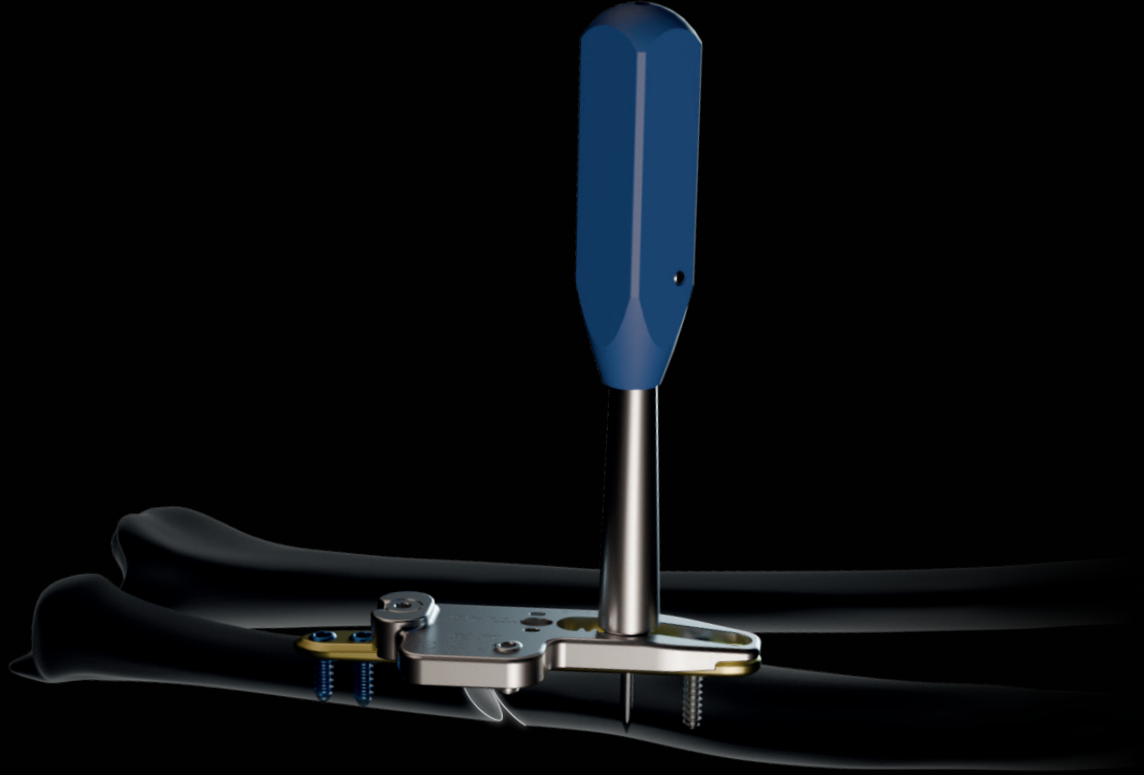


ALIANS ULNA 3/3.



ULNAR SHORTENING
OSTEOTOMY PLATE



ALIANS ULNA 3 / 3

Intended purpose:

The implants of the Alians Forearm range are intended for the fixation of fractures and osteotomies of the radius and the ulna in adults





Contraindications:

