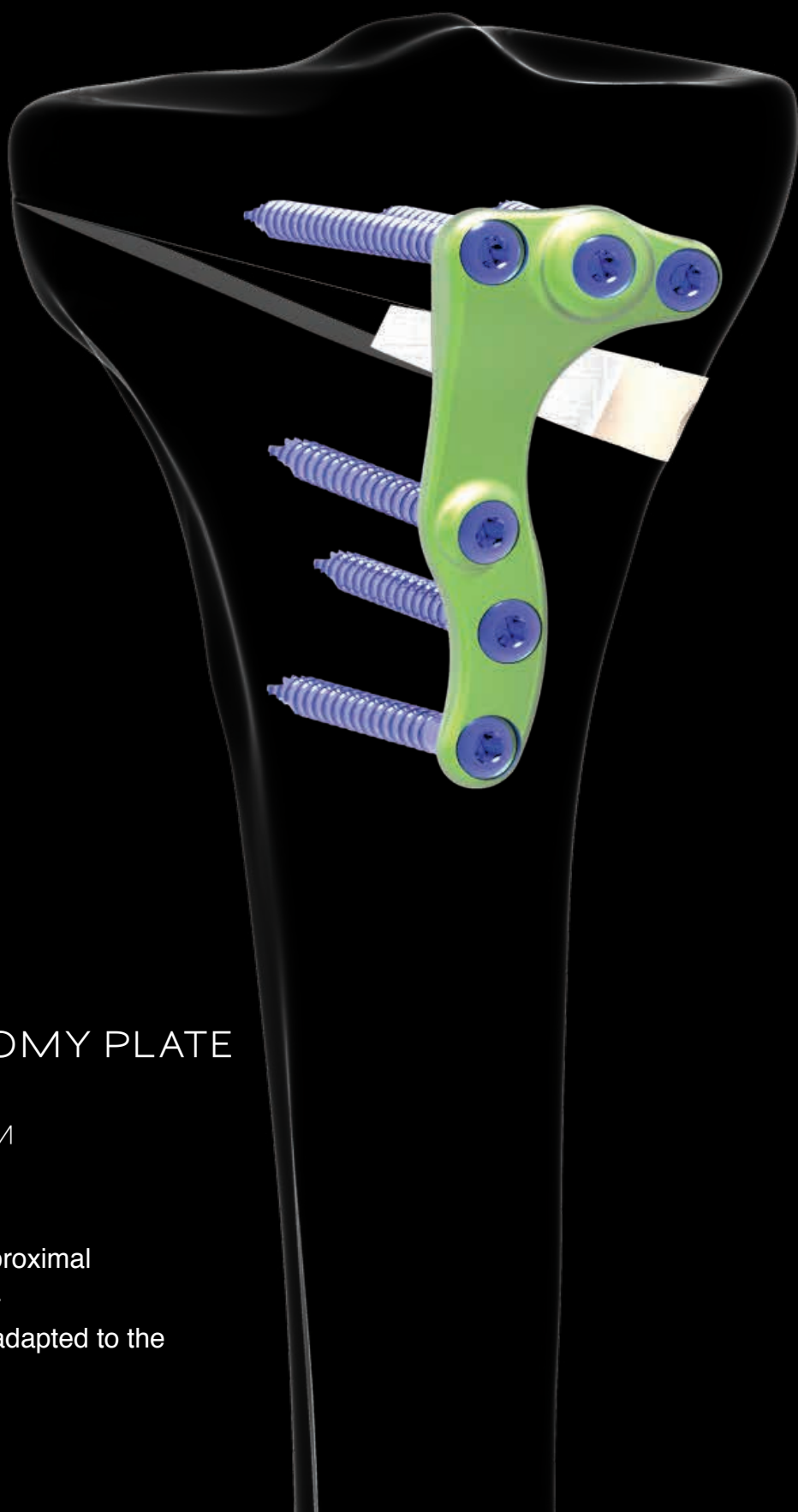




NEWCLIP-TECHNICS

INNOVATION MEANS MOTION



ACTIVMOTION HIGH TIBIAL OSTEOTOMY PLATE

POLYAXIAL LOCKING SYSTEM
DUALTEC SYSTEM®

- ▶ Anatomically contoured implant: proximal curvature and metaphyseal slope.
- ▶ Design and positioning perfectly adapted to the knee biomechanics.

