 mm reamer and note the graduation when passing through the femoral distal cortex to select the appropriate COMETE Length.



5

Fixation

Femoral fixation: Pass the COMETE through the distal femoral cortex.
Tibial fixation : screw an ECLIPSE BCP or Profil

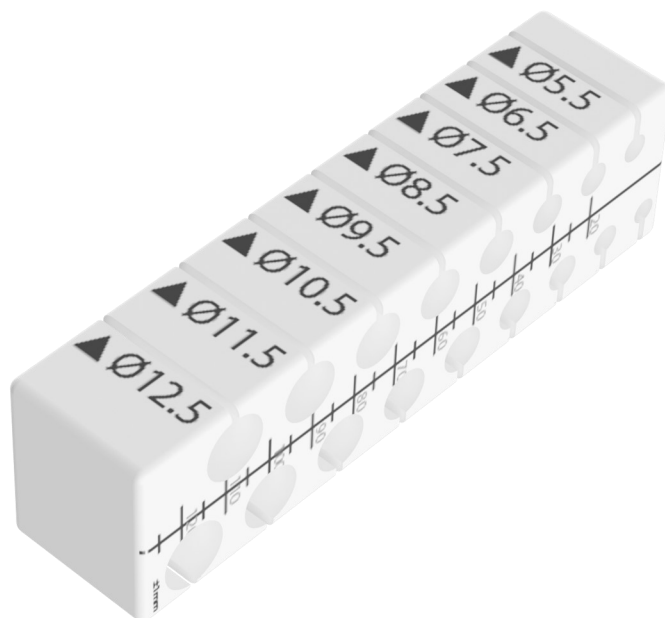


HARVESTING



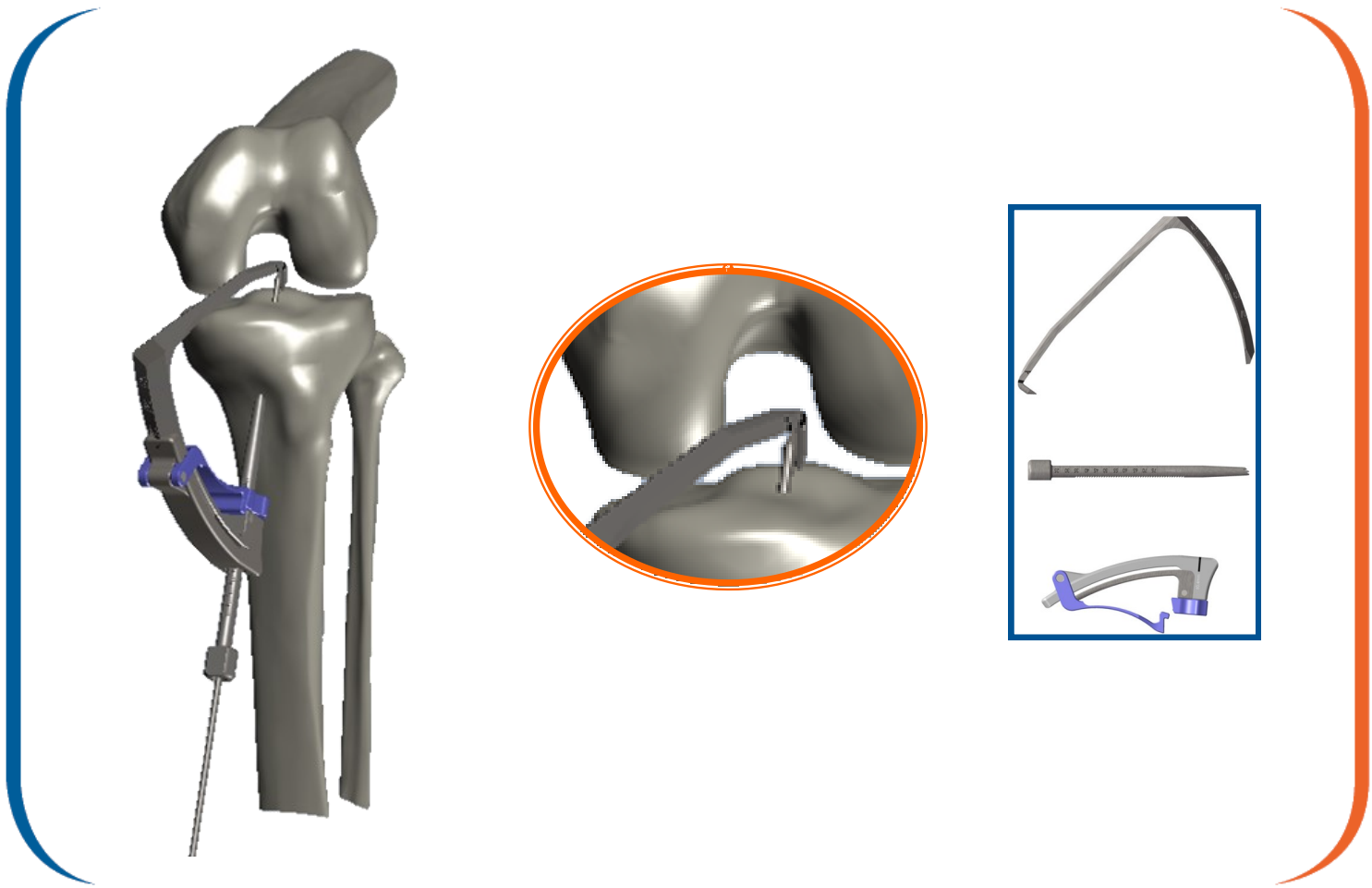
- Harvest the semi tendinosus and gracilis with the open stripper

CALIBRATION



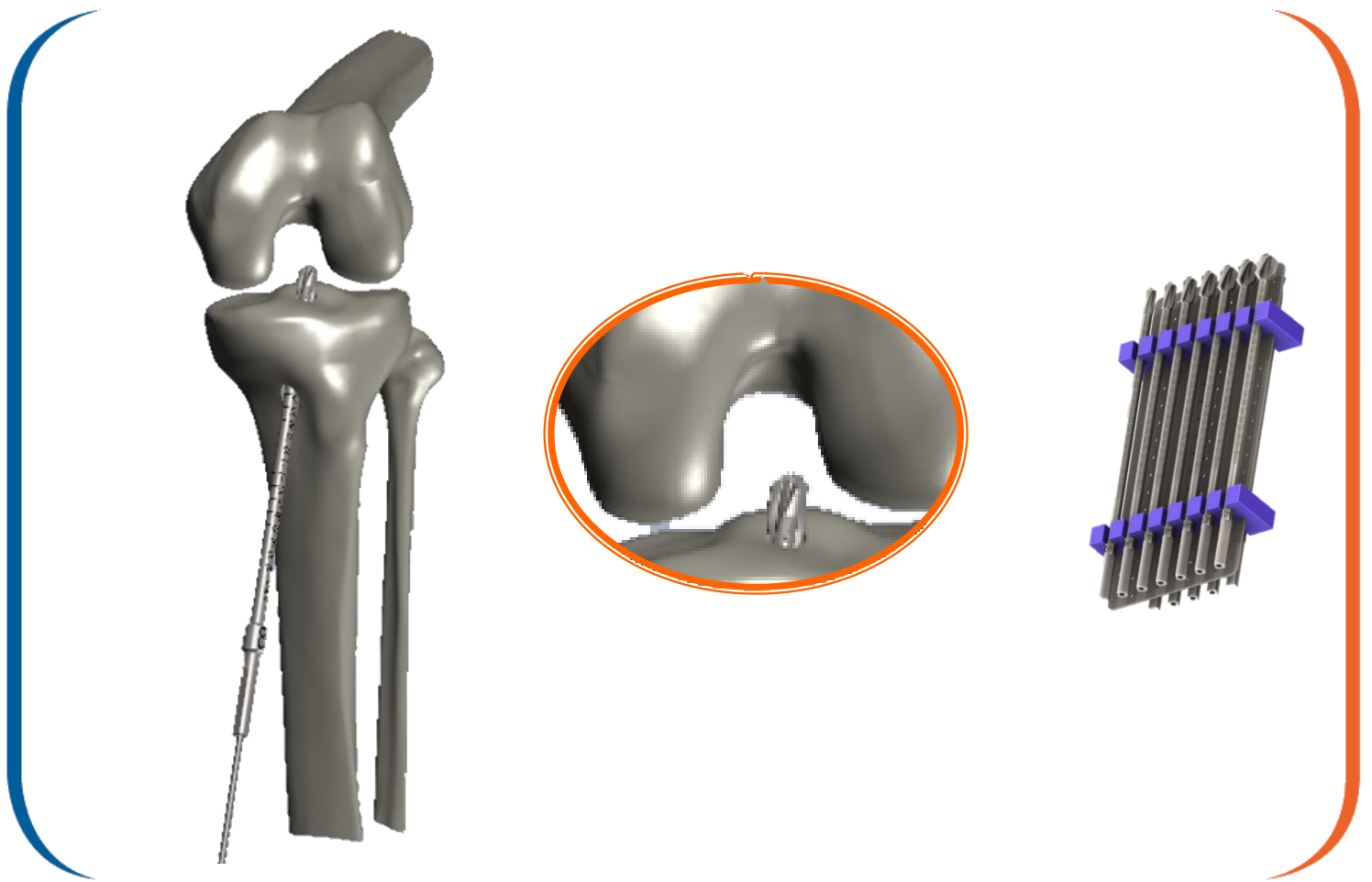
- Calibrer (diamètre et longueur) le transplant à l'aide du calibre

TUNNEL TIBIAL LOCATION



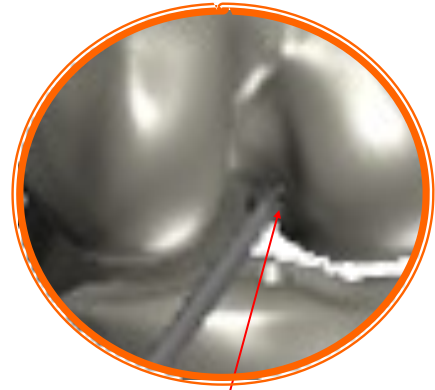
- Assemble the tibial guide and select the angulation
- Place the tip of the tibial guide onto the tibial ACL Footprint
- Use the laser marking to estimate the exit point of the guide wire
- Insert the tibial guide sleeve, the flat surface facing upware. Just apply a single « clic » after the contact with the cortex.
- Drill the wire pin guide throught the tibial guide sleeve
- Control the wire pin guide positioning

TIBIAL DRILLING



- Pass the tibial tunnel through the wire pin guide with the reamer that matches the graft diameter.

