



NEWCLIP-TECHNICS

INNOVATION MEANS MOTION



ALIANS ELBOW
DISTAL HUMERUS
& OLECRANON
POLYAXIAL LOCKING FIXATION
DUALTEC SYSTEM® II

- ▶ Distal humerus and olecranon plating system
- ▶ Polyaxial locking technology
- ▶ Precontoured implants

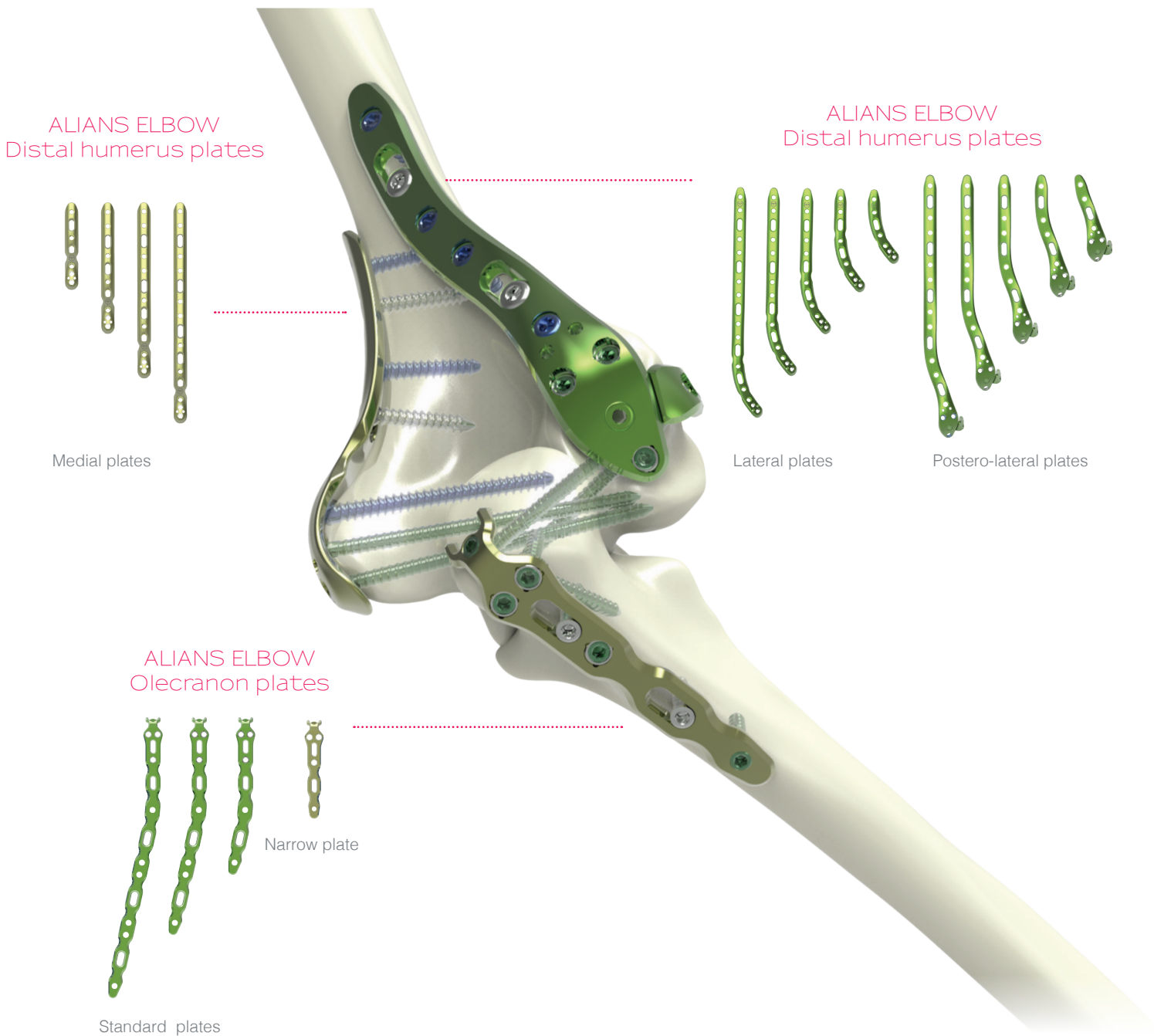
ALIANS ELBOW

Indications: the implants of the Alians Elbow range are intended for the fixation of fractures and osteotomies of the distal humerus and proximal ulna in adults.

