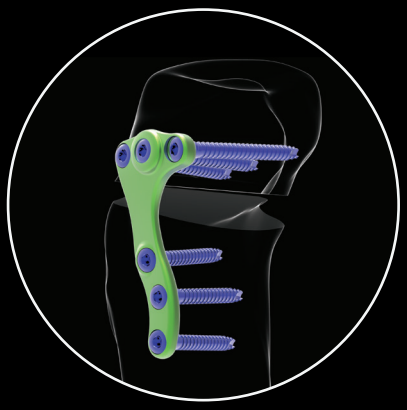
NEWCLIP-TECHNICS

INNOVATION MEANS MOTION



ACTIVMOTION PSI
HTO USING PATIENT SPECIFIC CUTTING GUIDE

- Single use patient specific cutting guide for HTO
- Tibial slope controlled
- Accuracy of the correction

ACTIVMOTION PSI

Indications: The implants of the ACTIVMOTION range are intended for knee osteotomy in adults.

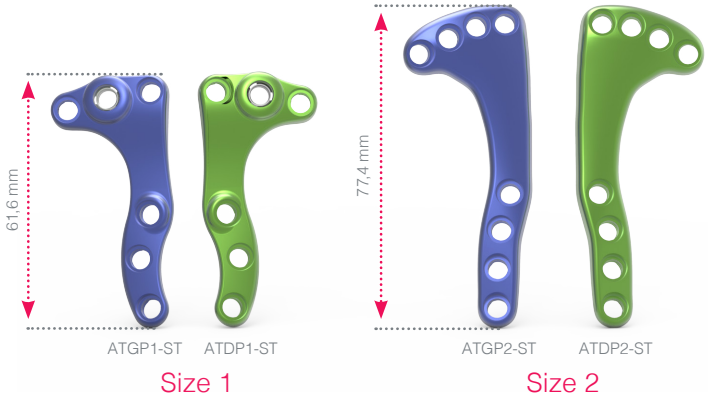
Contra-indications:
- Serious vascular deterioration, bone devitalization.
- Pregnancy.
- Acute or chronic local or systemic infections.
- Lack of musculo-cutaneous cover, severe vascular deficiency affecting the concerned area.
- Insufficient bone quality preventing a good fixation of the implants into the bone.
- Muscular deficit, neurological deficiency or behavioral disorders, which could submit the implant to abnormal mechanical strains.
- Allergy to one of the materials used or sensitivity to foreign bodies.
- Serious problems of non-compliance, mental or neurological disorders, failure to follow post-operative care recommendations.
- Unstable physical and/or mental condition.

TECHNICAL FEATURES

HIGH TIBIAL OSTEOTOMY PLATE

→ TECHNICAL FEATURES

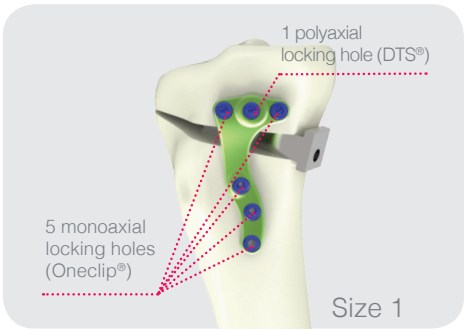
- **Anatomical asymmetrical implant** (green anodized for right plate and blue anodized for left plate),
- Proximal curve,
- Metaphyseal slope adapted to the anatomy,
- Material: **Titanium** alloy,
- Size 1 - Up to 16° of correction.
  Size 2 - Up to 20° of correction.

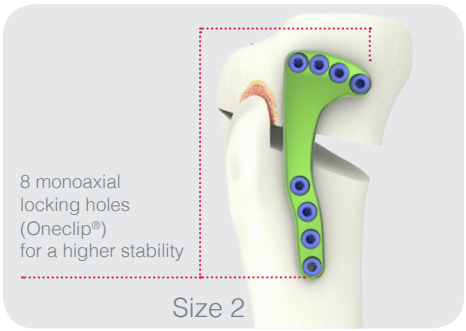


FIXATION

→ TECHNICAL FEATURES

- Ø4.5 mm reinforced core screws for optimal mechanical stability (progressive core diameter Ø3.9 to 4.5 mm),
- Buried screws to minimize risks of soft tissue irritation.