FEMORAL TUNNEL LOCATION



Measure the length of the total femoral tunnel (cortex to cortex)

- Select the appropriate offset : 1 mm more than the graft radius.
- Place the hook of the femoral guide at the over the top position, in contact with the bony cortex.
- Place the eyelet pin through the femoral guide.
- Drill the total femoral tunnel (cortex to cortex)

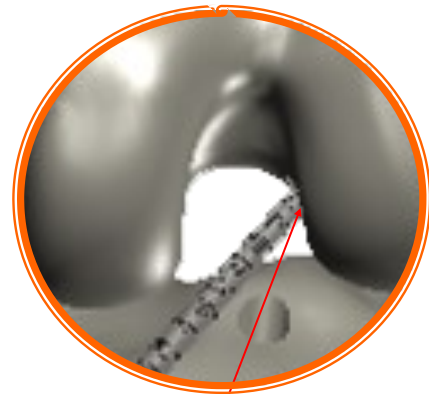
Note:

You can determinate the total length of total femoral tunnel with the threaded graduated eyelet pin

trans-tibial technic:

- Place the femoral guide on the tibial tunnel

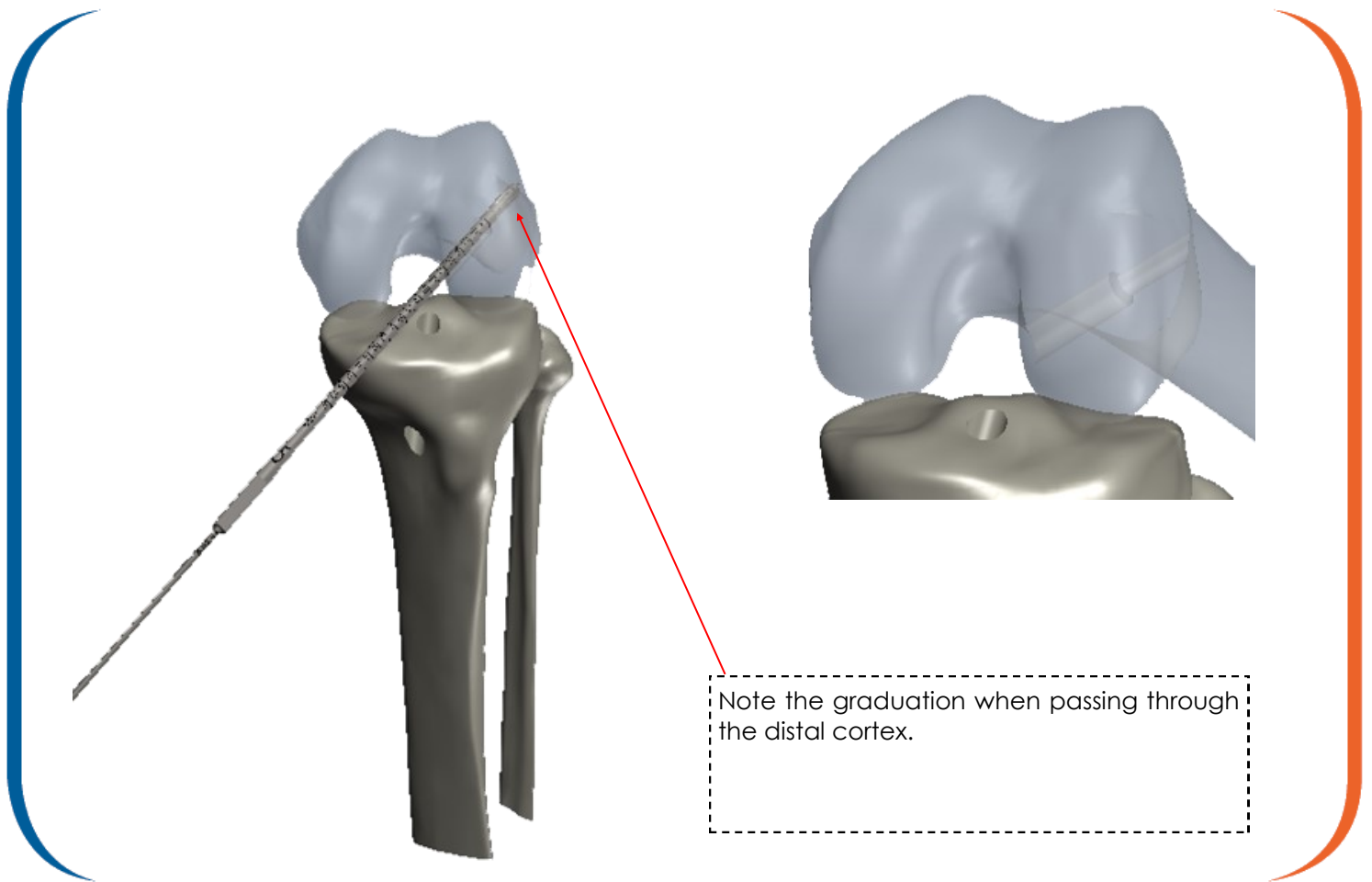
FÉMORAL DRILLING



depth of the femoral tunnel

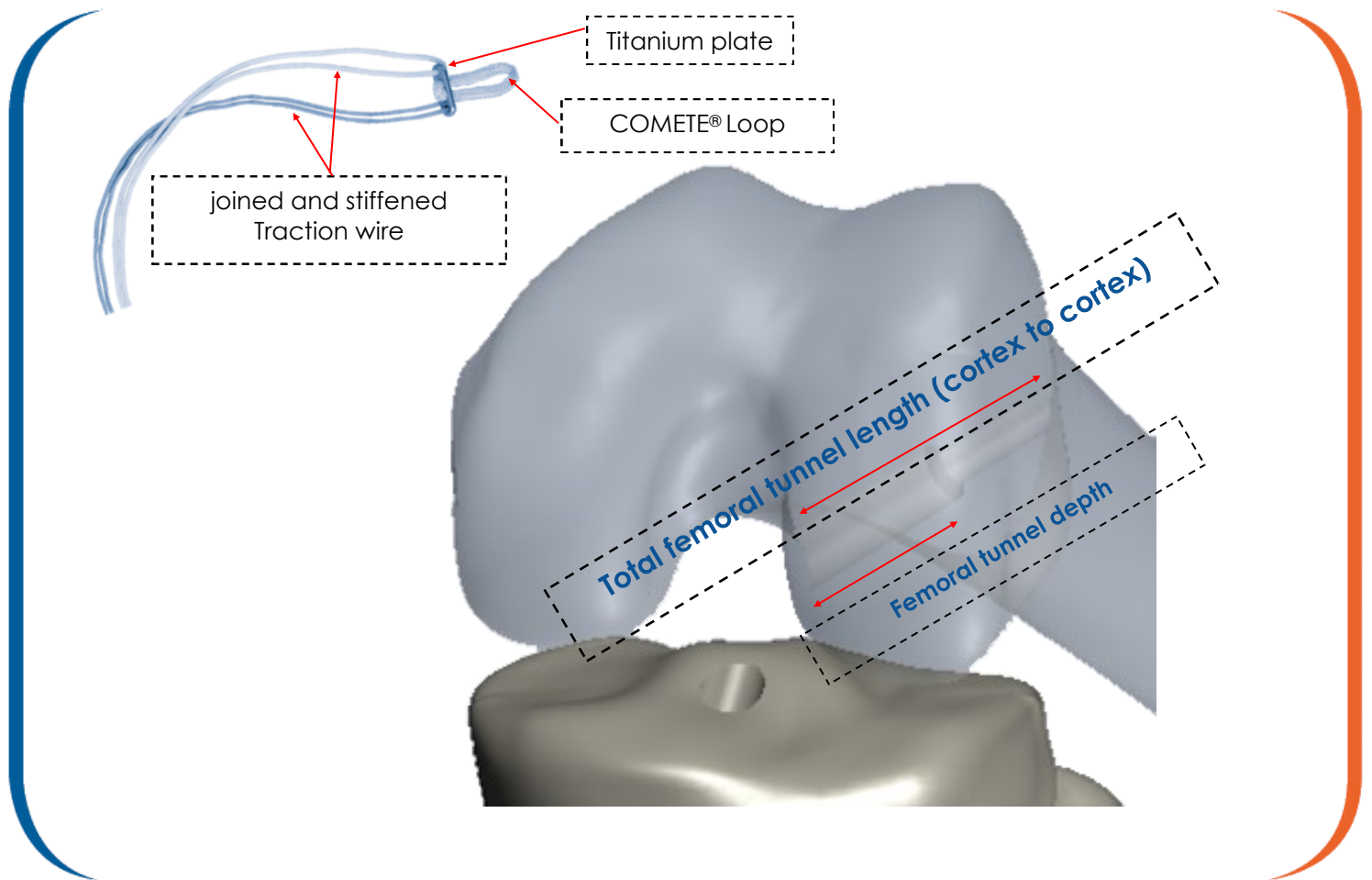
- Select the reamer which matches the graft diameter.
- Drill the femoral tunnel onto the eyelet pin at the desired depth.