Contra-indications:

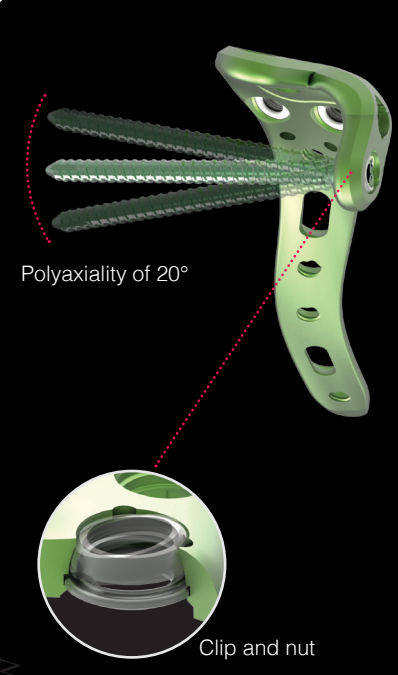
- Pregnancy.
- Acute or chronic local or systemic infections.
- Allergy to one of the materials used or sensitivity to foreign bodies.

ALIANS ELBOW RANGE



FIXATIONS : TECHNICAL FEATURES

ANGULAR RANGE: +/- 10° POLYAXIAL LOCKING RANGE



→ ANGULAR RANGE: +/- 10° POLYAXIAL LOCKING FIXATION

The DTS2® technology allows the screw to lock into the plate while permitting an angulation of the screw.

Newclip Technics plates combine both polyaxial and locking technologies to create a fixed-angle construct particularly useful for poor bone quality and/or multifragmentary fractures.

The DTS2® polyaxial locking holes are located in the epiphyseal area, thus facilitating the insertion of the epiphyseal screws in diverging or converging direction and allowing for optimal strength of the assembly.