IMPLANT DESCRIPTION

DESCRIPTION OF THE OPENING WEDGE TIBIAL OSTEOTOMY

→ IMPLANT DESCRIPTION

- Anatomic asymmetrical implant
(green anodized for right plate and blue anodized for left plate)
- Proximal curve
- 8°-12° metaphyseal slope
- 6 locking screws including 1 polyaxial screw

→ SURGICAL INDICATION

- Knee osteotomy

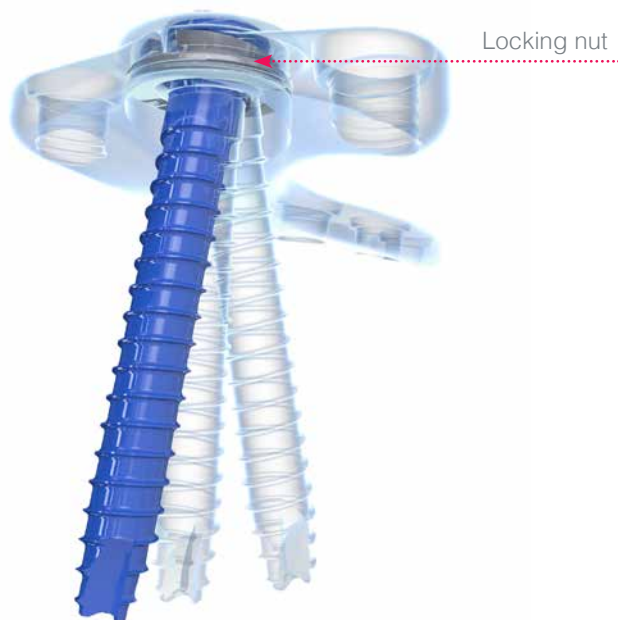
→ MATERIAL AND PACKAGING

- TA6V titanium alloy
- Sterile-packed



DUALTEC SYSTEM® FIXATION

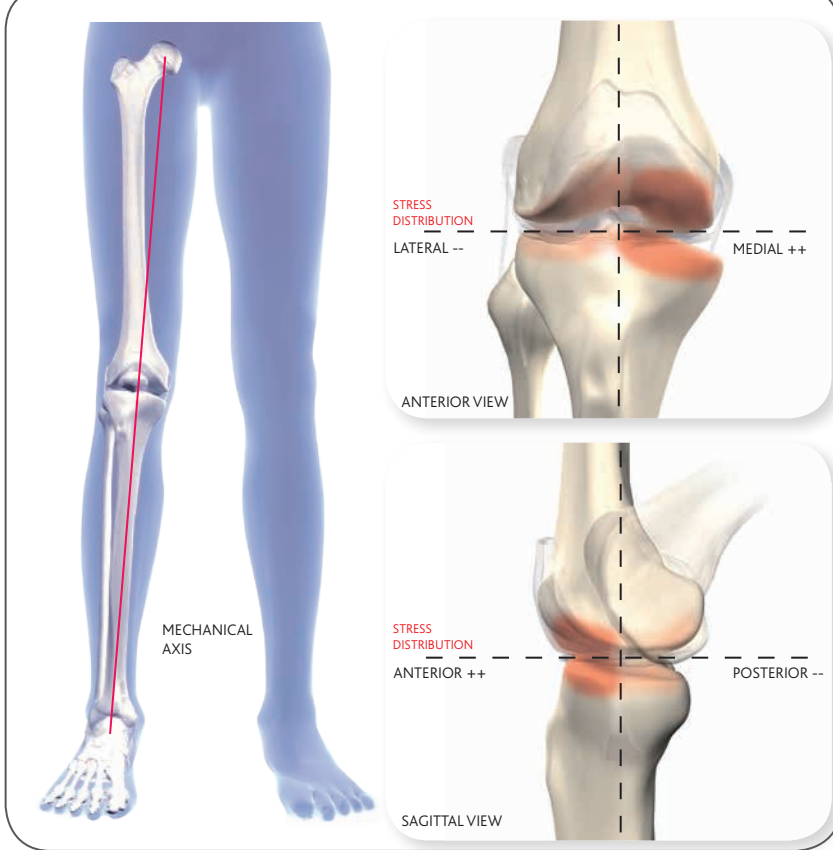
Progressive core diameter
Ø 3.9 to 4.5 mm