COMETE[®] DRILLING



- Drill the total femoral tunnel (cortex to cortex) with the 5 mm reamer.
- Mark the graduation when passing through the femoral distal cortex to get the depth of the length cortex to cortex (CTC).

COMETE® PRESENTATION AND LENGTH CHOICE

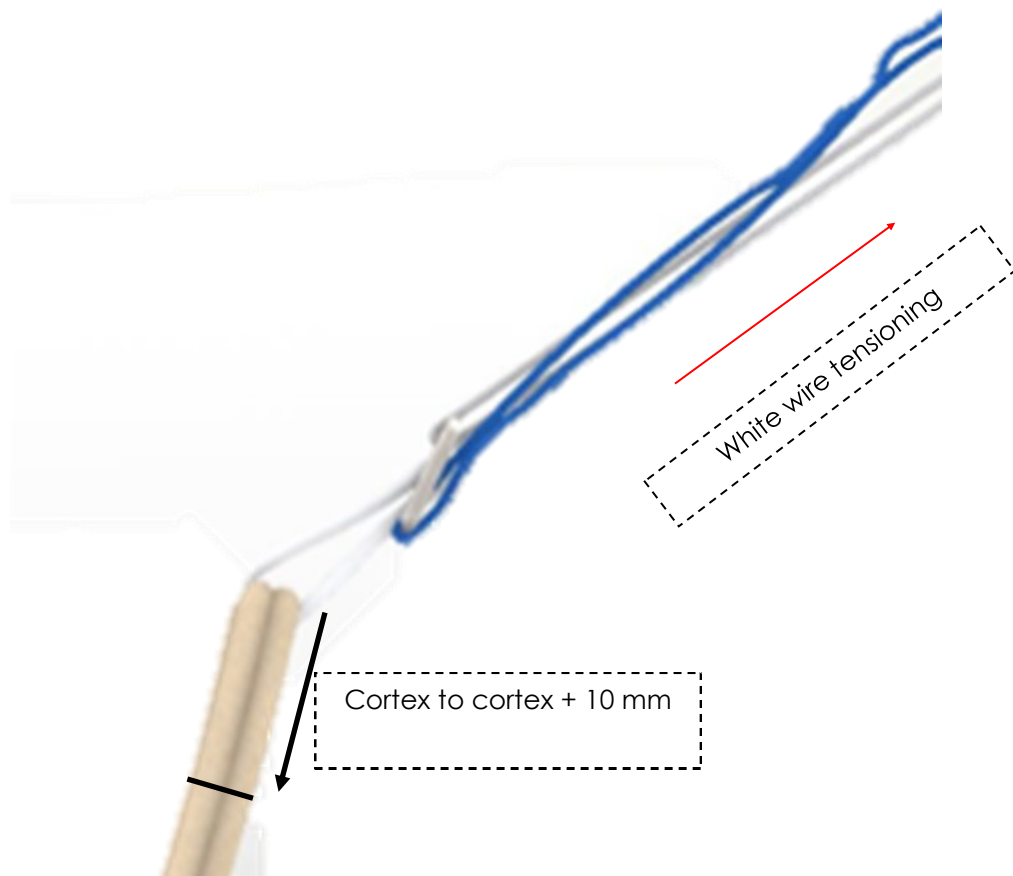


- COMETE® Length : 15, 20, 25, 30 and 35 mm
- Select COMETE® length loop : the COMETE® length must be greater or equal than the CTC length minus the femoral tunnel - plus 10 mm
The 10 mm allows the passage of the titanium plate

Example :

- CTC length **60 mm**
- Femoral tunnel **40 mm**
- COMETE® length : $60-40+10 = \mathbf{30\ mm}$

GRAFT PREPARATION

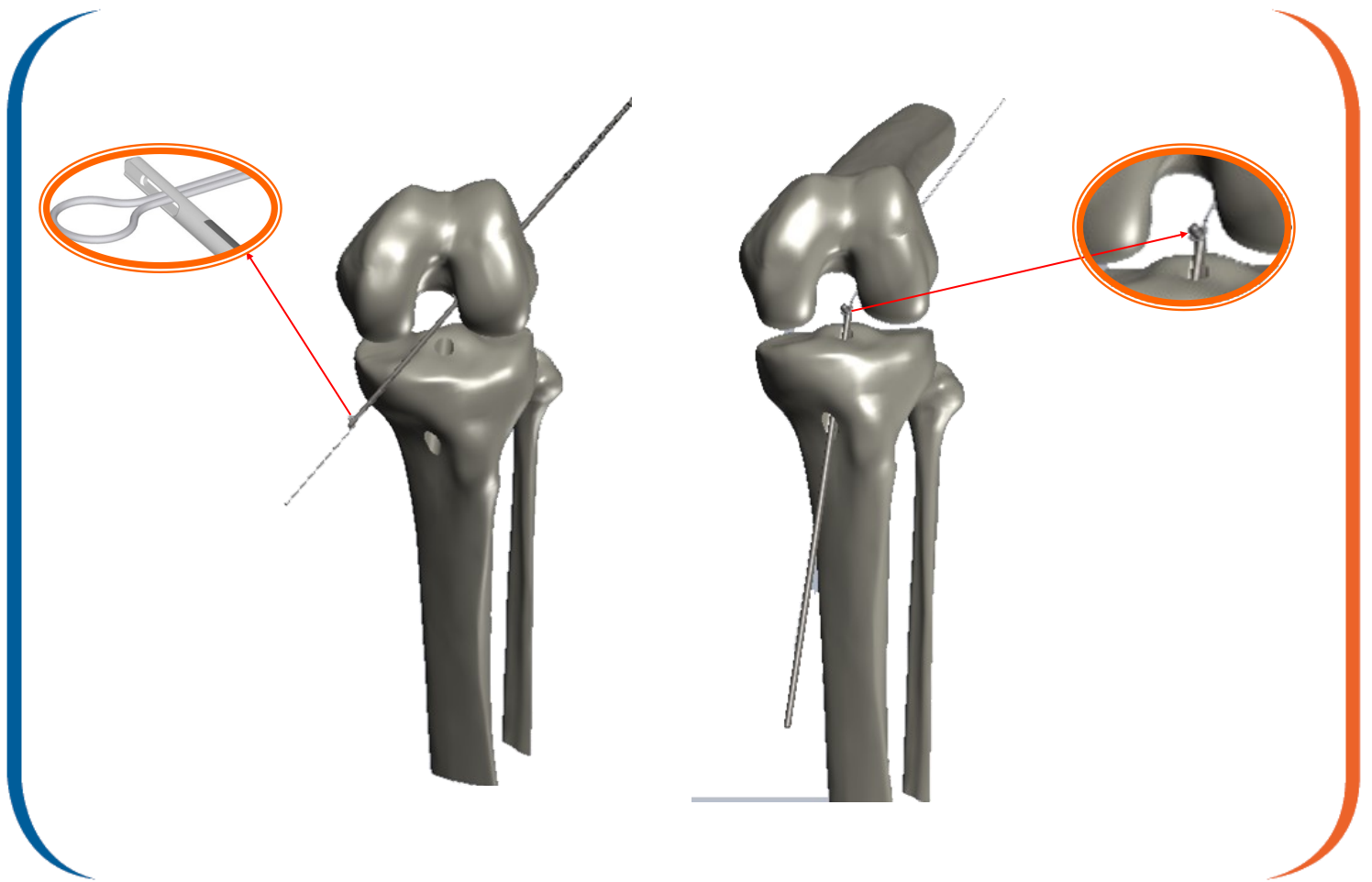


- Pass the Semi Tendinosus and Gracilis through the COMETE® Loop
- The graft can be threaded proximally and distally
- Mark the graft at a distance of 10 mm + the length cortex to cortex. The 10 mm are for the plate passage

Note:

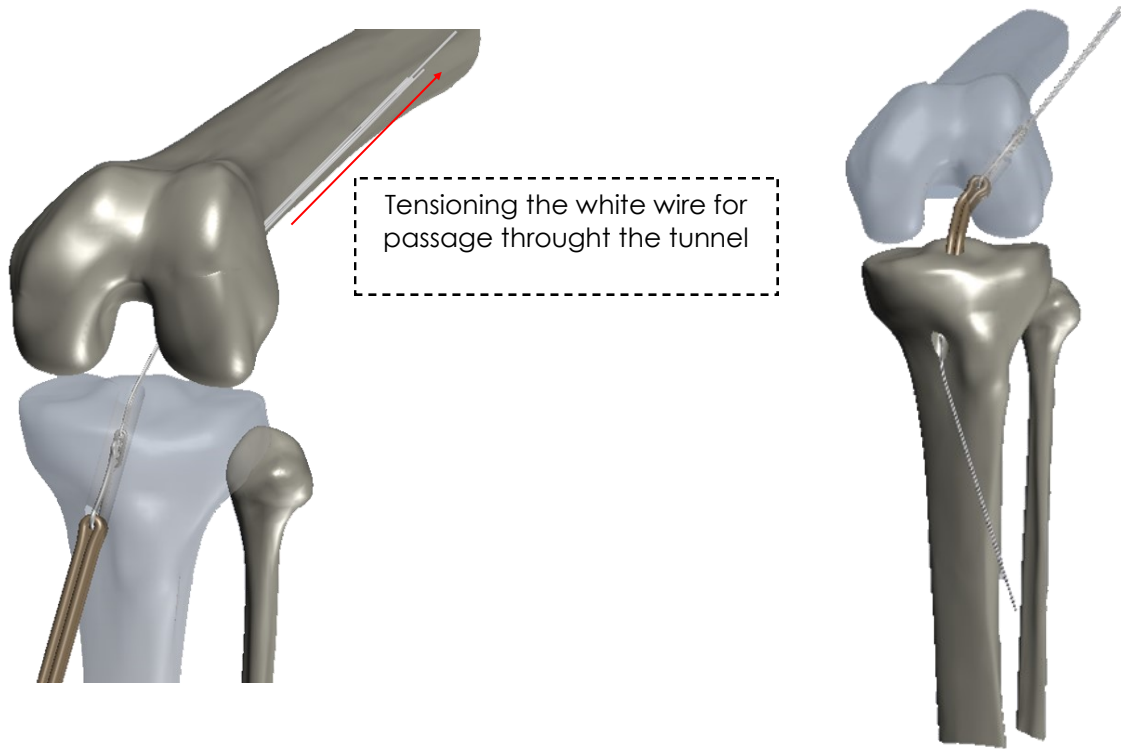
Tensioning the blue or white wire allows the board to be oriented for its passage through the tunnels.