Polyaxiality of 20°

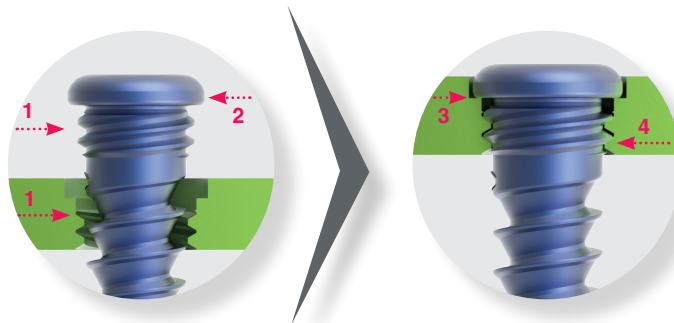
Clip and nut

Polyaxiality of 20°

MONOAXIAL LOCKING SYSTEM

→ FEATURES

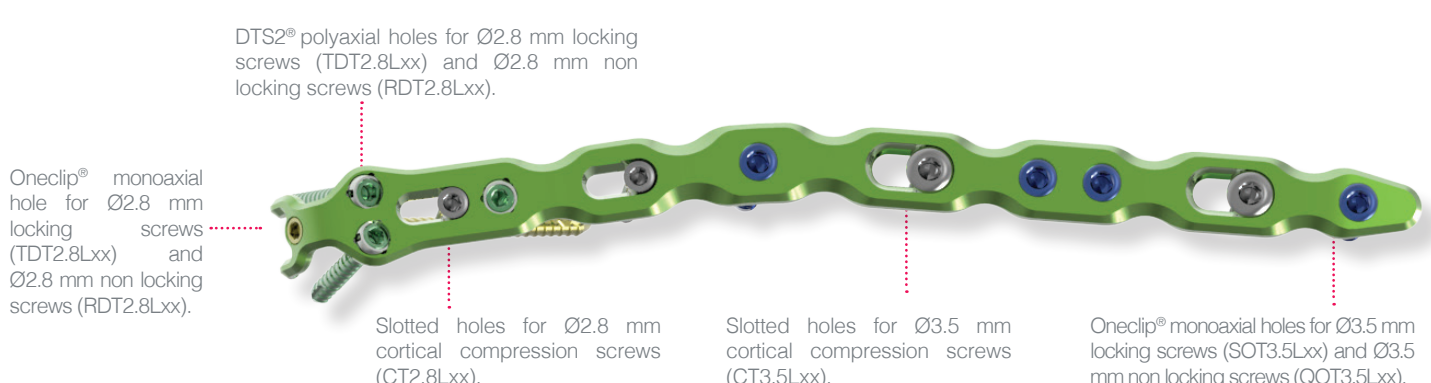
- The threaded sections under the screw head and inside the hole have strictly the **same characteristics (1)**:
 - Cylindrical internal thread profile,
 - Cylindrical external thread profile,
- Screw head cap (2),
- Plate and screw made from the same material: titanium alloy.



→ RESULTS

- **Low profile construct:**
 - The buried screw head thanks to the cap in the slot insuring the locking, (3),
 - The screw head is buried in the plate.
- **Construct limiting cold welding risks for improved removal properties:**
 - A perfect coaptation of both profiles when locking (4).

FIXATION SYSTEM



DTS2® polyaxial holes for Ø2.8 mm locking screws (TDT2.8Lxx) and Ø2.8 mm non locking screws (RDT2.8Lxx).

Oneclip® monoaxial hole for Ø2.8 mm locking screws (TDT2.8Lxx) and Ø2.8 mm non locking screws (RDT2.8Lxx).

Slotted holes for Ø2.8 mm cortical compression screws (CT2.8Lxx).

Slotted holes for Ø3.5 mm cortical compression screws (CT3.5Lxx).

Oneclip® monoaxial holes for Ø3.5 mm locking screws (SOT3.5Lxx) and Ø3.5 mm non locking screws (QOT3.5Lxx).

DISTAL HUMERUS PLATES

PRECONTOURED IMPLANTS

The design of ALIANS ELBOW Distal humerus implants is the result of a proprietary state-of-the-art mapping technology to establish the maximum congruence between the plate and the bone.



PLATE BENDING

Some plates from **ALIANS ELBOW** range (distal humerus and olecranon plates) offer bending areas. In certain cases, it is possible to bend the plate thanks to the bending irons (ANC452) following the instructions below:

- > Bending is only possible in the areas intended for this purpose,
- > A bendable area should be bent only once and in one direction,
- > Bending should not be performed excessively,
- > The holes must be protected so as to avoid damaging the fixation. The oval-shaped distortion of the holes when bending the plate into shape is a particular risk.

3 TYPES OF CONSTRUCT

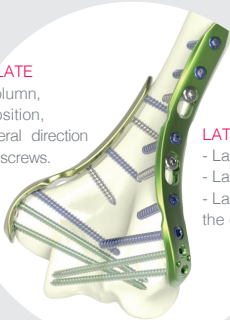
→ PARALLEL CONSTRUCT

MEDIAL PLATE

- Medial column,
- Medial position,
- Medio-lateral direction of the distal screws.

LATERAL PLATE

- Lateral column,
- Lateral position,
- Latero-medial direction of the distal screws.



→ PERPENDICULAR CONSTRUCTS

MEDIAL PLATE

POSTERO-LATERAL PLATE

- Lateral column,
- Dorsal position,
- Postero-anterior and latero-medial direction of the distal screws.