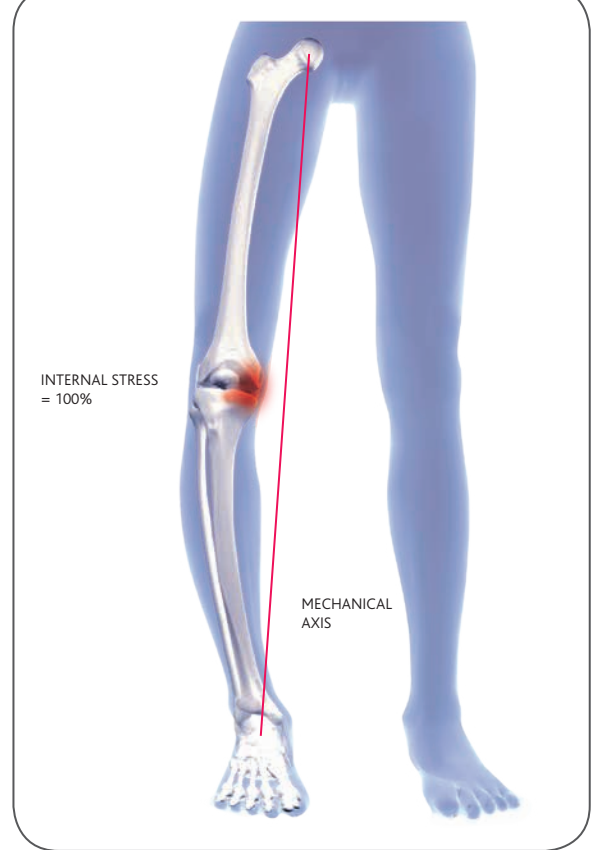
Polyaxial screws with a 25 degree cone.

