

# ALIANS ELBOW.



DISTAL HUMERUS &  
OLECRANON  
PLATING SYSTEM



# ALIANS ELBOW

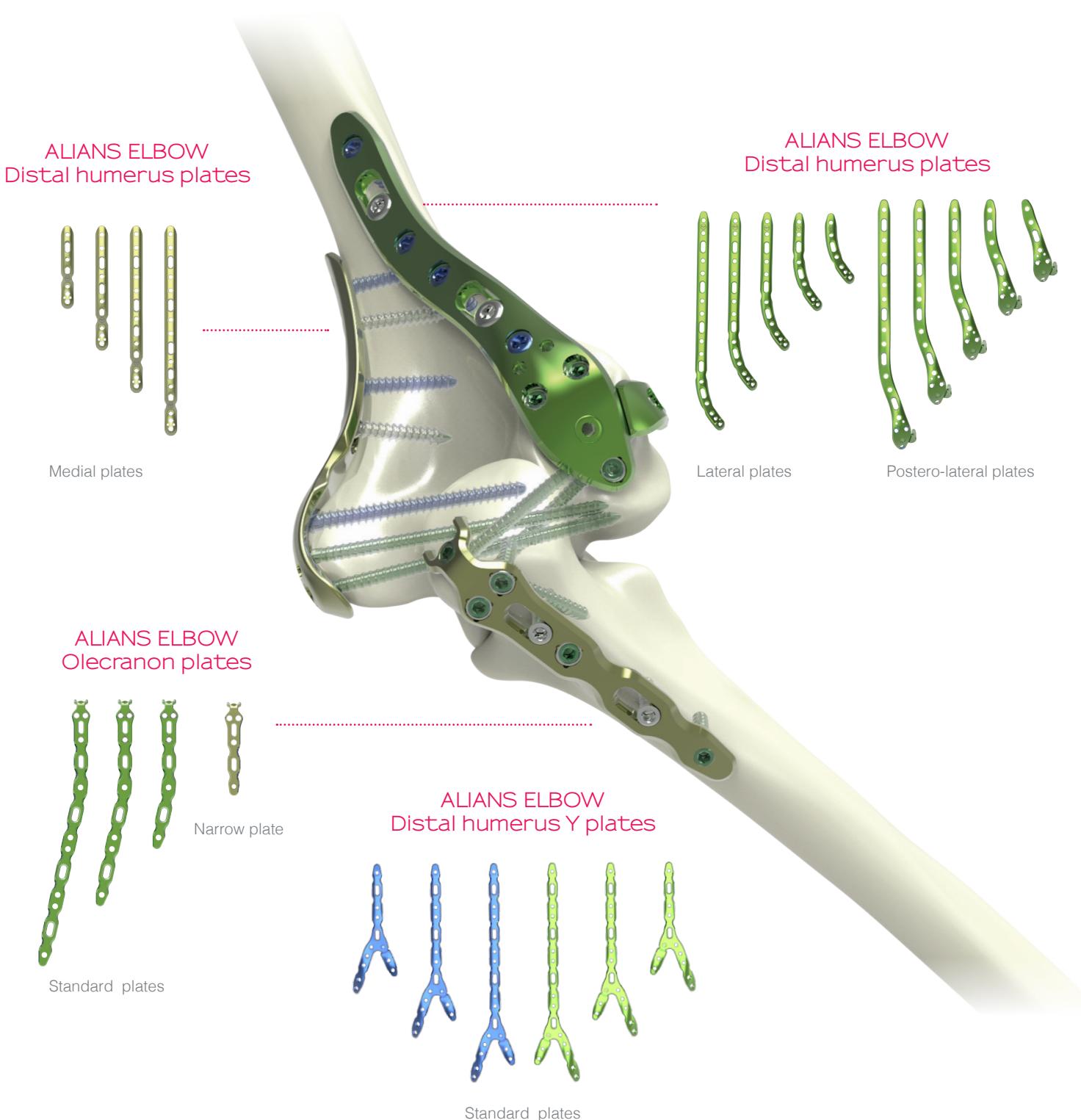
## Intended purpose:

The implants of the Alians Elbow range are dedicated to the fixation of fractures and osteotomies of the distal humerus and proximal ulna in adults.