MEDIAL PLATE

POSTERO-LATERAL PLATE

..... Lateral pre-assembled support

Fixation with lateral support

In the case of a perpendicular construct, the lateral support enables the insertion of 2 additional polyaxial long screws, from the lateral to the medial column of the distal humerus for extra stability and strength of the fixation.

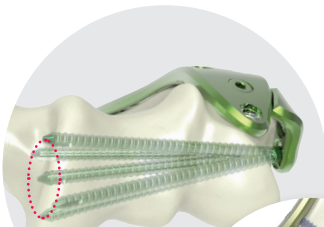
Fixation without lateral support

Distal humerus postero-lateral plates can be fitted to several types of fracture. In the case of partial articular fractures of the capitellum or very small humeri if the lateral support exceeds over the lateral epicondyl, it is possible to remove the lateral support. In this case, a Ø3.5 mm locking screw can be inserted in the cleared hole.

POLYAXIAL LOCKING FIXATION

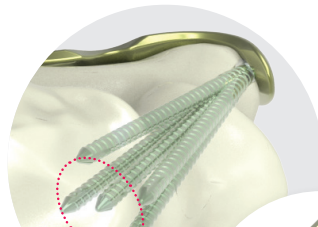
Polyaxial locking fixation:

- > Gives the surgeon the ability to reach all fragments of the articular block thanks to long screws,
- > Avoids conflicts between screws in the articular block.



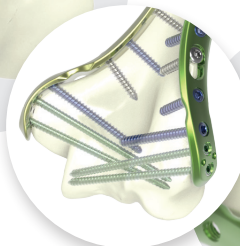
360° rotation
20° of polyaxiality

POSTERO-LATERAL PLATE



360° rotation
20° of polyaxiality

MEDIAL PLATE

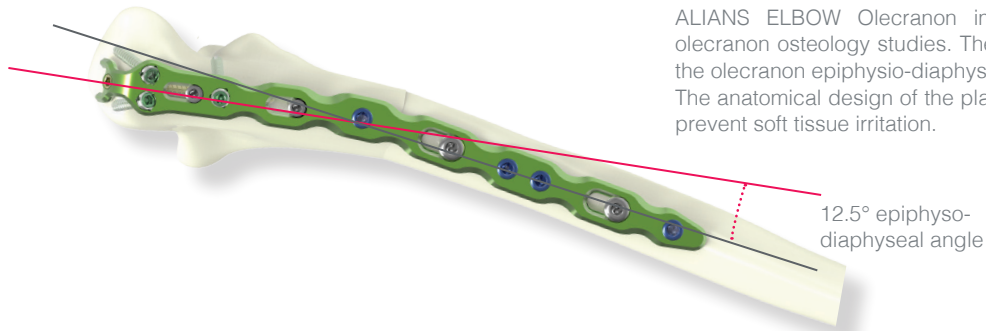


360° rotation
20° of polyaxiality

LATERAL PLATE

OLECRANON PLATES

PRECONTOURED IMPLANTS



ALIANS ELBOW Olecranon implants design is based on olecranon osteology studies. The design of the plate adapts to the olecranon epiphysio-diaphyseal curve. The anatomical design of the plate and the buried screw heads prevent soft tissue irritation.

12.5° epiphysio-diaphyseal angle

OLECRANON PLATES TECHNICAL FEATURES

➤ Bendable sections

➤ Bendable sections

➤ 'Home run' screw to target the coronoid process through the fracture site, to increase stability or to create compression.

➤ Reduced-width section in the area of the tip of the olecranon minimizing risks of skin necrosis.



➤ Narrow and thin profile: to minimize soft tissue irritation.

➤ Reinforced shaft: to counter diaphyseal bending forces.

➤ 2 hooks: inserted in the olecranon process to ease fracture reduction and enhance stability by limiting the constraints related to the triceps tendon.