BIOMECHANICS OF THE KNEE

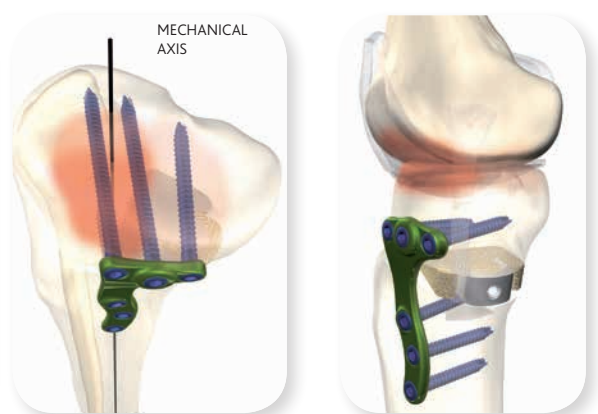
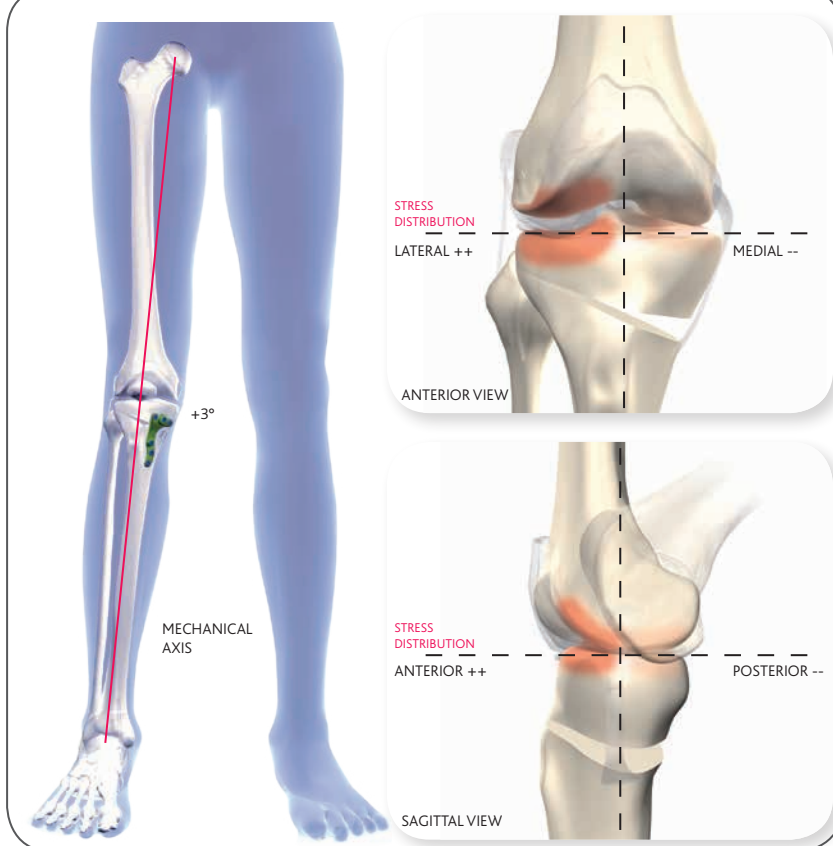
▶ NORMAL KNEE ALIGNMENT



▶ GENU VARUM



▶ KNEE AFTER +3° VALGISATION CORRECTION



▶ IDEAL IMPLANT POSITIONING.

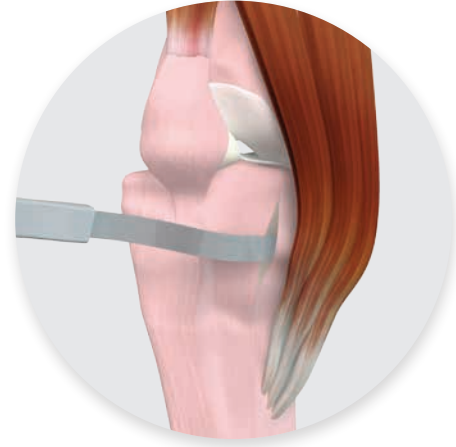
- The implant is fitted onto the antero-medial surface of the tibia where the highest mechanical stress are registered.
- Screws are distributed following a 2 + 1 pattern:
 - 2 screws on the lateral tibial plateau
 - 1 screw on the medial tibial plateau
- Orientation of the screws in an antero-posterior direction allows for increased resistance to mechanical stress when the knee rolls back.

SURGICAL TECHNIQUE

SURGICAL APPROACH



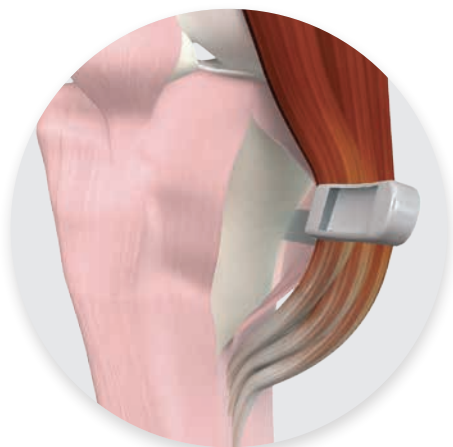
- The patient is positioned supine on the operating table. The procedure is performed under pneumatic tourniquet and a small pillow is placed under the buttock of the operated side in order to maintain the limb in neutral rotation.
- An 8 cm slightly oblique vertical incision is made along the antero-medial surface, running over the joint space down to under the tibial tuberosity.