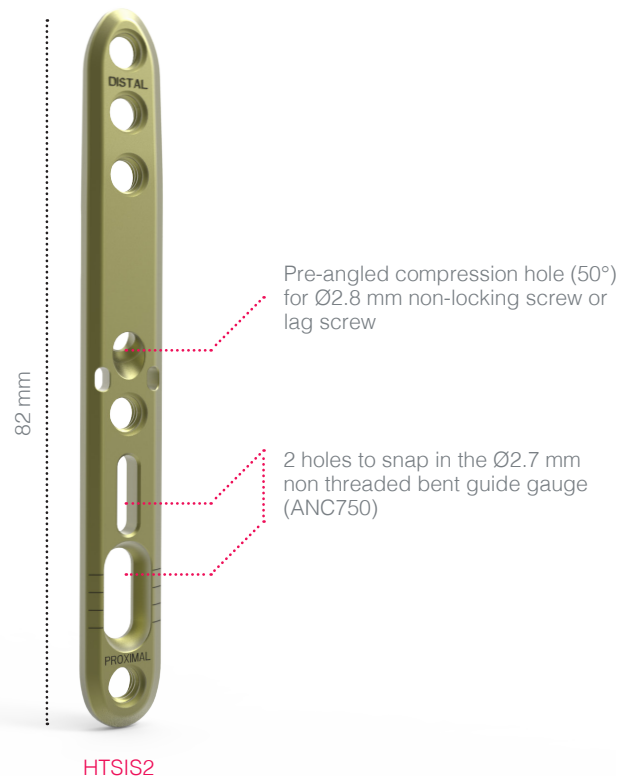
- Pregnancy.
- Acute or chronic local or systemic infections.
- Allergy to one of the materials used or sensitivity to foreign bodies.

IMPLANT TECHNICAL FEATURES

- ▶ **Anatomically contoured implant:** the edges and tips of the implant are rounded.
- ▶ **Marks** appearing on the implant :
 - **Proximal and distal** ends
 - **Graduations for checking** compression level

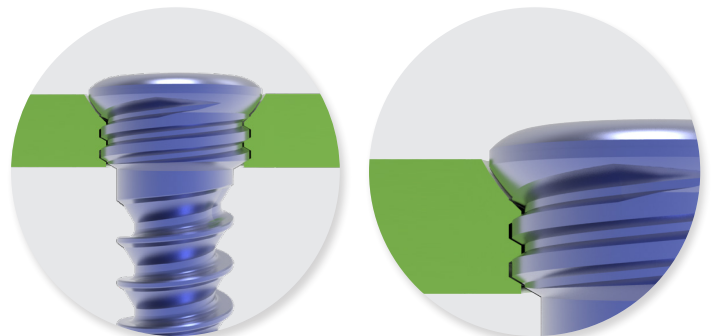
→ MONOAXIAL FIXATION

-  • Ø3.5 mm non-locking screw for proximal oblong hole (CT3.5Lxx)
-  • Ø3.5 mm locking screw (SOT3.5Lxx)
-  • Ø2.8 mm non-locking screw for pre-angled central hole (CT2.8Lxx): stabilization screw
-  • Ø2.8 mm lag screw for pre-angled central hole (QBT2.8Lxx) : compression screw



MONOAXIAL LOCKING SYSTEM

- ▶ The screw head is stopped in the hole, ensuring its locking.
- ▶ The screw head is buried in the plate.
- ▶ 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.

CUTTING GUIDE AND COMPRESSION DEVICE

COMPONENTS

- ▶ **2 blocks** (ANC670 and ANC671) allowing to manage the operated side (right or left) and the approach (lateral, dorsal or palmar/volar).



Block - Alians
Ulna plate fixation
screw

Pin holes

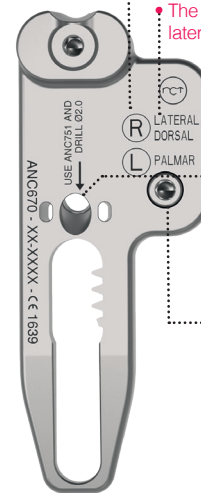
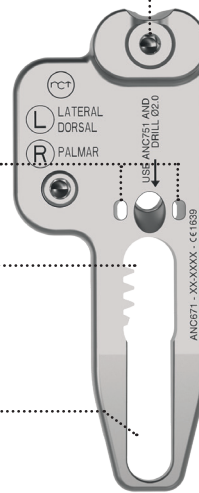
Rack-and-pinion
system allowing
compression of
the osteotomy
sites

The block should be chosen according to:

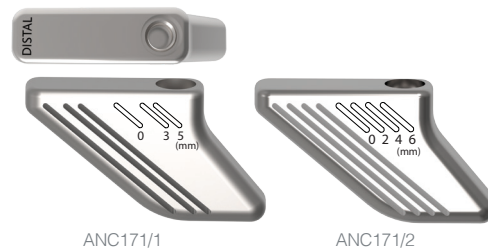
- The side: right or left
- The selected approach: lateral, dorsal or palmar (volar)