## Contra-indications:

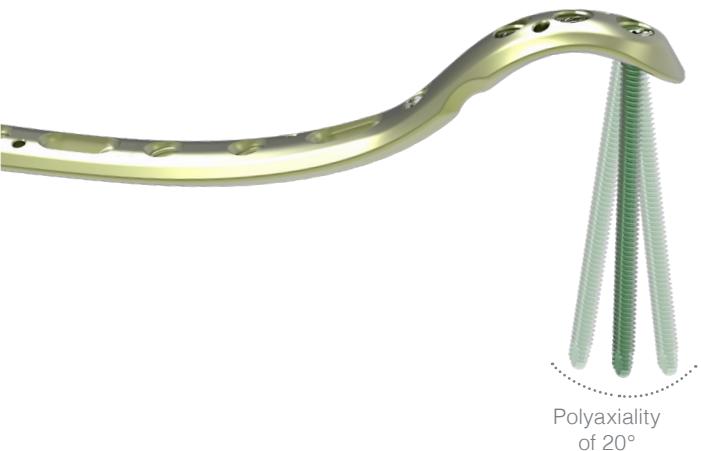
- Pregnancy.
- Acute or chronic local or systemic infections.
- Allergy to one of the materials used or sensitivity to foreign bodies.

## ALIANS ELBOW RANGE



# FIXATIONS : TECHNICAL FEATURES

## POLYAXIAL LOCKING FIXATION



Polyaxial locking fixation gives the surgeon the ability to reach all fragments in different directions. It also allows to avoid conflicts between screws from another plate.

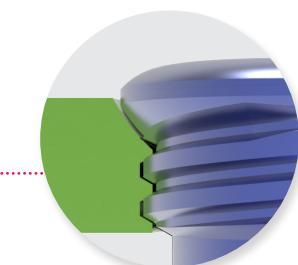
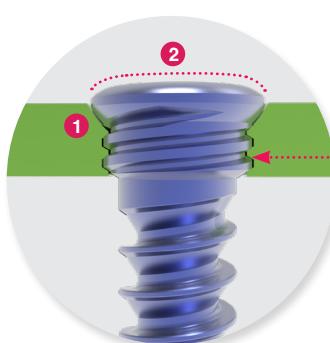
The DTS2 and DTS3 technologies ensures the locking of the screw into the plate while allowing its angulation. This system enables screws to be inserted in diverging or converging directions, thereby improving the stability of the assembly.



Dualtec System® III Technology  
Polyaxial locking fixation

## MONOAXIAL LOCKING SYSTEM

- The screw head is stopped in the hole, ensuring its locking (1).
- The screw head is buried in the plate (2).
- Plate and screw made from the same material: titanium alloy.
- Non locking screws (CT3.5LxxD) can be used in the locking holes at the surgeon's discretion.



The threads under the screw head and inside the hole have strictly the same characteristics.

## 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 non-locking compression screws (CT2.8Lxx).

Slotted holes for Ø3.5 mm non-locking 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.



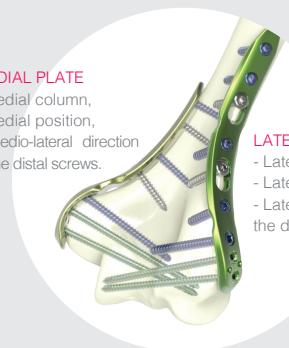
### PLATE BENDING

Some plates from the Alians Elbow range (distal humerus and olecranon plates) offer bending areas. In certain cases, it is possible to bend the plate using the bending irons (ANC650) 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.
- There is a risk of distortion of the holes when bending the plate. Thus, the holes must be protected to avoid damaging the fixation system.