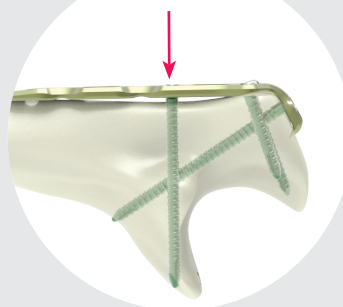
POLYAXIAL LOCKING FIXATION

Polyaxial hole Polyaxial hole



Two olecranon screws:
to be directed toward the tip of the olecranon limiting the constraints related to the triceps tendon.

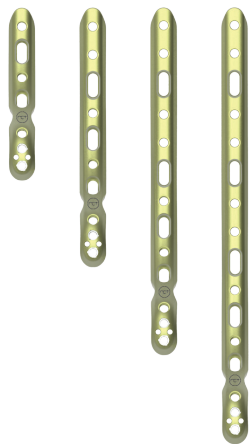
Polyaxial hole



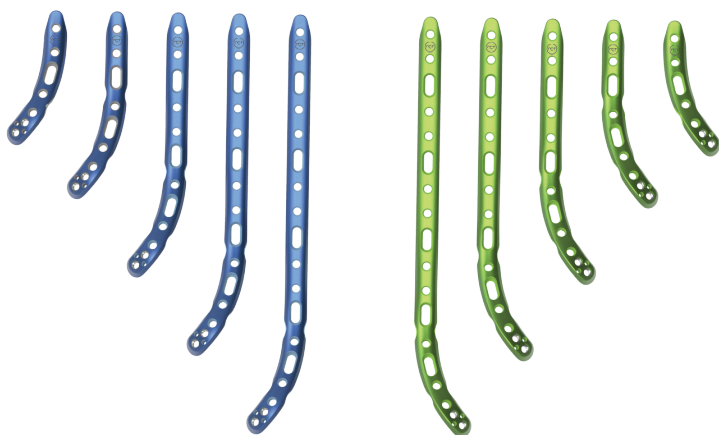
The coronoid screw:
the screw targets and stabilizes the coronoid fragment.

IMPLANT REFERENCES

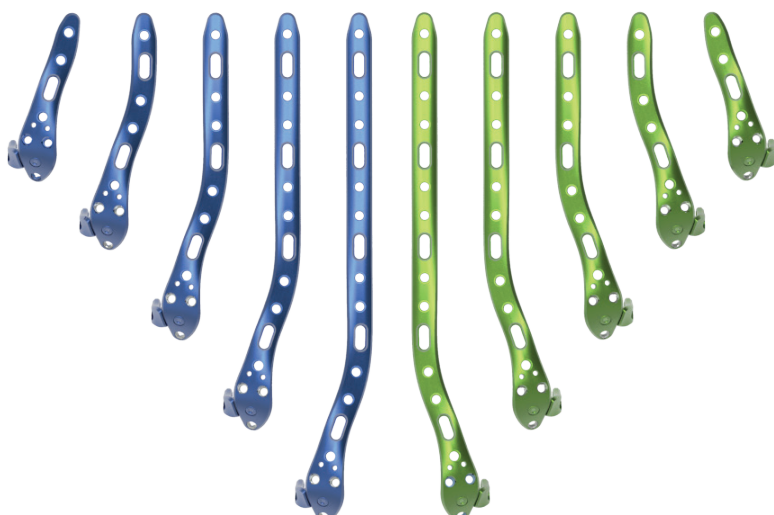
→ DISTAL HUMERUS PLATES



MEDIAL PLATES	
Ref.	Description
NTSM1	Medial distal humerus plate - Symmetrical - Size 1 - 7 holes - L76 mm
NTSM2	Medial distal humerus plate - Symmetrical - Size 2 - 10 holes - L113 mm
NTSM3	Medial distal humerus plate - Symmetrical - Size 3 - 13 holes - L150 mm
NTSM4	Medial distal humerus plate - Symmetrical - Size 4 - 16 holes - L187 mm