Pre-oriented hole for
transfixation screw in
order to be perpendi-
cular to the cut

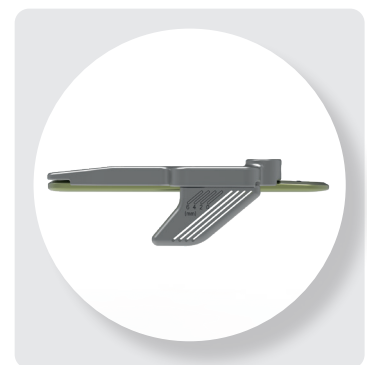
Block - cutting guide
fixation screw



- ▶ **2 cutting guides** (ANC171/1 and ANC171/2) enabling 2 to 6 mm resections. The indication 'DISTAL' is present on each cutting guide to ensure an appropriate positioning on the block.



ASSEMBLING



1. Choose one of the two blocks (ANC670 or ANC671) depending on the operated side (left or right) and the selected approach (lateral, dorsal or palmar/volar).

The illustration above presents a palmar/volar approach on a left ulna.

Choose the appropriate cutting guide (ANC171/1 or ANC171/2) depending on the resection to perform.

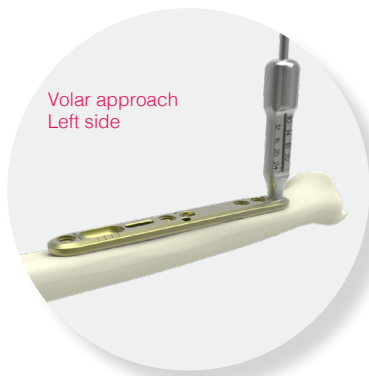
Assemble the cutting guide and the block by fastening the preassembled screw with the screwdriver part of the 2-in-1 instrument (ANC083C).

2. To perform the resection, adjust and secure the cutting and compression device to the plate. Insert and tighten the screw of the block into the appropriate hole of the plate using the screwdriver part of the 2-in-1 instrument (ANC083C).

FINAL RESULT

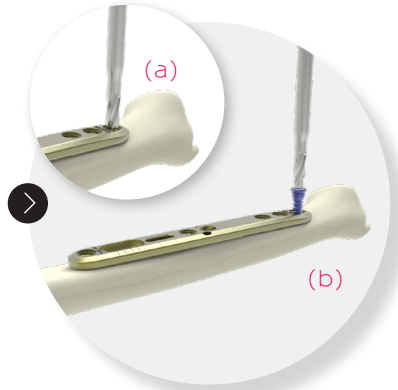
SURGICAL TECHNIQUE

The surgical technique described below is applicable for all the compatible surgical approaches of the range.



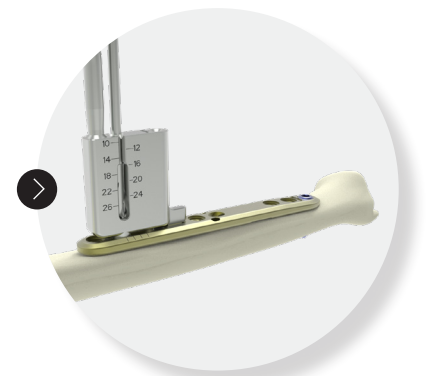
1. Position the plate. In the most distal hole, drill (Ø2.7 mm) (ANC089C) and directly read the drilling depth on the Ø2.7 mm threaded guide gauge (ANC186).

NB : It is possible to position the plate previously assembled with the cutting guide and compression device.



2.a. To ease the insertion of the Ø3.5 mm locking screw (SOT3.5Lxx) use the countersink part of the 2-in-1 instrument (ANC083C) to widen the previously drilled first cortex.