## 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

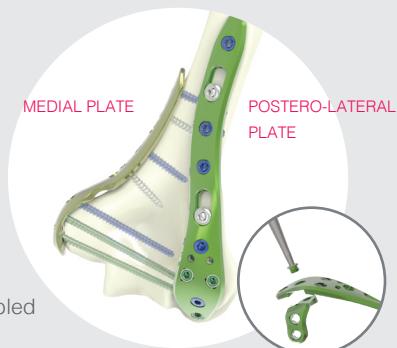


#### MEDIAL PLATE

#### POSTERO-LATERAL PLATE

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

..... Lateral pre-assembled support



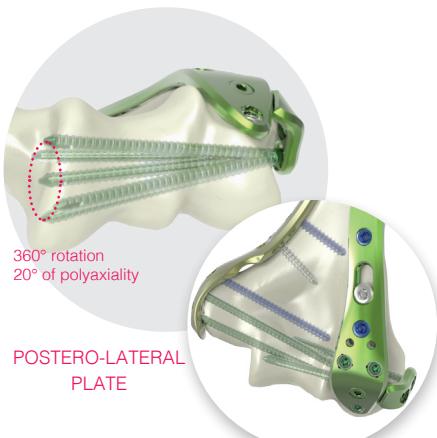
#### Fixation with lateral support

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 to improve the stability.

#### Fixation without lateral support

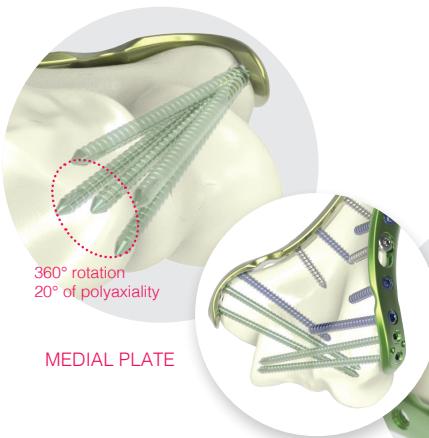
Distal humerus postero-lateral plates can be fitted to several types of fracture. In the case of partial articular fractures of the capitellum or very small humeri if the lateral support exceeds over the lateral epicondyl, it is possible to remove the lateral support. In this case, a Ø3.5 mm locking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