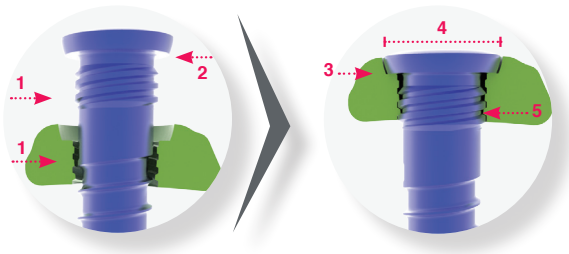




→ MONOAXIAL LOCKING FIXATION

Features:

- The threaded section under the screw head and inside the hole have strictly the **same characteristics** (1):
  - Cylindrical internal thread profile,
  - Cylindrical external thread profile,
- Screw head cap (2),
- Plate and screws made from the same material: titanium alloy.



Results :

- **Low profile construct:**
  - The screw is stopped in the hole by its cap, ensuring the locking (3),
  - The screw head is buried in the plate (4),
- **Construct limiting cold welding risks for improved removal properties:**

A perfect coaptation of both profiles when locking (5).

TECHNICAL FEATURES

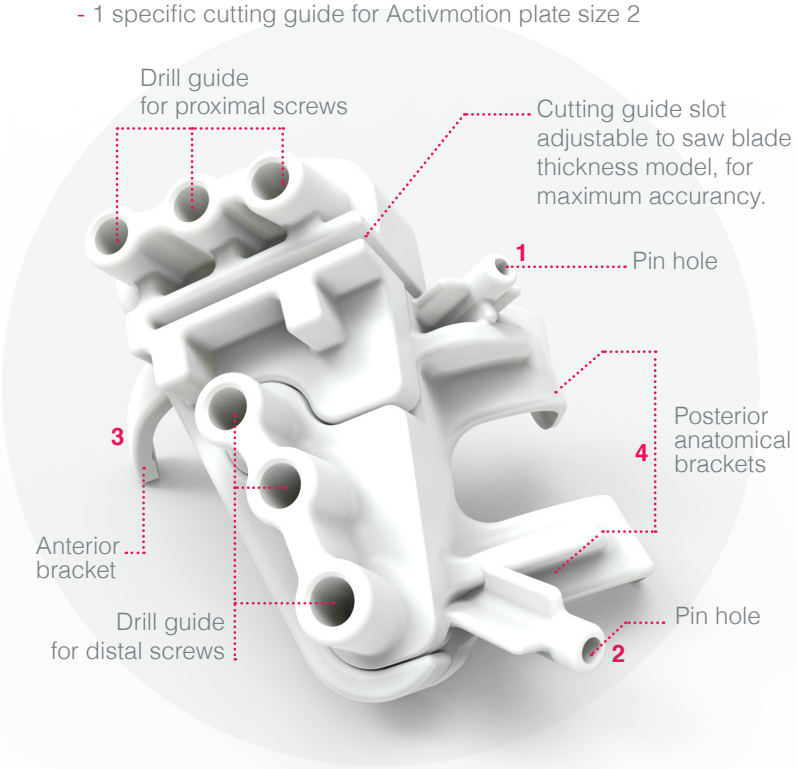
PATIENT SPECIFIC CUTTING GUIDE - STEP BY STEP

Based on patient CT scan, the patient specific cutting guide for HTO offer an optimal correction of HKA axis and tibial slope.

→ TECHNICAL FEATURES

One single use patient specific cutting guide for each Activmotion plates:

- 1 specific cutting guide for Activmotion plate size 1
- 1 specific cutting guide for Activmotion plate size 2



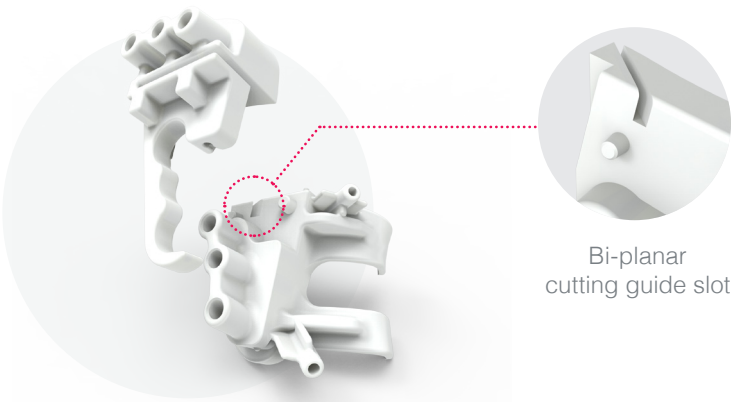
1. **Pin hole** allowing a visual checking of the osteotomy direction and PSI good location compliant with planification file, located 1 mm under the cut.