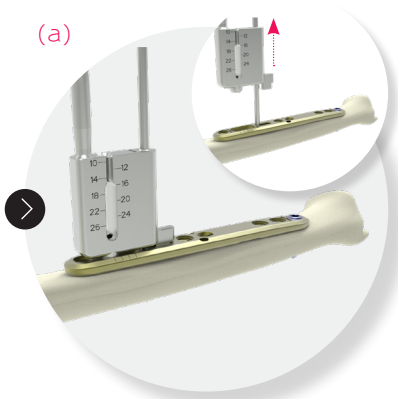
2.b. Insert a Ø3.5 mm locking screw (SOT3.5Lxx) using the screwdriver part of the 2-in-1 instrument (ANC083C).



3. Snap the Ø2.7 mm non threaded bent guide gauge (ANC750) in the plate oblong hole.

In the proximal hole of the instrument, perform the Ø2.7 mm drilling (ANC089C) and directly read the drilling depth.

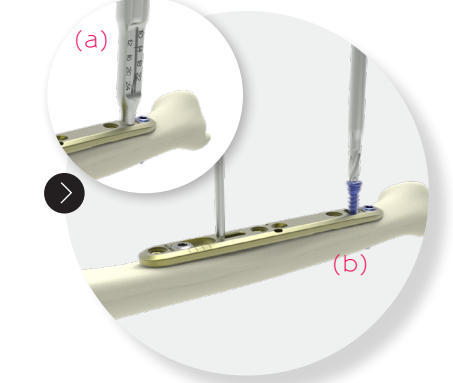
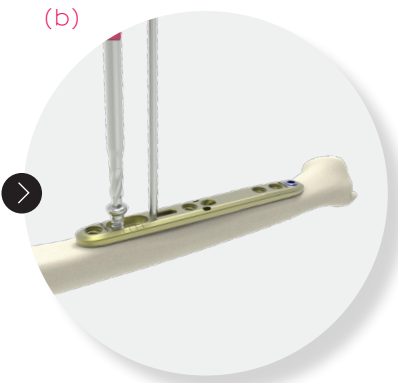
NB : In case where the block is assembled with the plate, the Ø2.7 mm non threaded bent guide gauge (ANC750) can be snapped in through the block (see § "components").



4.a. In the distal hole of the instrument (ANC750), insert a Ø2.2 mm pin (33.0222.120) using the binon-locking fixation method. Remove the non threaded bent guide gauge (ANC750) by sliding it along the Ø2.2 mm pin (33.0222.120).

4.b. Insert a Ø3.5 mm non-locking screw (CT3.5Lxx) using the binon-locking fixation method in the proximal part of the oblong hole using the screwdriver part of the 2-in-1 instrument (ANC083C).

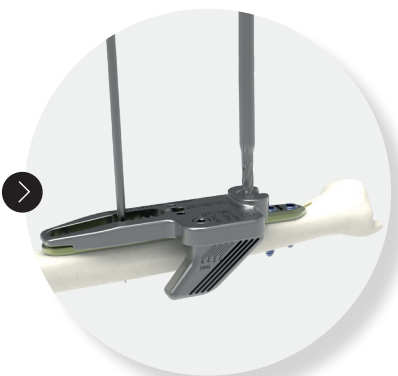
The non-locking screw (CT3.5Lxx) and the Ø2.2 mm pin (33.0222.120) help to perfectly align both proximal and distal parts during compression.



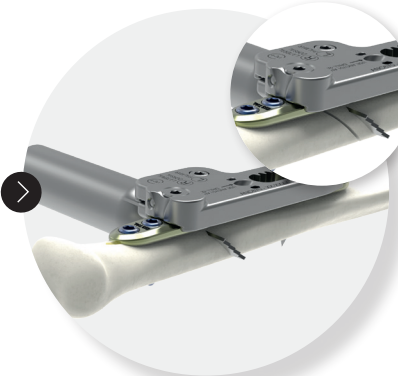
5.a. In the second distal hole of the plate, drill (Ø2.7 mm) (ANC089C) using the Ø2.7 mm threaded guide gauge (ANC186). Measure the screw length directly on the threaded guide gauge (ANC186) or with the length gauge (ANC124).