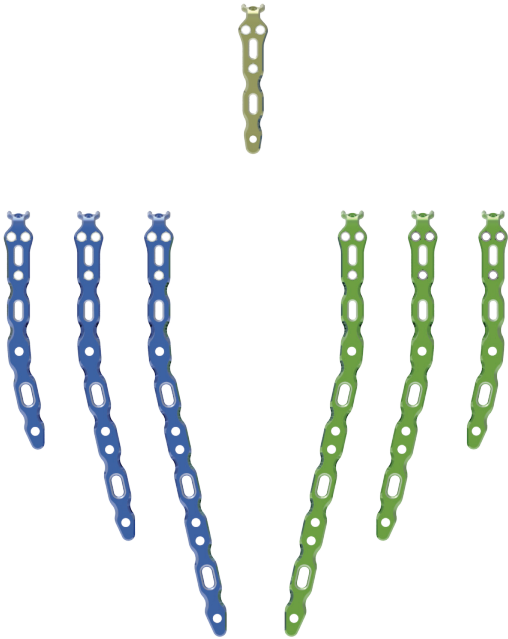
LATERAL PLATES	
Ref.	Description
NTGL1	Lateral distal humerus plate - Left - Size 1 - 7 holes - L70 mm
NTDL1	Lateral distal humerus plate - Right - Size 1 - 7 holes - L70 mm
NTGL2	Lateral distal humerus plate - Left - Size 2 - 9 holes - L93 mm
NTDL2	Lateral distal humerus plate - Right - Size 2 - 9 holes - L93 mm
NTGL3	Lateral distal humerus plate - Left - Size 3 - 12 holes - L131 mm
NTDL3	Lateral distal humerus plate - Right - Size 3 - 12 holes - L131 mm
NTGL4	Lateral distal humerus plate - Left - Size 4 - 15 holes - L169 mm
NTDL4	Lateral distal humerus plate - Right - Size 4 - 15 holes - L169 mm
NTGL5	Lateral distal humerus plate - Left - Size 5 - 18 holes - L207 mm
NTDL5	Lateral distal humerus plate - Right - Size 5 - 18 holes - L207 mm



POSTERO-LATERAL PLATES	
Ref.	Description
NTGQ1	Posterolateral distal humerus plate - Left - Size 1 - 9 holes - L72 mm
NTDQ1	Posterolateral distal humerus plate - Right - Size 1 - 9 holes - L72 mm
NTGQ2	Posterolateral distal humerus plate - Left - Size 2 - 11 holes - L99 mm
NTDQ2	Posterolateral distal humerus plate - Right - Size 2 - 11 holes - L99 mm
NTGQ3	Posterolateral distal humerus plate - Left - Size 3 - 14 holes - L137 mm
NTDQ3	Posterolateral distal humerus plate - Right - Size 3 - 14 holes - L137 mm
NTGQ4	Posterolateral distal humerus plate - Left - Size 4 - 17 holes - L175 mm
NTDQ4	Posterolateral distal humerus plate - Right - Size 4 - 17 holes - L175 mm
NTGQ5	Posterolateral distal humerus plate - Left - Size 5 - 20 holes - L213 mm
NTDQ5	Posterolateral distal humerus plate - Right - Size 5 - 20 holes - L213 mm

IMPLANT REFERENCES

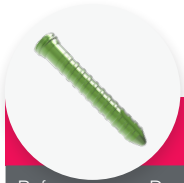
→ OLECRANON PLATES



NARROW PLATE	
Ref.	Description
HTSPN1	Olecranon plate - Narrow - Symmetrical - Size 1 - 7 holes - L64 mm

STANDARD PLATES	
Ref.	Description
HTGPS1	Olecranon plate - Standard - Left - Size 1 - 9 holes - L102 mm
HTDPS1	Olecranon plate - Standard - Right - Size 1 - 9 holes - L102 mm
HTGPS2	Olecranon plate - Standard - Left - Size 2 - 12 holes - L141 mm
HTDPS2	Olecranon plate - Standard - Right - Size 2 - 12 holes - L141 mm
HTGPS3	Olecranon plate - Standard - Left - Size 3 - 15 holes - L182 mm
HTDPS3	Olecranon plate - Standard - Right - Size 3 - 15 holes - L182 mm