TRACTION WIRE



- Pass a suture loop through the eyelet pin and tract the eyelet pin.
- Pass the suture loop of the joint through the tibial tunnel

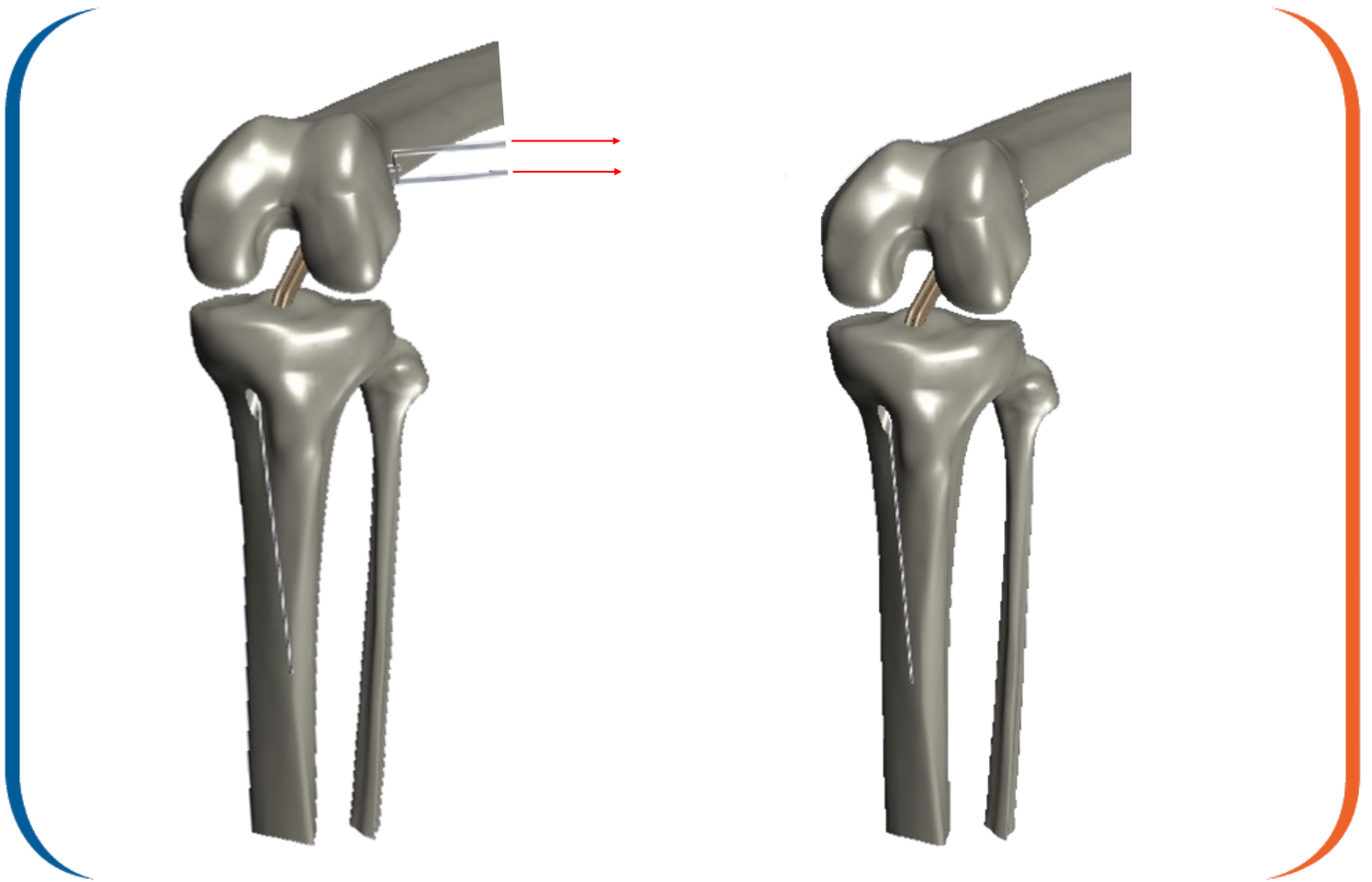
COMETE[®] POSITIONING



- Dissociate the COMETE[®] Pullwire to facilitate the tunnel passage.
- Pass the COMETE[®] Pullwire onto the suture loop and tract it until the COMETE Wire emerges from the skin surface.
- Pull the white COMETE[®] Pullwires to orientate the COMETE[®] titanium plate and pass the COMETE[®] and the graft through the tibial and femoral tunnels.

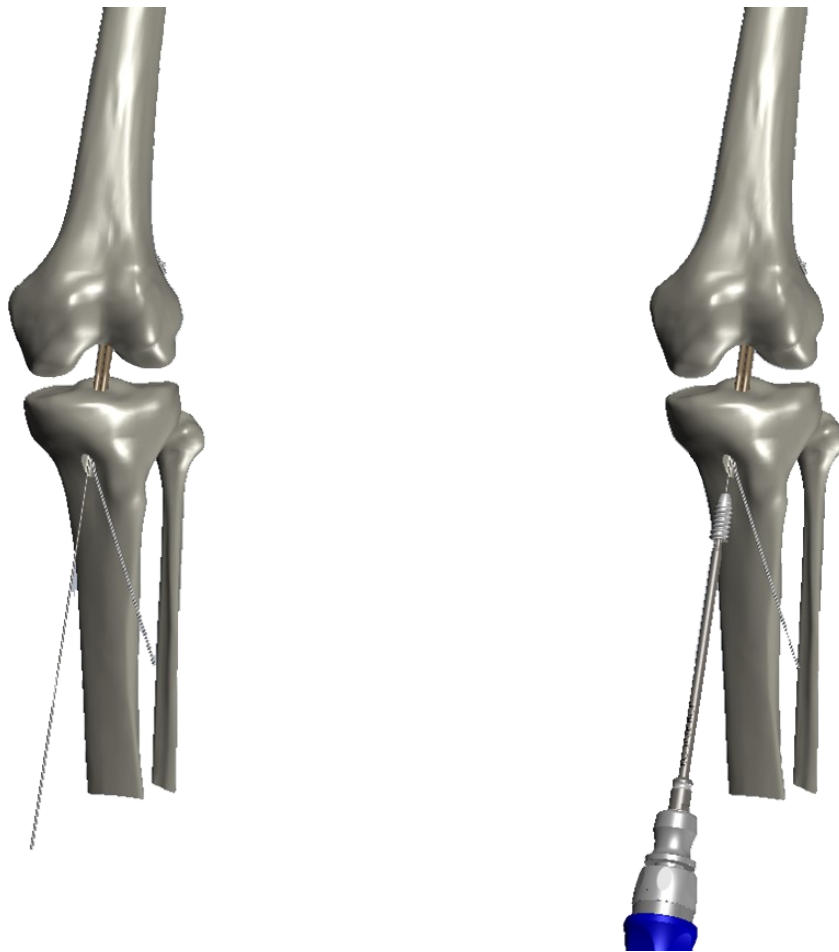
Stop towing when the mark on the graft reaches the internal femoral tunnel aperture.

COMETE[®] IMPLANT FIXATION



- Keep a tension on the white COMETE[®] Pullwire and pull the blue COMETE[®] Pullwire to make sure the titanium plate is perpendicular to the femoral cortex. Pull back the graft to control the fixation.

TIBIAL FIXATION



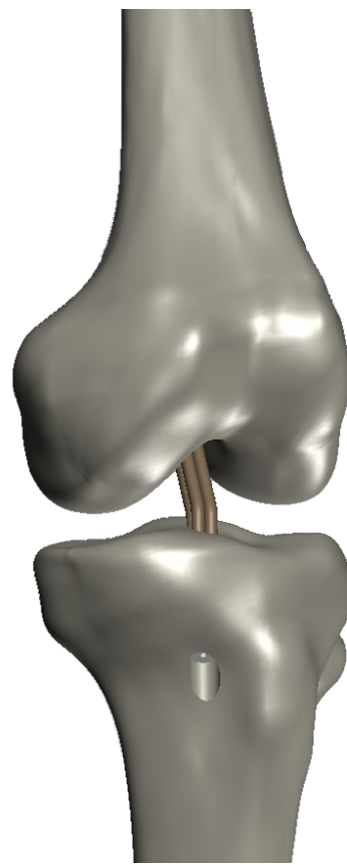
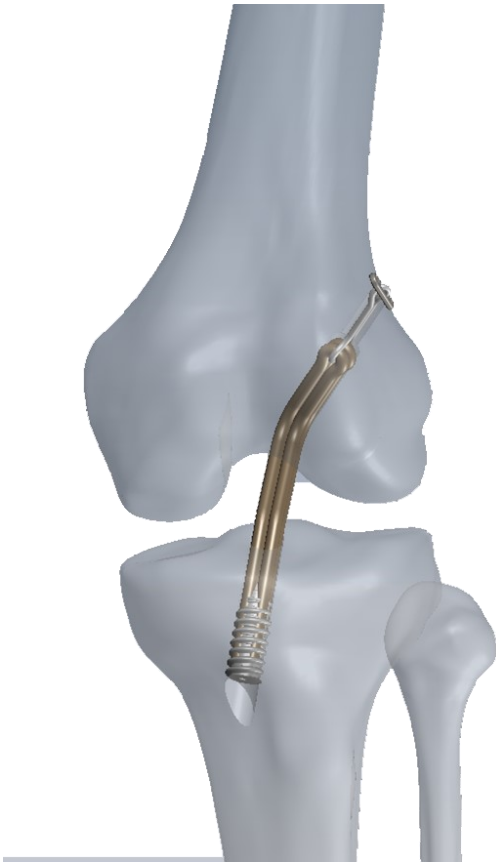
Tapping :