## POLYAXIAL LOCKING FIXATION



360° rotation  
20° of polyaxiality

POSTERO-LATERAL PLATE



MEDIAL PLATE



360° rotation  
20° of polyaxiality

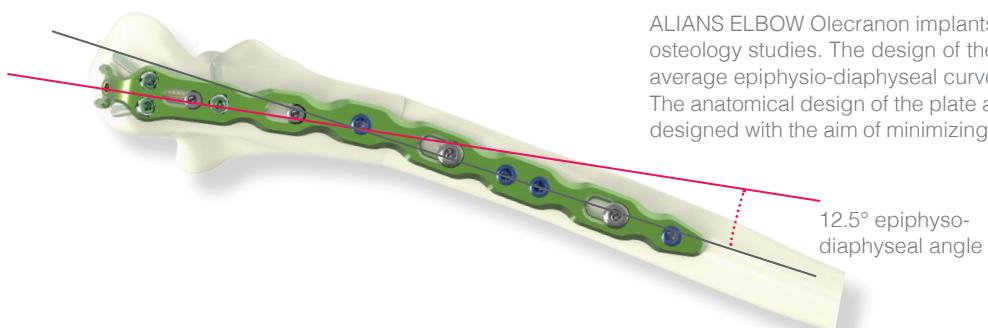
LATERAL PLATE

#### 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.

# OLECRANON PLATES

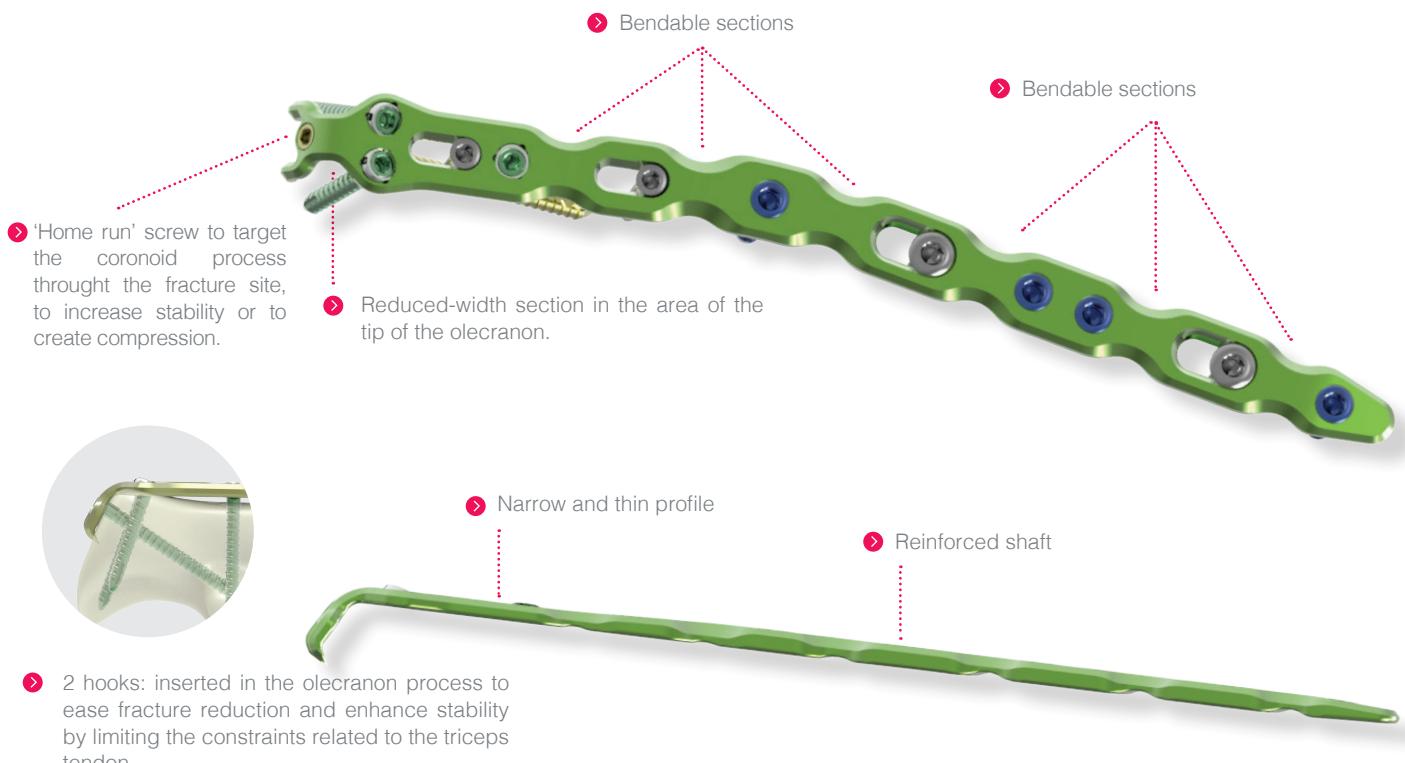
## PRECONTOURED IMPLANTS



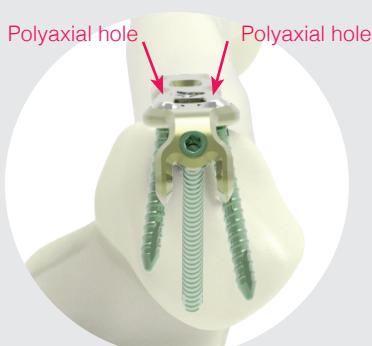
ALIANS ELBOW Olecranon implants design is based on olecranon osteology studies. The design of the plate adapts to the olecranon average epiphysio-diaphyseal curve.

The anatomical design of the plate and the buried screw heads are designed with the aim of minimizing the risk of soft tissues irritation.