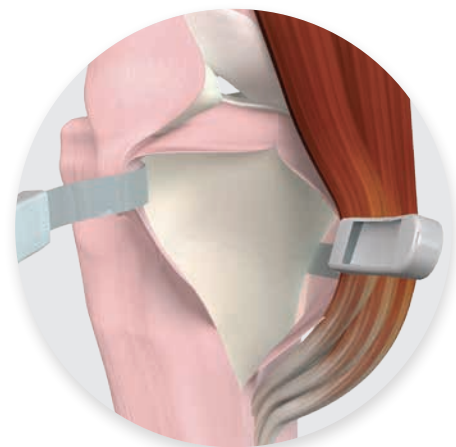
- A single-plane incision is made through the periosteum; then the hamstring and the medial collateral ligament (MCL) are retracted posteriorly.

The larger the angular correction must be, the more the hamstring and MCL should be released distally.

CAUTION : if the release is adequate, the opening of the osteotomy and the insertion of the bone graft can be performed with no risk of tearing the lateral cortical hinge. If it is not, forcing the graft in may tear the hinge, thus seriously jeopardizing complete bone mending.
ie: pseudarthrosis.



- An elevator is placed very carefully over the posterior surface of the tibial metaphysis and should remain in place as a protection during the osteotomy.



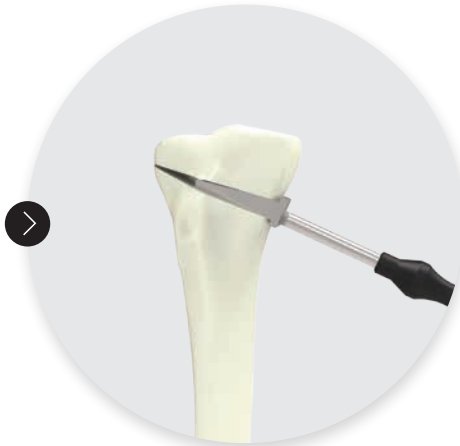
- Clear the deepest part of the patellar tendon down to its attachment onto the tibial tuberosity, and protect it using a retractor during the osteotomy.

SURGICAL TECHNIQUE

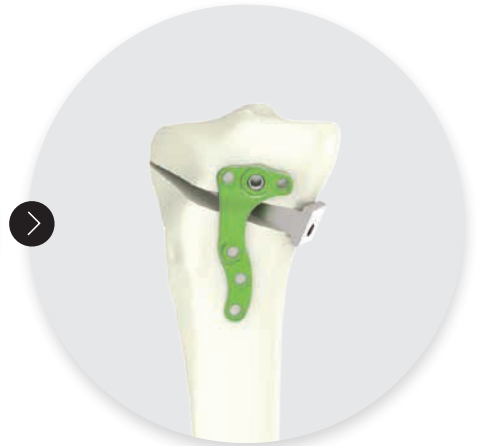
HIGH TIBIAL OSTEOTOMY



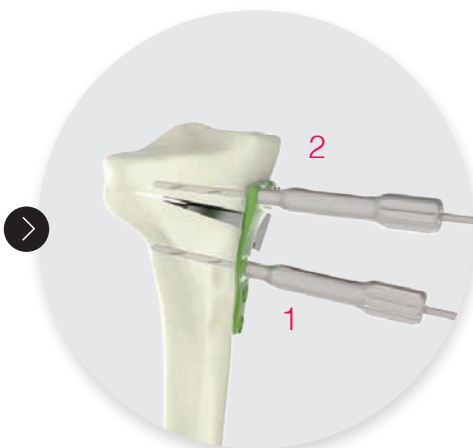
1. Incise upward toward the head of the fibula and stop incision 5-10 mm before the lateral cortical area.