5.b. Insert a Ø3.5 mm locking screw (SOT3.5Lxx) using the screwdriver part of the 2-in-1 instrument (ANC083C).

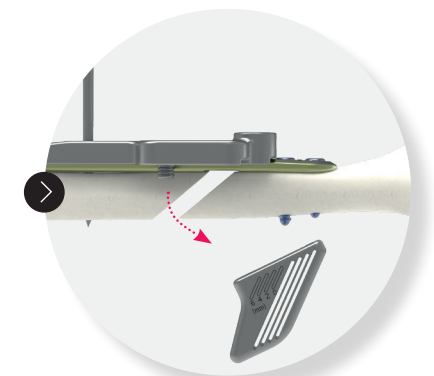
NB : In case where the block is assembled with the plate, the Ø2.7 mm threaded guide gauge (ANC186) can be locked on the second most distal hole without conflict with the block.



6. Assemble the cutting and compression device (see, § "Assembling") and fix it into the distal hole the closest to the osteotomy site.



7. Perform the two cuts necessary for the ulnar shortening osteotomy using the cutting guide at graduation 0 at first. Then at the graduation corresponding to the required resection. The resection is thus made by two oblique saw cuts.



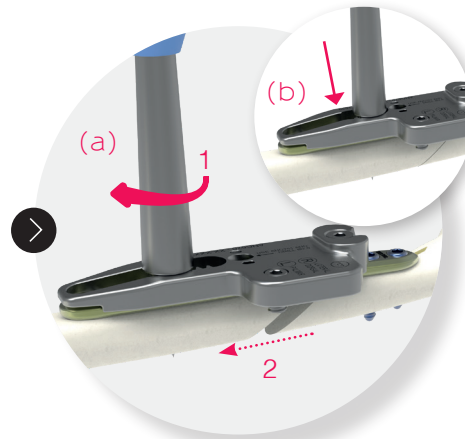
8. Remove the cutting guide (ANC171/1 or ANC171/2) to pull out the resected bone fragment.

SURGICAL TECHNIQUE OPTION 1: STABILIZATION STANDARD NON-LOCKING SCREW



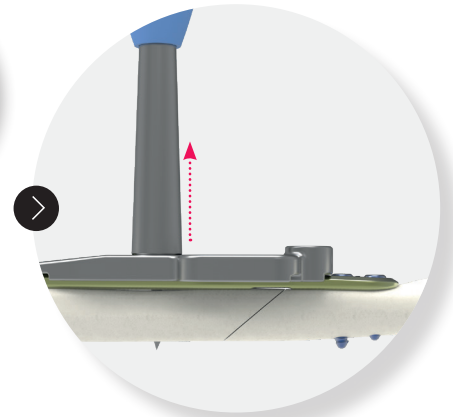
9. Slide the cannulated handle (ANC669) along the Ø2.2 mm pin (33.0222.120) and into the rack-and-pinion section of the block.

⚠ Unscrew the non-locking screw (CT3.5Lxx) of only half a turn so that the plate may be slid.

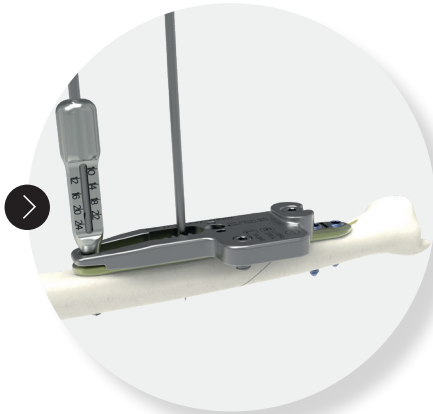


10.a. Rotate the cannulated handle to perform compression of the osteotomy site.

10.b. While maintaining the compression, tighten up the Ø3.5 mm non-locking screw (CT3.5Lxx) into the oblong hole.