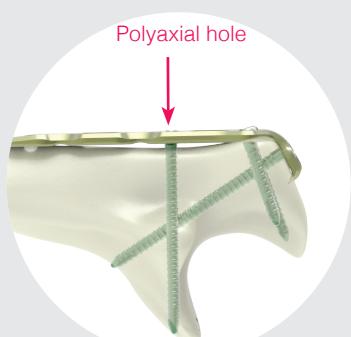
## OLECRANON PLATES TECHNICAL FEATURES



## POLYAXIAL LOCKING FIXATION



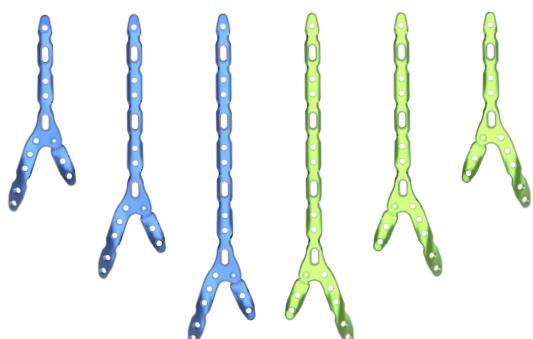
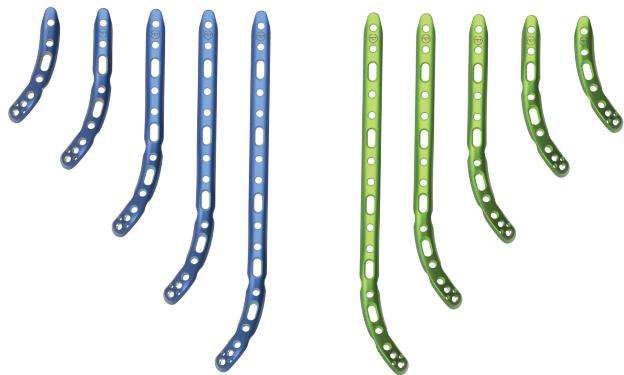
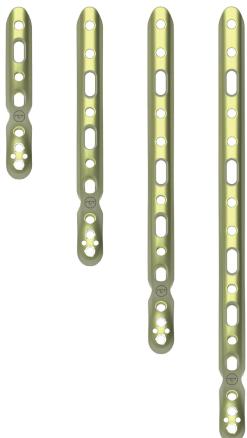
Two olecranon screws:  
to be directed toward the tip of the olecranon



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

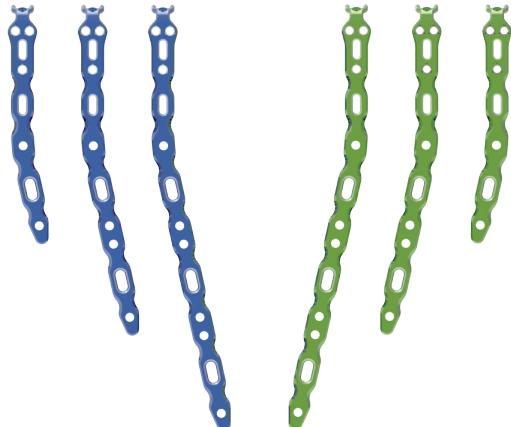
LATERAL PLATES	
Ref.	Description
NTGL1	Lateral distal humerus plate - Left - Size 1 - 7 holes - L70 mm
NTDL1	Lateral distal humerus plate - Right - Size 1 - 7 holes - L70 mm
NTGL2	Lateral distal humerus plate - Left - Size 2 - 9 holes - L93 mm
NTDL2	Lateral distal humerus plate - Right - Size 2 - 9 holes - 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

Y PLATES	
Ref.	Description
NTGY1	Y distal humerus plate - Left - Size 1
NTDY1	Y distal humerus plate - Right - Size 1
NTGY2	Y distal humerus plate - Left - Size 2
NTDY2	Y distal humerus plate - Right - Size 2
NTGY3	Y distal humerus plate - Left - Size 3
NTDY3	Y distal humerus plate - Right - Size 3

# IMPLANT REFERENCES

## → OLECRANON PLATES



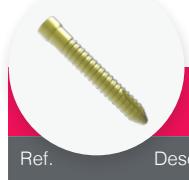
## → Ø2.8 MM SCREWS



### 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)

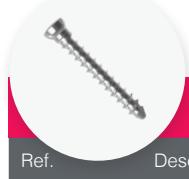
\*Green anodized



### 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



### NON-LOCKING SCREWS\*

Ref.	Description
CT2.8Lxx	Ø2.8 mm non-locking screws Length : From 12 mm to 30 mm (2 mm increments)

\*Non anodized or pink anodized for sterile screws

## 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

## → 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



### NON-LOCKING SCREWS\*

Ref.	Description
CT3.5Lxx	Ø3.5 mm non-locking 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. An "ST" code is added at the end of the reference, e.g. "SOT3.5L16-ST".