- Case of use of shank screw starter : assemble the Shank starter \varnothing 7mm trinkle amended to the Ratcheting trinkle amended driver handle.
- Pull the suture wire of the graft at the tibial level
- Place the screwguide wire into the tibial tunnel
- pass the assembled instrument or the Tap for interference screws L 20-25-30mm through the tibial tunnel

Screwing :

- Case of use of shank screw driver : assemble Shank screwdriver ECLIPSE® BCP trinkle amended to the Ratcheting trinkle amended driver handle.
- Position the interference screw (ECLIPSE® BCP or ECLIPSE® PROFIL) onto onto the assembled instrument or the Universal screwdriver Biomatlante \varnothing 7-8-9-10-11-12mm.
- Insert the screw into the tibial tunnel over the screw guide wire by maintaining tension on the the suture wire of the graft

FIXATIONS IMPLANTS



- ECLIPSE® BCP Composite Interference screw



- ECLIPSE® Profil resorbable polylactic interference Screw

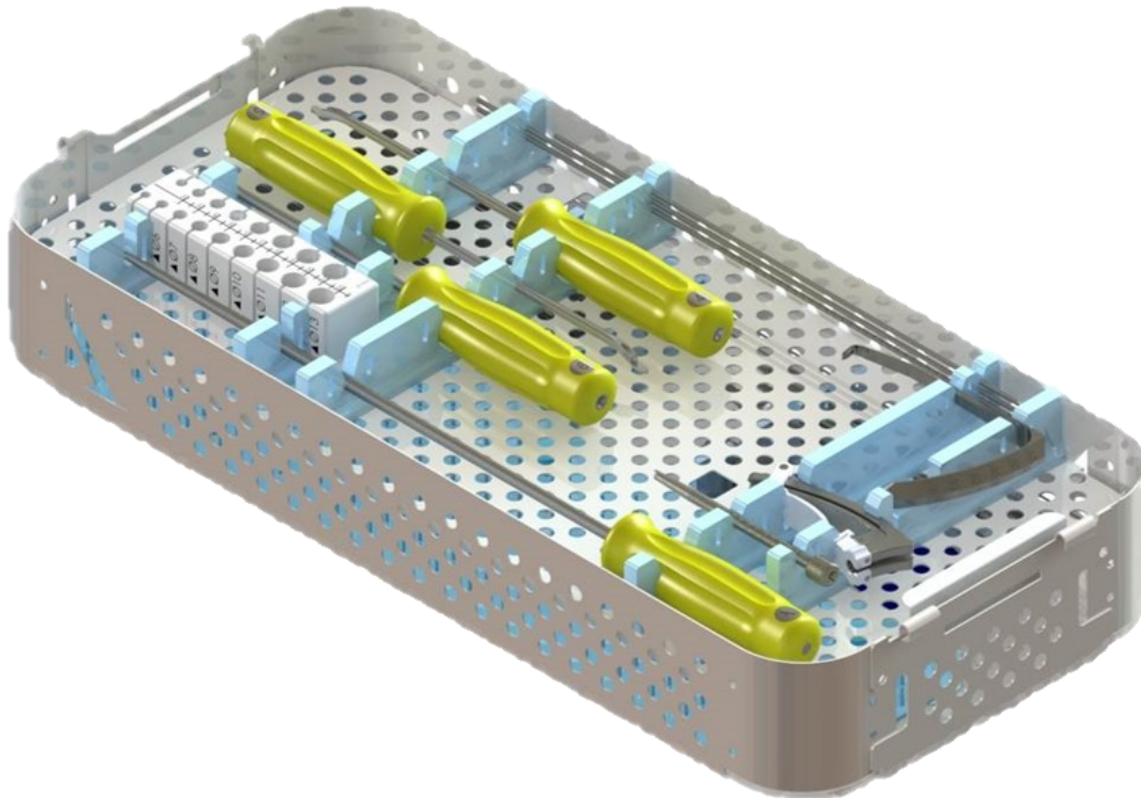


- COMETE®



INSIDE OUT MODULAR INSTRUMENTATION SET 2-0299940

OVERHEAD TRAY

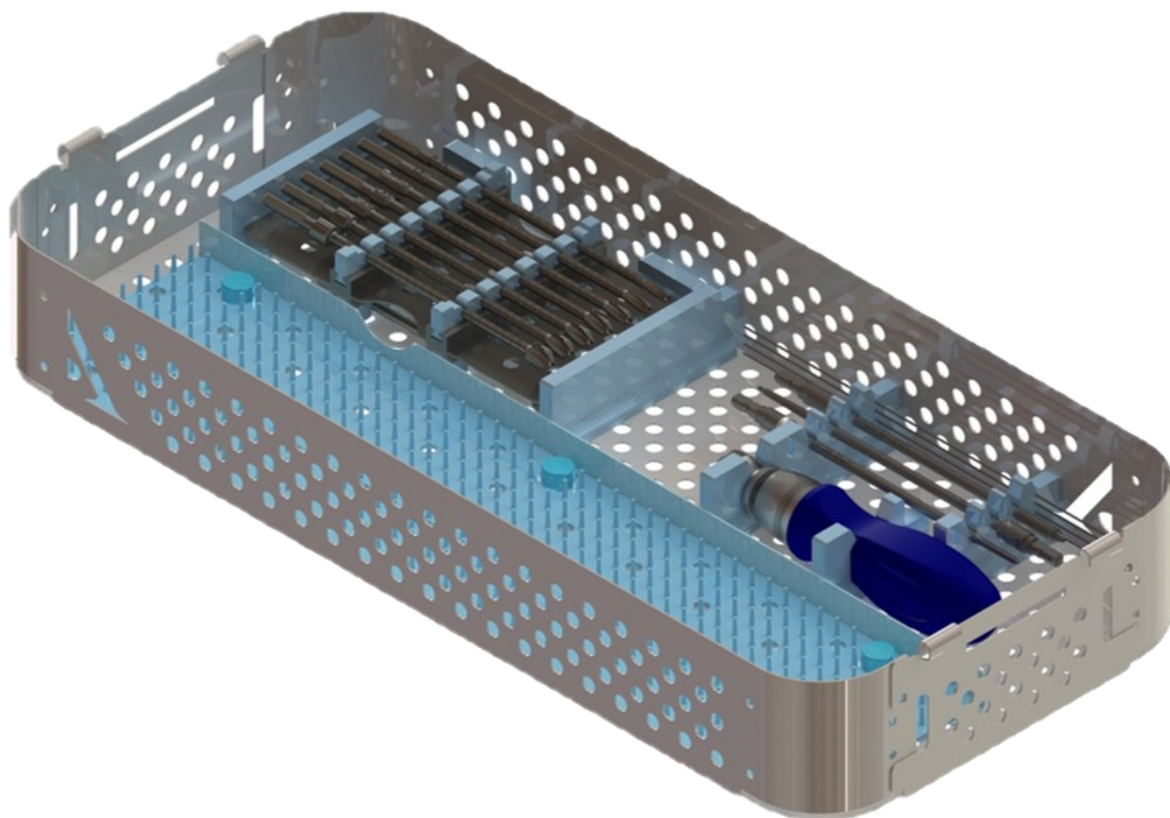


5mm IN/OUT femoral guide.....	2-0405305
6mm IN/OUT femoral guide.....	2-0405306
7mm IN/OUT femoral guide.....	2-0405307
Graft sizer.....	2-0401800
Open Stripper Ø5mm.....	2-0405505
Modular guide body / handle.....	2-0404800
Modular tibial guide sleeve.....	2-0404900
Modular tibial aimer.....	2-0405000
Threaded graduated Eyelet pin Ø2.4mm Lg 350mm.....	2-0404700
Trocard eyelet pin Ø2.4mm Lg350mm.....	2-0405400
Wire pin guide Ø2.4mm Lg300mm.....	2-0405600

INSIDE OUT MODULAR INSTRUMENTATION SET

2-0299940

LOW TRAY



Cannulated reamer Ø5mm.....	2-0405210
Cannulated reamer Ø5,5mm.....	2-0405215
Cannulated reamer Ø6mm.....	2-0405220
Cannulated reamer Ø6,5mm.....	2-0405225
Cannulated reamer Ø7mm.....	2-0405230
Cannulated reamer Ø7,5mm.....	2-0405235
Cannulated reamer Ø8mm.....	2-0405240
Cannulated reamer Ø8,5mm.....	2-0405245
Cannulated reamer Ø9mm.....	2-0405250
Cannulated reamer Ø9,5mm.....	2-0405255
Cannulated reamer Ø10mm.....	2-0405260
Cannulated reamer Ø11mm.....	2-0405270
Ratcheting trinkle amended driver handle.....	2-0406400
Screw guidewire Ø 1.1mm length 240mm.....	2-0405700
Wire Nitinol Ø 1.1mm length 300mm.....	15INBR001F10
Shank screwdriver ECLIPSE® BCP trinkle amended.....	2-0406200
Shank starter Ø 7mm trinkle amended.....	2-0406300

INSIDE OUT MODULAR INSTRUMENTATION SET

2-0299940

LOW TRAY (FOLLOW UP)