2. Insert wedges of gradually larger size until finding the appropriate one (6-16 mm) while maintaining the lateral surface of the tibia. Once the appropriate wedge has been inserted, the angular correction is maintained during osteosynthesis.



3. Position the plate onto the antero-internal side so that the proximal part of the plate runs parallel to the osteotomy cut.



4. Fit the first $\text{Ø}4.0$ mm guide (ANC212) under the osteotomy cut, then start drilling using a $\text{Ø}4.0$ mm drill (ANC211). Fit a second $\text{Ø}4.0$ mm guide into the polyaxial slot of the plate. Adjust the drilling to the lateral tibial plateau. Remove the drill guides. Tighten and lock the 2 chosen screws.
If necessary, use the hand drill (ANC119US) before inserting the screws.



5. Proceed similarly for the other 3 monoaxial locking holes (the order is preoperatively planned).



6. The construct is complete when each screw has been perfectly tightened.

→ BENDING THE PLATE

1. Bending is only possible on the metaphyseal part of the plate between:
 - the polyaxial hole (a.)
 - the first diaphyseal hole (b.).

The positioning of the bending pliers must be as accurate as possible so that the ergonomic qualities of the plate are not altered.

2. Bend only once and without reverse bending.



ATLANTIC FUSION[®] CAGE - ASSEMBLY

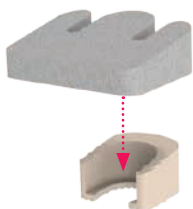


Wedge for fusion cage
(TBSxx)



Fusion cage for HTO
(FCPxx)

- The cages (FCPxx) and bone substitutes (TBSxx) are delivered in two different sterile packaging.



- The bone substitute must be inserted into the cage only as shown.



- Final position of the 2 elements after assembly.



- Use the HTO fusion cage handling tool (ANC047) to insert the cage and bone substitute into position.

FINAL RESULT



IMPLANTS REFERENCES

OPENING TIBIAL PLATE*

Ref.	Description
ATDP1-ST	Right opening tibial plate - size 1
ATGP1-ST	Left opening tibial plate - size 1



Ø4.5 MM DTS® SELF TAPPING SCREW*

Ref.	Description
ST4.5L30-ST	DTS® self-tapping screw Ø4.5 mm - L30 mm
ST4.5L35-ST	DTS® self-tapping screw Ø4.5 mm - L35 mm
ST4.5L40-ST	DTS® self-tapping screw Ø4.5 mm - L40 mm
ST4.5L45-ST	DTS® self-tapping screw Ø4.5 mm - L45 mm
ST4.5L50-ST	DTS® self-tapping screw Ø4.5 mm - L50 mm
ST4.5L55-ST	DTS® self-tapping screw Ø4.5 mm - L55 mm
ST4.5L60-ST	DTS® self-tapping screw Ø4.5 mm - L60 mm
ST4.5L65-ST	DTS® self-tapping screw Ø4.5 mm - L65 mm
ST4.5L70-ST	DTS® self-tapping screw Ø4.5 mm - L70 mm
ST4.5L75-ST	DTS® self-tapping screw Ø4.5 mm - L75 mm



ATDP1



ATGP1

ATLANTIC FUSION® CAGE AND WEDGE FOR FUSION CAGE REFERENCES

ATLANTIC FUSION® CAGE*

Ref.	Description
FCP06	Fusion cage for HTO - 6 mm high
FCP08	Fusion cage for HTO - 8 mm high
FCP10	Fusion cage for HTO - 10 mm high
FCP12	Fusion cage for HTO - 12 mm high
FCP14	Fusion cage for HTO - 14 mm high
FCP16	Fusion cage for HTO - 16 mm high