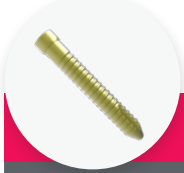
→ Ø2.8 MM SCREWS



REINFORCED CORE LOCKING SCREWS*

Ref.	Description
TDT2.8Lxx	Ø2.8 mm reinforced core locking screws Length : from 10 mm to 60 mm (2 mm increments from 10 to 40) (5 mm increments from 40 to 60)

*Green anodized



REINFORCED CORE NON LOCKING SCREWS*

Ref.	Description
RDT2.8Lxx	Ø2.8 mm reinforced core non-locking screws Length : From 10 mm to 60 mm (2 mm increments from 10 to 40) (5 mm increments from 40 to 60)

*Golden anodized

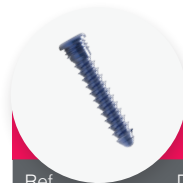


CORTICAL SCREWS*

Ref.	Description
CT2.8Lxx	Ø2.8 mm standard cortical screws Length : From 12 mm to 30 mm (2 mm increments)

*Non anodized or pink anodized for sterile screws

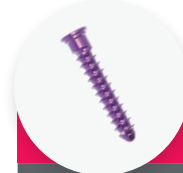
→ Ø3.5 MM SCREWS



LOCKING SCREWS*

Ref.	Description
SOT3.5Lxx	Ø3.5 mm locking screws Length : from 10 mm to 60 mm (2 mm increments from 10 to 40) (5 mm increments from 40 to 60)

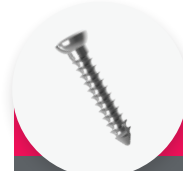
*Blue anodized



NON LOCKING SCREWS*

Ref.	Description
QOT3.5Lxx	Ø3.5 mm non locking screws Length : from 10 mm to 60 mm (2 mm increments from 10 to 40) (5 mm increments from 40 to 60)

*Fuchsia anodized



CORTICAL SCREWS*

Ref.	Description
CT3.5Lxx	Ø3.5 mm standard cortical screws Length : From 10 mm to 40 mm (2 mm increments)

*Non anodized or light blue anodized for sterile screws

Remark:

Please note that all implants are also available in sterile packaging. The tube packaging is handy and easy to use. An "ST" code is added at the end of the reference, e.g. "SOT3.5L16-ST".

INSTRUMENT REFERENCES

ALIANS ELBOW INSTRUMENTS		
Ref.	Description	Qty
ANC082E	2.0 mm quick coupling hexagonal prehensor screwdriver	2
ANC083C	2.5 mm quick coupling hexagonal prehensor screwdriver	3
ANC089C	Ø2.7 mm quick coupling drill bit - L125 mm	1
ANC102L	Length gauge for Ø2.8 mm screws - Measures 10 - 60 mm	1
ANC103	2.0 mm hexagonal non prehensor screwdriver	1
ANC107	2.5 mm quick coupling hexagonal non prehensor screwdriver	1
ANC124L	Length gauge for Ø3.5 mm screws - Measures 10 - 60 mm	1
ANC160	Handle for fast drilling guide	1
ANC186	Ø2.7 mm threaded guide gauge for Ø3.5 mm screws	1
ANC191	Ø2.7 mm non threaded bent guide gauge for Ø3.5 mm screws	1
ANC256E	Ø2.7 mm quick coupling drill bit - L180 mm	2
ANC259E	Ø2.7 mm threaded long guide gauge for Ø3.5 mm screws	2
ANC261E	Ø2.7 mm non threaded bent long guide gauge for Ø3.5 mm screws	1
ANC287	Ø2.3 mm quick coupling drill bit - L180 mm	2
ANC305	Ø2.3 mm DTS2 drill guide	2
ANC306	Ø2.3 mm non threaded guide gauge for Ø2.8 mm screws	1
ANC309	Ø1.7 mm guide for Ø1.6 mm pin	1
ANC313	Fast drilling guide for medial distal humerus plate - Symmetrical (NTSMx)	1