Universal screwdriver Biomatlante Ø 7-8-9-10-11-12mm.....	16INTO001
Tap for interference screws L 20-25-30mm.....	11INTA001
Short cannulated reamer Ø5mm.....	2-0406710
Short cannulated reamer Ø5,5mm.....	2-0406715
Short cannulated reamer Ø6mm.....	2-0406720
Short cannulated reamer Ø6,5mm.....	2-0406725
Short cannulated reamer Ø7mm.....	2-0406730
Short cannulated reamer Ø7,5mm.....	2-0406735
Short cannulated reamer Ø8mm.....	2-0406740
Short cannulated reamer Ø8,5mm.....	2-0406745
Short cannulated reamer Ø9mm.....	2-0406750
Short cannulated reamer Ø9,5mm.....	2-0406755
Short cannulated reamer Ø10mm.....	2-0406760
Short cannulated reamer Ø11mm.....	2-0406770



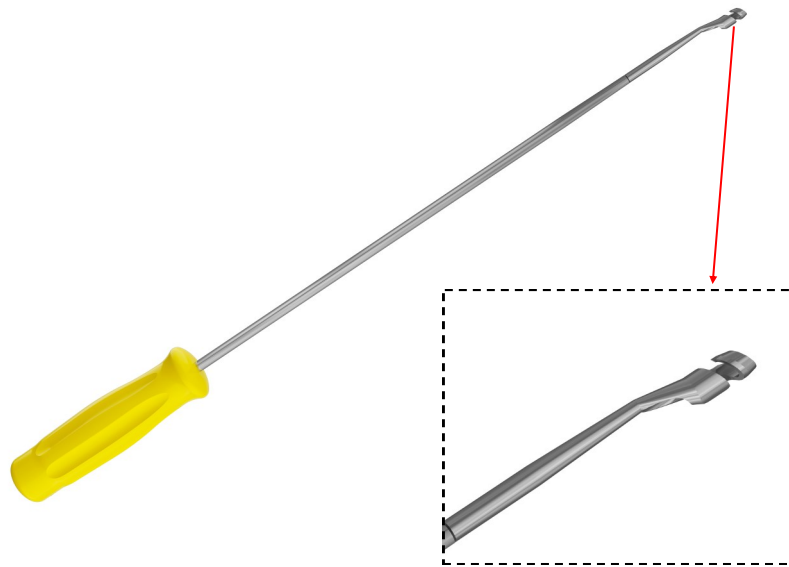
EXPLANATORY NOTES

Instrumentation Set Présentation

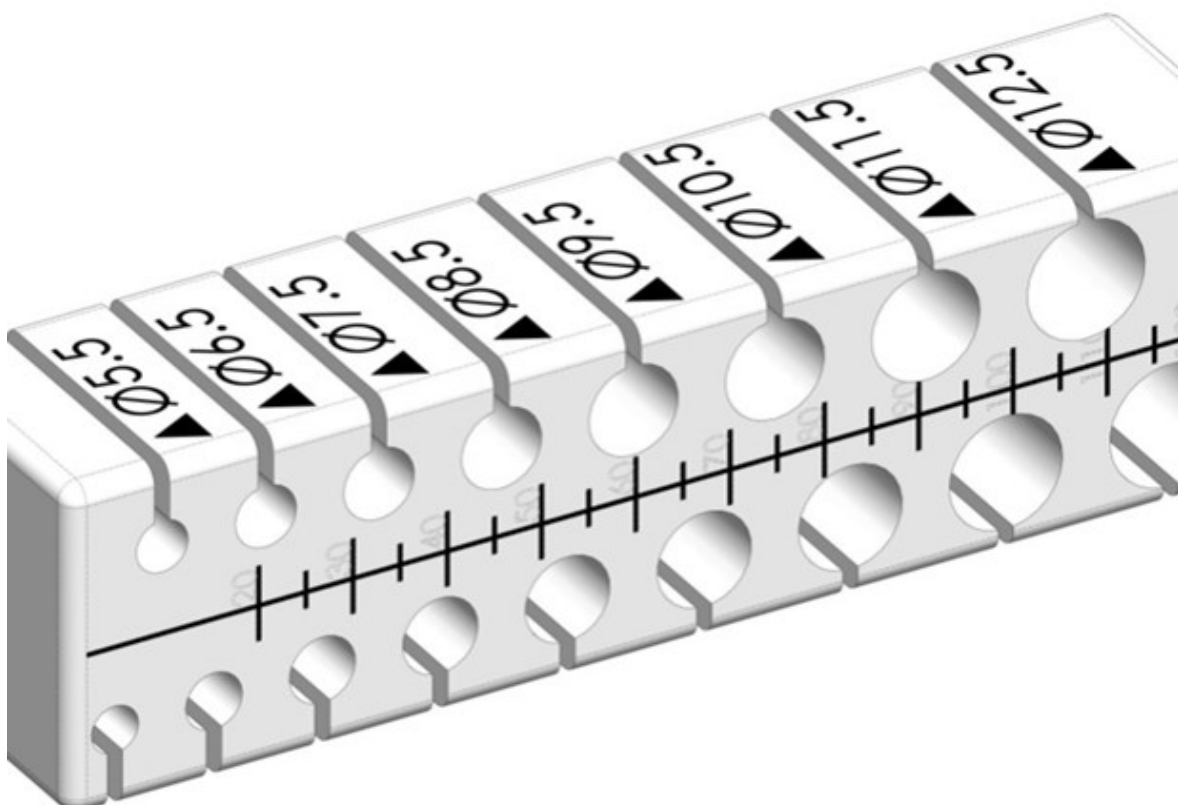
INSTRUMENTATION SET DESCRIPTION

HARVESTING

- Open Stripper Ø 5mm: length 350 mm



- Graft sizer: diameter and length



INSTRUMENTATION SET DESCRIPTION

FIXATION

- Ratcheting trinkle driver handle



- Shank starter Ø 7mm Trinkle amanded



- Shank screwdriver dedicated to ECLIPSE® BCP et ECLIPSE® Profil



- Wire Nitinol Ø 1.1mm lenght 300mm and Wire pin guide Ø2,4mm Lg300mm



- Universal screwdriver Biomatlante Ø 7-8-9-10-11-12mm



- Tap for interference screws L 20-25-30mm

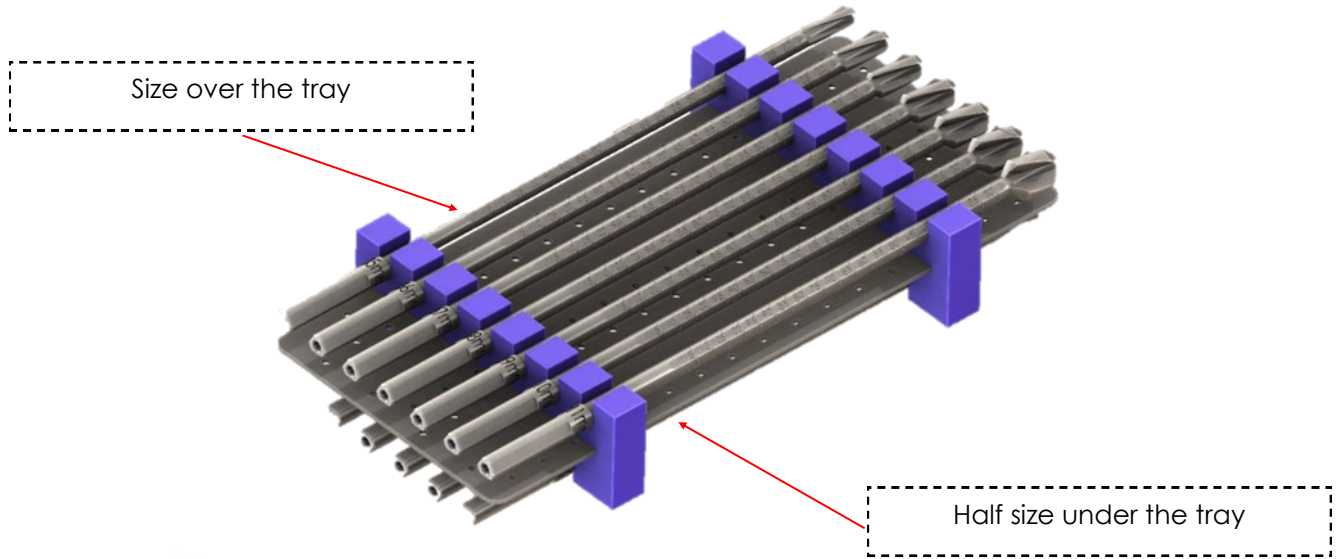


INSTRUMENTATION SET DESCRIPTION

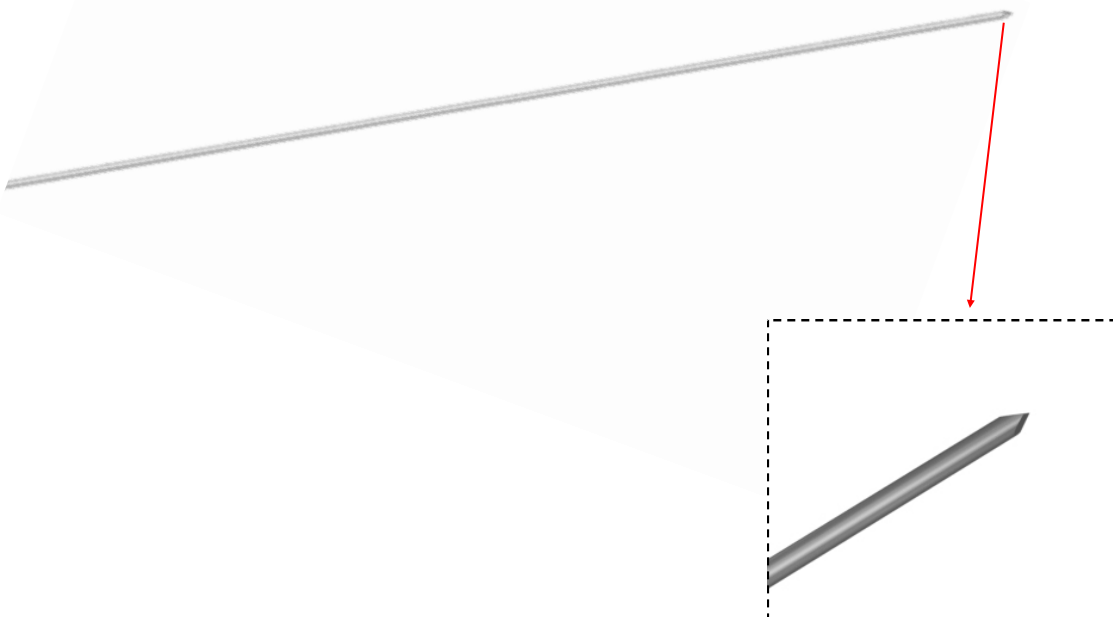
DRILLING

○ Cannulated reamers

- Diameters: 5 / 5.5 / 6 / 6.5 / 7 / 7.5 / 8 / 8.5 / 9 / 9.5 / 10 and 11 mm.
- Proximal cutting only to PCL friendly