11. Remove the cannulated compression handle (ANC669) by sliding it along the Ø2.2 mm pin (33.0222.120).



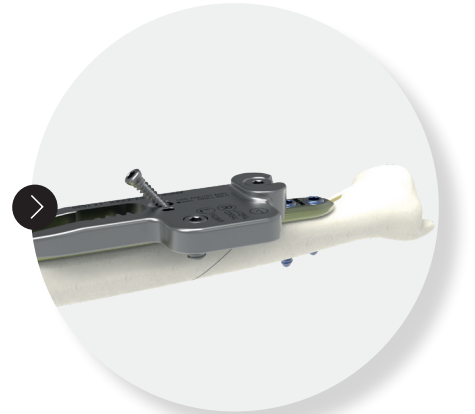
12. Into the most proximal hole, drill (Ø2.7 mm) (ANC089C) using the Ø2.7 mm guide gauge (ANC186). Measure the screw length directly on the threaded guide gauge (ANC186) or with the length gauge (ANC124).

Insert a Ø3.5 mm locking screw (SOT3.5Lxx) Remove the Ø2.2 mm pin (33.0222.120).

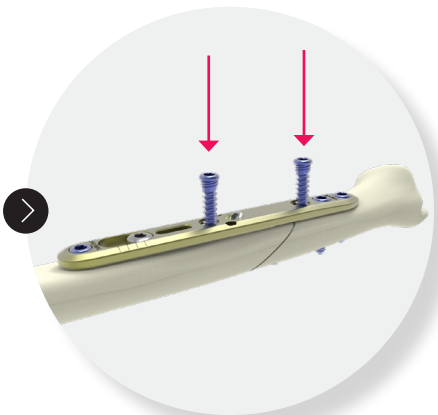


13. Position the Ø2.0 mm non threaded guide gauge (ANC751) into the pre-angled (50°) hole of the block (ANC670/671), drill (Ø2.0 mm) (ANC088) and directly read the drilling depth on the guide gauge (ANC751).

⚠ Ø2.7 mm drill **must not be used** into the pre-angled hole (ANC089C).



14. Insert a Ø2.8 mm non-locking screw (CT2.8Lxx) directly through the block using the appropriate screwdriver (ANC082).



15. Remove the block and complete the procedure by inserting the last two Ø3.5 mm locking screws (SOT3.5Lxx) into the remaining locking holes using the technique described in the step 1 and 2.

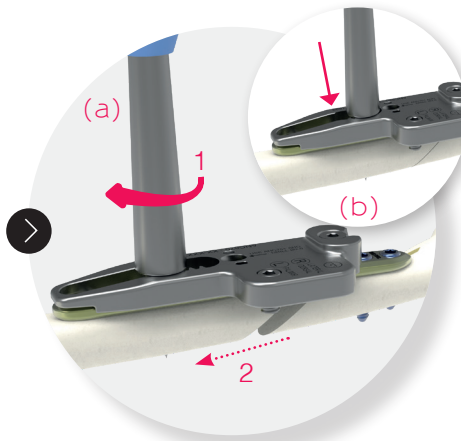


SURGICAL TECHNIQUE OPTION 2: COMPRESSION LAG SCREW



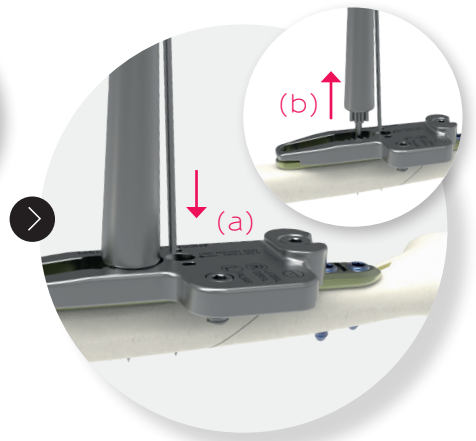
9. Slide the cannulated compression handle along the Ø2.2 mm pin (33.0222.120) and into the rack-and-pinion section of the block.