#### Remark:

Please note that the «xx» in the references represent the length of the screw. Ex : the reference for the Ø2.8 mm non locking screw 20 mm is «CT2.8L20»

# INSTRUMENT REFERENCES

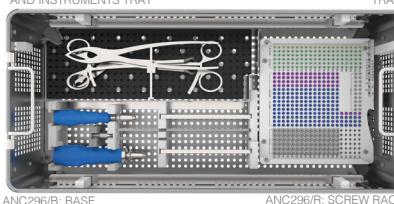
ALIANS ELBOW INSTRUMENTS			ALIANS ELBOW INSTRUMENTS		
Ref.	Description	Qty	Ref.	Description	Qty
ANC082E	2.0 mm quick coupling hexagonal prehensor screwdriver	2	ANC314	Fast drilling guide for lateral distal humerus plate - Left (NTGLx)	1
ANC083C	2.5 mm quick coupling hexagonal prehensor screwdriver	3	ANC315	Fast drilling guide for lateral distal humerus plate - Right (NTDLx)	1
ANC089C	Ø2.7 mm quick coupling drill bit - L125 mm	1	ANC316	Fast drilling guide for posterolateral distal humerus plate - Left (NTGQx)	1
ANC102L	Length gauge for Ø2.8 mm screws - Measures 10 - 60 mm	1	ANC317	Fast drilling guide for posterolateral distal humerus plate - Right (NTDQx)	1
ANC103	2.0 mm hexagonal non prehensor screwdriver	1	ANC344	240 mm verbrugge forceps	1
ANC107	2.5 mm quick coupling hexagonal non prehensor screwdriver	1	ANC345	200 mm reduction forceps	1
ANC124L	Length gauge for Ø3.5 mm screws - Measures 10 - 60 mm	1	ANC348	240 mm reduction forceps	1
ANC160	Handle for fast drilling guide	1	ANC350	Ø4.5 mm AO quick coupling handle - Size 1	1
ANC186	Ø2.7 mm threaded guide gauge for Ø3.5 mm screws	1	ANC351	Ø4.5 mm AO quick coupling handle - Size 2	1
ANC191	Ø2.7 mm non threaded bent guide gauge for Ø3.5 mm screws	1	ANC452	Bending iron	2
ANC256E	Ø2.7 mm quick coupling drill bit - L180 mm	2	ANC463	Ø3.5 mm quick coupling countersink	2
ANC259E	Ø2.7 mm threaded long guide gauge for Ø3.5 mm screws	2	ANC493	Ø2.3 mm non threaded bent guide gauge for Ø2.8 mm screws	1
ANC261E	Ø2.7 mm non threaded bent long guide gauge for Ø3.5 mm screws	1	ANC494	Ø2.3 mm threaded long guide gauge for Ø2.8 mm screws	1
ANC287	Ø2.3 mm quick coupling drill bit - L180 mm	2	ANC498	Ø2.3 mm quick coupling drill bit - L150 mm	1
ANC305	Ø2.3 mm DTS2 drill guide	2	ANC650	Bending iron 1	1
ANC306	Ø2.3 mm non threaded guide gauge for Ø2.8 mm screws	1	ANC651	Bending iron 2	1
ANC309	Ø1.7 mm guide for Ø1.6 mm pin	1	33.0216.210	Pin Ø1.6 - L210 mm	5
ANC313	Fast drilling guide for medial distal humerus plate - Symmetrical (NTSMx)	1	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:

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

## → SET DESCRIPTION



ANC296/R: SCREW RACK

This information is intended to demonstrate the Newclip Technics portfolio of medical devices. Always refer to the package insert, product label and/or user instructions including cleaning and sterilization before using any Newclip Technics product. These products must be handled and/or implanted by trained and qualified staff who have read the instructions before use. A surgeon must always rely on her or his own professional clinical judgement when deciding whether to use a particular product when treating a particular patient. 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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