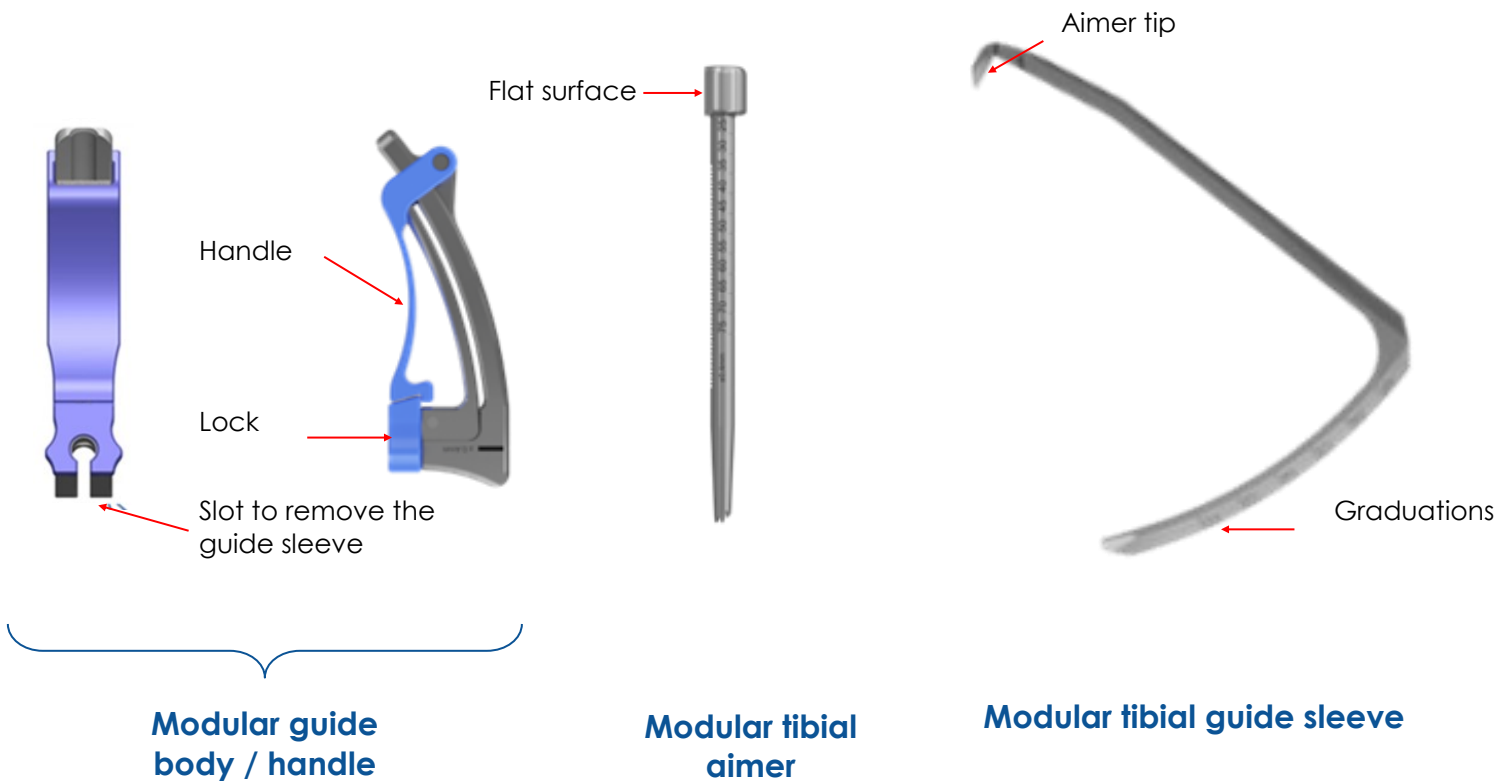
○ Wire pin guide Ø2,4mm Lg300mm



INSTRUMENTATION SET DESCRIPTION

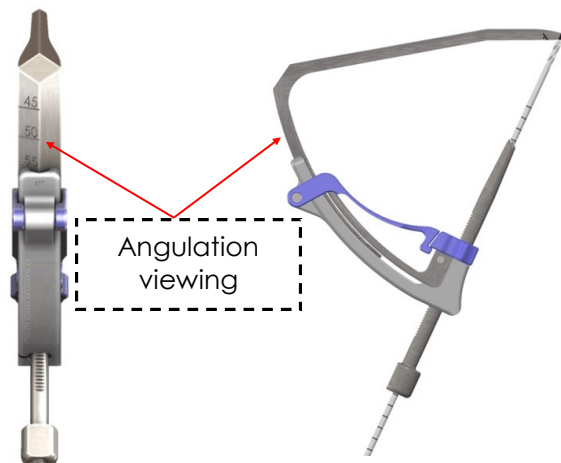
MODULAR TIBIAL GUIDE

Description



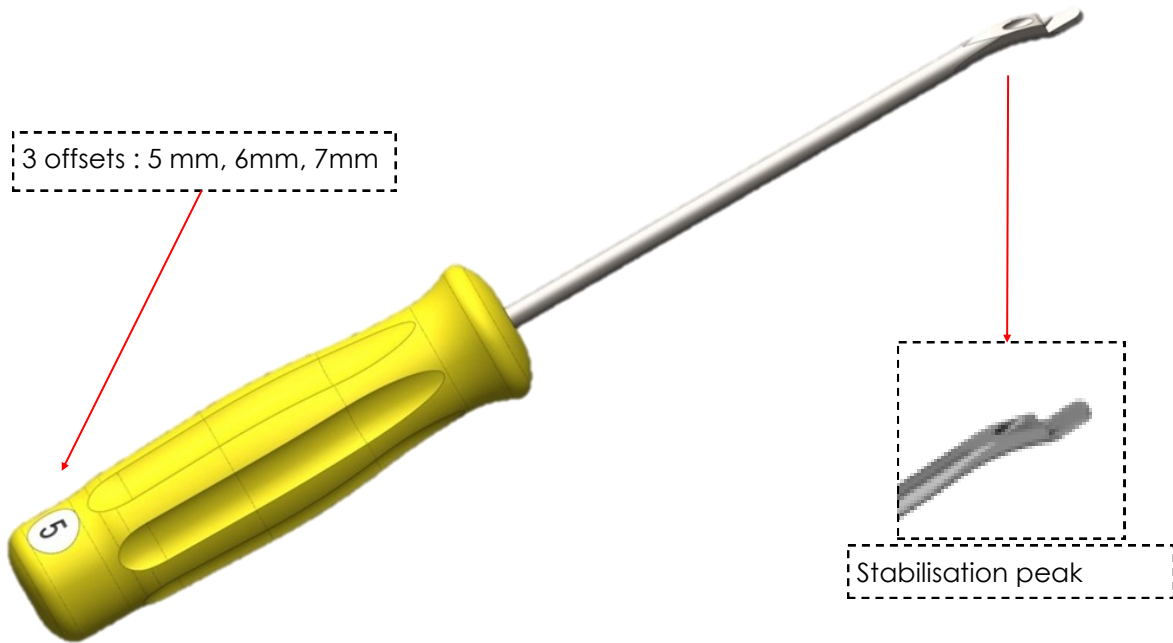
MODULAR TIBIAL GUIDE

- Angulation 45° to 70°
- The pin will emerge in the bend of the guide



INSTRUMENTATION SET DESCRIPTION

INSIDE-OUT FEMORAL GUIDE



THREADED GRADUATED EYELET PIN

- Diameter 2.4 mm, length 350 mm

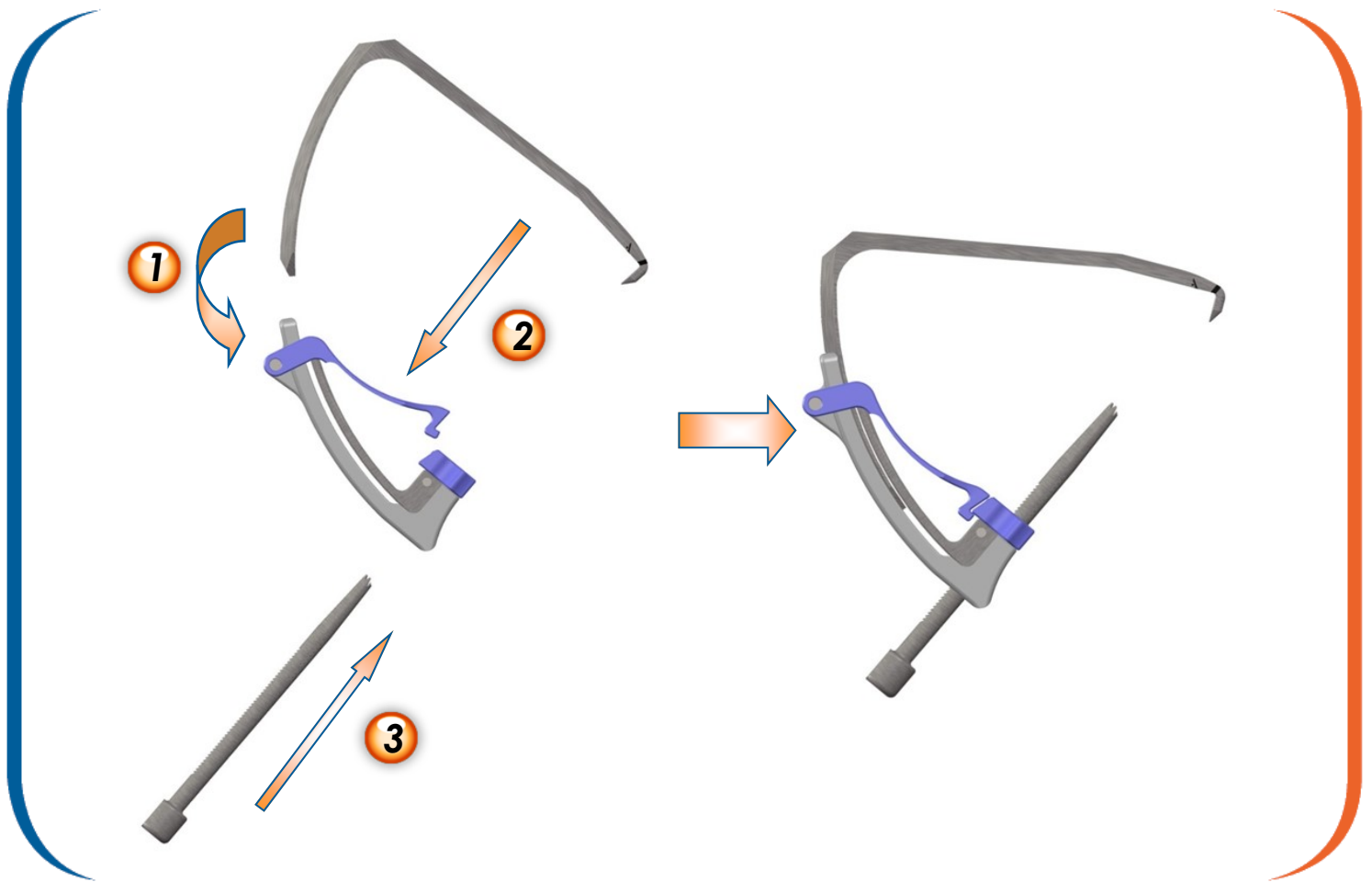


TROCARD EYELET PIN

- Diameter 2.4 mm, length 350 mm



ASSEMBLAGE DU VISEUR TIBIAL



○ Insert the modular aimer into the modular guide handle to select angulation

1

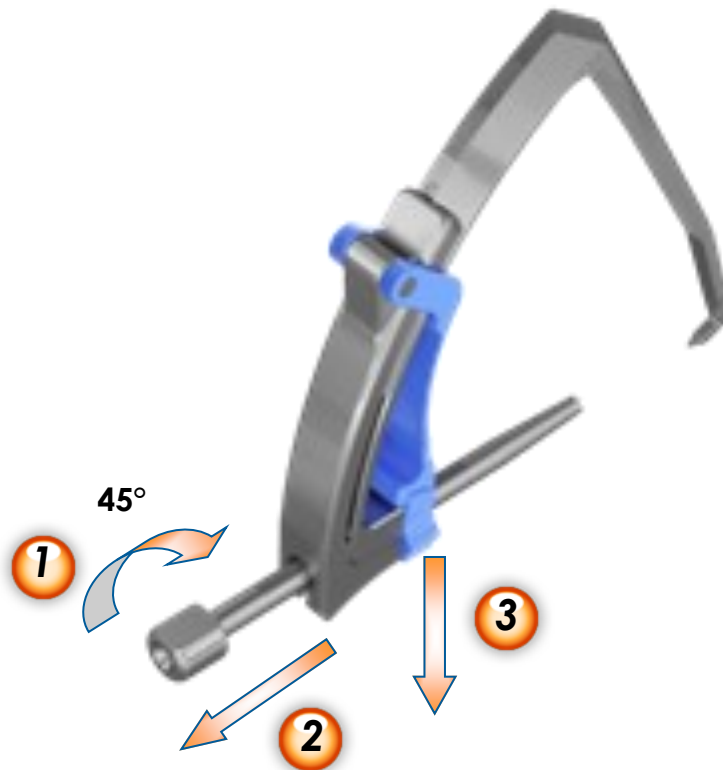
○ lock the guide (Modular tibial aimer + Modular guide handle) by pulling the blue handle towards the guide handle

2

○ Insert the modular tibial guide sleeve into the Modular Guide Handle with the ratchet mechanism facing upward

3

MODIFICATION DE L'ANGULATION



- Turn the guide sleeve a quarter turn (1)
- Remove the Modular fibial guide sleeve (2)
- Unlock the fibial guide by pulling the lock downwards. This action releases the lock and the tibial guide sleeve (3)
- Modify the angulation of the guide
- Lock the guide

1

2

3

IMPLANTS RESORBABLES

ECLIPSE® PROFIL : CE0123

Composition :

100% PLDLLA (70/30) amorphous

Range :

1-0402771	Poly lactique résorbable ECLIPSE Profil interference screw Ø 7 Lg 20 mm
1-0402772	Poly lactique résorbable ECLIPSE Profil interference screw Ø 7 Lg 25 mm
1-0402773	Poly lactique résorbable ECLIPSE Profil interference screw Ø 7 Lg 30 mm
1-0402781	Poly lactique résorbable ECLIPSE Profil interference screw Ø 8 Lg 20 mm
1-0402782	Poly lactique résorbable ECLIPSE Profil interference screw Ø 8 Lg 25 mm
1-0402783	Poly lactique résorbable ECLIPSE Profil interference screw Ø 8 Lg 30 mm
1-0402791	Poly lactique résorbable ECLIPSE Profil interference screw Ø 9 Lg 20 mm
1-0402792	Poly lactique résorbable ECLIPSE Profil interference screw Ø 9 Lg 25 mm
1-0402793	Poly lactique résorbable ECLIPSE Profil interference screw Ø 9 Lg 30 mm
1-0402702	Poly lactique résorbable ECLIPSE Profil interference screw Ø 10 Lg 25 mm
1-0402703	Poly lactique résorbable ECLIPSE Profil interference screw Ø 10 Lg 30 mm
1-0402714	Poly lactique résorbable ECLIPSE Profil interference screw Ø 11 Lg 35 mm