⚠ Unscrew the non-locking screw (CT3.5Lxx) of only half a turn so that the plate may be slid.



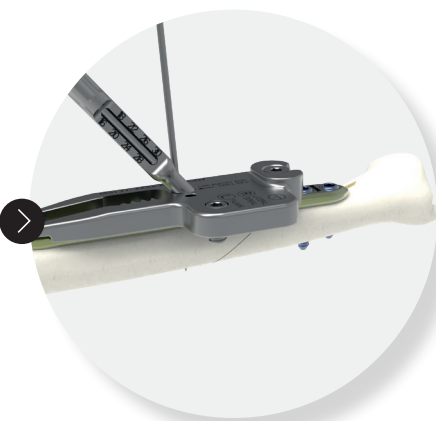
10.a. Rotate the cannulated handle to perform compression of the osteotomy site.

10.b. While maintaining the compression, tighten the Ø3.5 mm non-locking screw (CT3.5Lxx) into the oblong hole.



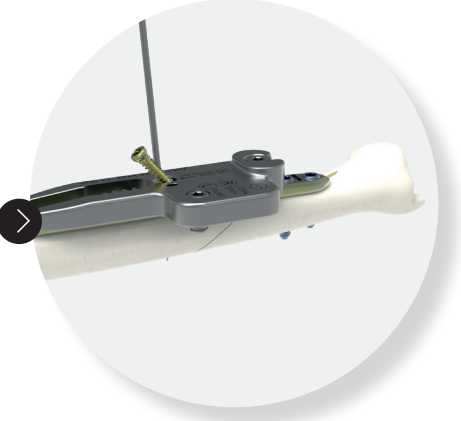
11.a. Insert a Ø1.6 mm pin (33.0216.100) into one of the appropriate side holes for stabilization of the assembly. **Make sure to insert the pin into the proximal part of the pin hole in order to allow compression.**

11.b. Then remove both the cannulated compression handle (ANC669) and the Ø2.2 mm pin (33.0222.120).

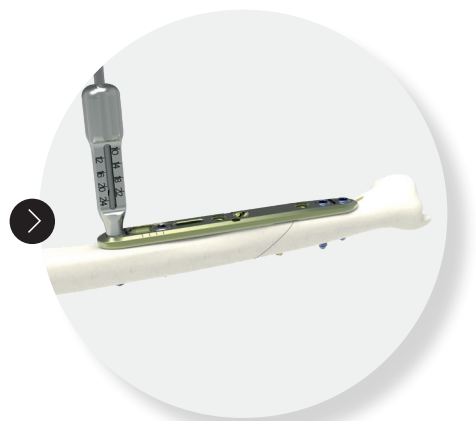


12. Position the Ø2.0 mm non threaded gauge (ANC751) into the pre-angled (50°) hole of the block and perform the drilling (Ø2.0 mm) (ANC088). Read directly the drilling depth on the Ø2.0 mm non threaded guide gauge (ANC751).

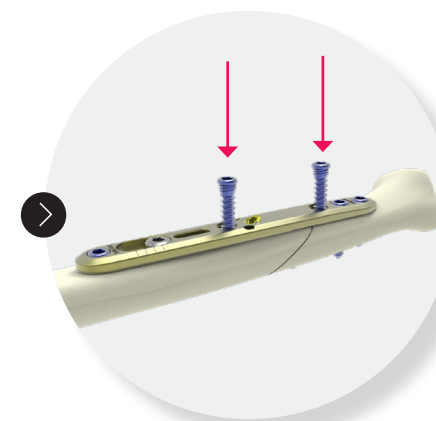
⚠ Ø2.7 mm drill **must not be used** into the preangled hole (ANC089C).