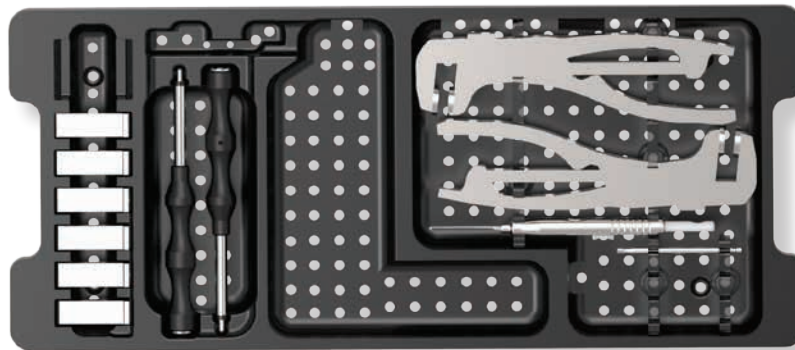
WEDGE** FOR FUSION CAGE*

Ref.	Description
TBS06	Wedge for fusion cage 6°
TBS08	Wedge for fusion cage 8°
TBS10	Wedge for fusion cage 10°
TBS12	Wedge for fusion cage 12°
TBS14	Wedge for fusion cage 14°
TBS16	Wedge for fusion cage 16°

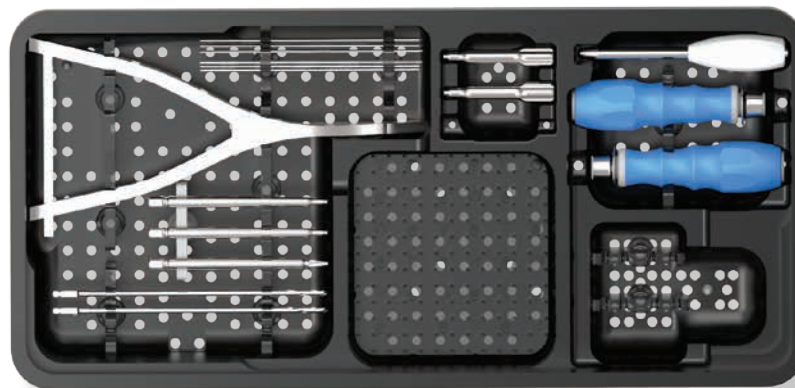
**Manufacturer: BIOMATLANTE FRANCE
Class: III
Notified body: TUV - CE 0123

* Sterile packaging

INSTRUMENTS REFERENCES



INSERT



BASE

INSTRUMENTS

Ref.	Description	Qty
ANC019	Metallic wedge 6 mm high	1
ANC020	Metallic wedge 8 mm high	1
ANC021	Metallic wedge 10 mm high	1
ANC022	Metallic wedge 12 mm high	1
ANC023	Metallic wedge 14 mm high	1
ANC024	Handle for metallic wedge and cutting guide	2
ANC025	Metallic wedge 16 mm high	1
ANC047	HTO fusion cage handling tool	1
ANC119-SK	3.0 mm hexagonal screwdriver with quick coupling system	2
ANC120-US	Ø4.2 mm reamer with US quick coupling system	2
ANC210	Length gauge for Ø4.5 mm screws	1
ANC211	Ø4.0 mm quick coupling drill bit	2
ANC212	Ø4.0 mm DTS® drill guide	2
ANC235	HTO Meary pliers	1
ANC240	Pliers for bending ACTIV plates	2
ANC312	3.0 mm quick coupling hexagonal screwdriver	1
ANC352	Ø6 mm US quick coupling handle	2
33.0222.150	K-wire -Trocar point/Round End - Ø2.2 L150 mm	3

The information presented in this brochure is intended to demonstrate a NEWCLIP TECHNICS product. Always refer to the package insert, product label and/or user instructions before using any NEWCLIP TECHNICS product. Surgeons must always rely on their own clinical judgment when deciding which products and techniques to use with their patients. Products may not be available in all markets. Product availability is subject to the regulatory or medical practices that govern individual markets. Please contact your NEWCLIP TECHNICS representative if you have questions about the availability of NEWCLIP TECHNICS products in your area.



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