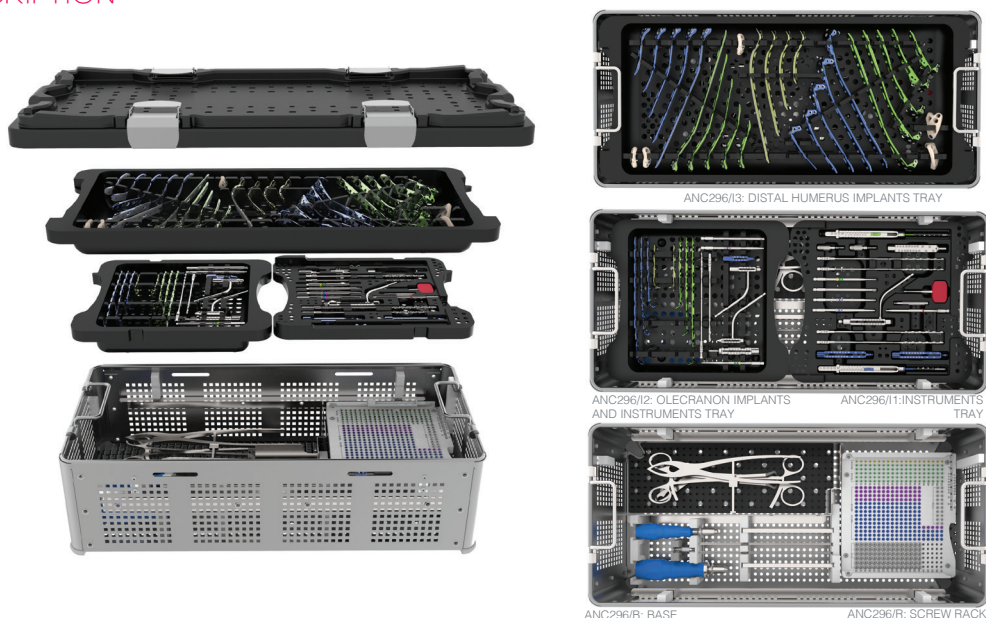
ALIANS ELBOW INSTRUMENTS		
Ref.	Description	Qty
ANC314	Fast drilling guide for lateral distal humerus plate - Left (NTGLx)	1
ANC315	Fast drilling guide for lateral distal humerus plate - Right (NTDLx)	1
ANC316	Fast drilling guide for posterolateral distal humerus plate - Left (NTGQx)	1
ANC317	Fast drilling guide for posterolateral distal humerus plate - Right (NTDQx)	1
ANC344	240 mm verbrugge forceps	1
ANC345	200 mm reduction forceps	1
ANC348	240 mm reduction forceps	1
ANC350	Ø4.5 mm AO quick coupling handle - Size 1	1
ANC351	Ø4.5 mm AO quick coupling handle - Size 2	1
ANC452	Bending iron	2
ANC463	Ø3.5 mm quick coupling countersink	2
ANC493	Ø2.3 mm non threaded bent guide gauge for Ø2.8 mm screws	1
ANC494	Ø2.3 mm threaded long guide gauge for Ø2.8 mm screws	1
ANC498	Ø2.3 mm quick coupling drill bit - L150 mm	1
ANC650	Bending iron 1	1
ANC651	Bending iron 2	1
33.0216.210	Pin Ø1.6 - L210 mm	5
33.0220.210	Pin Ø2.0 - L210 mm	5

REMOVAL KIT

If you have to remove ALIANS ELBOW implants (distal humerus or olecranon implants), make sure to order the **Newclip Technics removal set** which includes the following instruments:

- ANC082E or ANC103: Screwdriver for Ø2.8 mm screws,
- ANC107 or ANC016: Screwdriver for Ø3.5 mm screws,
- ANC351: Ø4.5 mm AO quick coupling handle - Size 2.

→ SET DESCRIPTION



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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