2. **Pin hole** locating :

- To stop the cut
- The lateral hinge point calculated 10-11 mm from the lateral cortex and at a distance from the tibial plateau depending on the patients anatomy.

3. **Anterior bracket** between the anterior tuberosity and the patellar tendon for accurate positioning.

4.**Posterior anatomical brackets** congruent with the tibial surface for accurate positioning.



Bi-planar
cutting guide slot

→ PROCESS

Day 1...

1 Patient case identification, **decision to go for HTO with PSI**

2 Newclip Technics protocol **validated** thanks to patient CT scan

3 **Fill in the order form** for 3D design of the patient specific cutting guide for HTO

4 Comparison between 3D patient specific cutting guide for HTO and patient analysis for **preplanification**

5 **Manufacturing** and control of the patient specific cutting guide for HTO

6 Implants and instruments **set supply** for surgery

7 **Final preoperative** planning based on surgeon's specifications

8 **Surgery**

Surgeon

Newclip Technics

CLINICAL CASES

CLINICAL CASE - SIZE 1

Diagnosis

PATIENT
Sexe **M**
Side **Right**

PRE-OPERATIVE
Frontal HKA **176°**
Tibial slope **9°**

Indication

Newclip Technics Range
Activmotion

Post-operative (desired)
Frontal HKA **184°**
Tibial slope **9°**

Result

POST-OPERATIVE

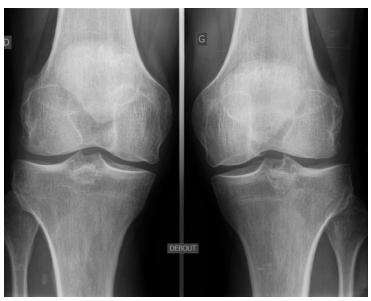
Frontal HKA **184° :** ☑
Tibial slope **9° :** ☑

CLINICAL CASE - SIZE 2

Diagnosis

PATIENT
Sexe **M**
Side **bilateral**

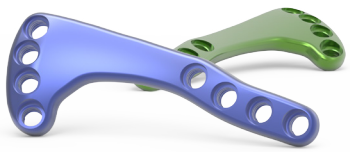
PRE-OPERATIVE :
Frontal HKA **176°**
Tibial slope **9°**



Indication

Newclip Technics Range
Activmotion

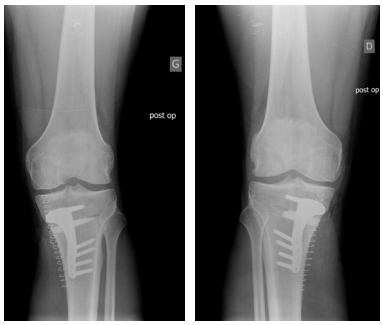
Post-operative (desired)
Frontal HKA **182°**
Tibial slope **5°**



Result

POST-OPERATIVE

Frontal HKA **182° :** ☑
Tibial slope **5° :** ☑



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.

NEWCLIP TECHNICS
PA de la Lande Saint Martin - 45 rue des Garottières
44115 Haute Goulaine (France)
Phone : +33 (0)2 28 21 37 12 - Fax : +33 (0)2 40 63 68 37
orders@newcliptechnics.com - www.newcliptechnics.com

NEWCLIP USA
642 Larkfield Center
Santa Rosa CA 95403, USA
Phone : + 1 707 230 5078
customerservice@newclipusa.com - www.newclipusa.com

CasCliniques EN - Activmotion PSI - Ed3 - 11/2016 - Medical device EC: class IIb - CE 0120 SGS UK - US Class: II - Read labeling and instructions before use. Patient specific cutting guide : Development in progress.