1-0402724	Poly lactique résorbable ECLIPSE Profil interference screw Ø 12 Lg 35 mm



Manufactured by BIOMATLANTE—5 Rue Edouard Belin—ZA Les Quatre Nations—43360 Vigneux de Bretagne—FRANCE

ECLIPSE® BCP : CE0123

Composition :

75 % PLDLLA amorphous
25 % HA et BTCP

Range :

1-0401071	Composite ECLIPSE BCP interference screw Ø 7 Lg 20 mm
1-0401072	Composite ECLIPSE BCP interference screw Ø 7 Lg 25 mm
1-0401073	Composite ECLIPSE BCP interference screw Ø 7 Lg 30 mm
1-0401081	Composite ECLIPSE BCP interference screw Ø 8 Lg 20 mm
1-0401082	Composite ECLIPSE BCP interference screw Ø 8 Lg 25 mm
1-0401083	Composite ECLIPSE BCP interference screw Ø 8 Lg 30 mm
1-0401091	Composite ECLIPSE BCP interference screw Ø 9 Lg 20 mm
1-0401092	Composite ECLIPSE BCP interference screw Ø 9 Lg 25 mm
1-0401093	Composite ECLIPSE BCP interference screw Ø 9 Lg 30 mm
1-0401012	Composite ECLIPSE BCP interference screw Ø 10 Lg 25 mm
1-0401013	Composite ECLIPSE BCP interference screw Ø 10 Lg 30 mm
1-0401004	Composite ECLIPSE BCP interference screw Ø 11 Lg 35 mm
1-0401024	Composite ECLIPSE BCP interference screw Ø 12 Lg 35 mm



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IMPLANTS NON RESORBABLES

COMETE[®] : CE0120

Sterile anchore devices

Range

OAMGEFX15U	Sterile anchor device COMETE [®] Lg 15 mm
OAMGEFX20U	Sterile anchor device COMETE [®] Lg 20 mm
OAMGEFX25U	Sterile anchor device COMETE [®] Lg 25 mm
OAMGEFX30U	Sterile anchor device COMETE [®] Lg 30 mm
OAMGEFX35U	Sterile anchor device COMETE [®] Lg 35 mm

Manufactured by : COUSIN BIOTECH, 8 rue de l'Abbé Bonpain, 59117 WERVIQ-SUD—FRANCE



SUTORTHO[®] 0.7 : CE0086

Suture—Tendon and ligament reintegration

1-0402600 Suture—Tendon and ligament reintegration SUTORTHO 0.7



Round Needle : 4/8 lenhg 26 mm



Triangular Needle : 4/8 length 40 mm



Manufactured by TEKNIMED SAS Montredon rue d'Apollo 231240 L'UNION-FRABCE



AMPLITUDE [®]

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01700 Neyron, France
Tel. : +33 (0)4 37 85 19 19
Fax : +33 (0)4 37 85 19 18

E-mail : amplitude@amplitude-ortho.com

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26000 Valence, France
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Fax : +33 (0)4 75 41 87 42

Internet : www.amplitude-ortho.com