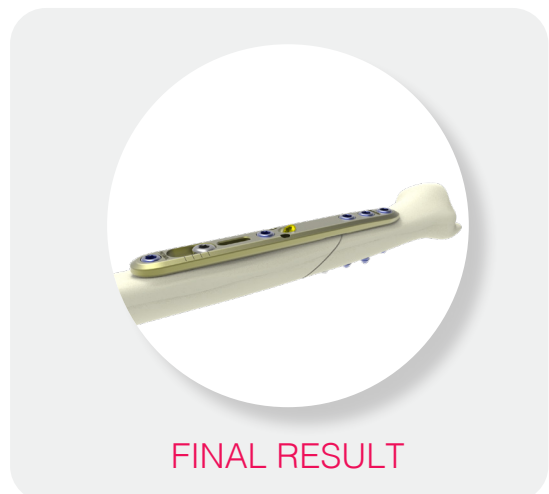
13. Insert a Ø2.8 mm lag screw (QBT2.8Lxx) directly through the block using the appropriate screwdriver (ANC082).



14. Remove the Ø1.6 mm pin and the block. Into the most proximal hole, drill (Ø2.7mm) (ANC089C) using the Ø2.7 mm threaded gauge gauge (ANC186). Insert a Ø3.5 mm locking screw (SOT3.5Lxx) using the screwdriver part of the 2-in-1 instrument (ANC083C).



15. Complete the procedure by inserting the last two Ø3.5 mm locking screws (SOT3.5Lxx) into the remaining locking holes using the technique described in step 1 and 2.

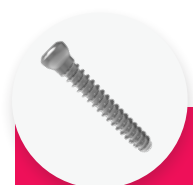


FINAL RESULT

IMPLANTS REFERENCES

ALIANS ULNA PLATE 3/3

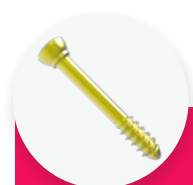
Ref.	Description
HTSIS2	Distal ulnar osteotomy plate - Symmetrical - Size 2



Ø2.8 mm
Non-locking SCREW*

Ref.	Description
CT2.8L16	Ø2.8 mm non-locking screw - L16 mm
CT2.8L18	Ø2.8 mm non-locking screw - L18 mm
CT2.8L20	Ø2.8 mm non-locking screw - L20 mm
CT2.8L22	Ø2.8 mm non-locking screw - L22 mm
CT2.8L24	Ø2.8 mm non-locking screw - L24 mm

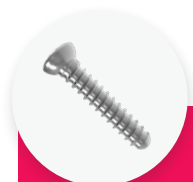
* Non anodized.



Ø2.8 mm
LAG SCREW*

Ref.	Description
QBT2.8L18	Ø2.8 mm lag screw - L18 mm
QBT2.8L20	Ø2.8 mm lag screw - L20 mm
QBT2.8L22	Ø2.8 mm lag screw - L22 mm
QBT2.8L24	Ø2.8 mm lag screw - L24 mm

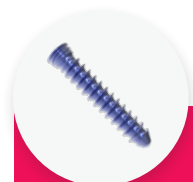
* Yellow anodized.



Ø3.5 mm
Non-locking SCREW*

Ref.	Description
CT3.5L10	Ø3.5 mm non-locking screw - L10 mm
CT3.5L12	Ø3.5 mm non-locking screw - L12 mm
CT3.5L14	Ø3.5 mm non-locking screw - L14 mm
CT3.5L16	Ø3.5 mm non-locking screw - L16 mm
CT3.5L18	Ø3.5 mm non-locking screw - L18 mm
CT3.5L20	Ø3.5 mm non-locking screw - L20 mm
CT3.5L22	Ø3.5 mm non-locking screw - L22 mm

* Non anodized.



Ø3.5 mm
LOCKING SCREW*

Ref.	Description
SOT3.5L10	Ø3.5 mm locking screw - L10 mm
SOT3.5L12	Ø3.5 mm locking screw - L12 mm
SOT3.5L14	Ø3.5 mm locking screw - L14 mm
SOT3.5L16	Ø3.5 mm locking screw - L16 mm
SOT3.5L18	Ø3.5 mm locking screw - L18 mm
SOT3.5L20	Ø3.5 mm locking screw - L20 mm
SOT3.5L22	Ø3.5 mm locking screw - L22 mm

* Blue anodized.

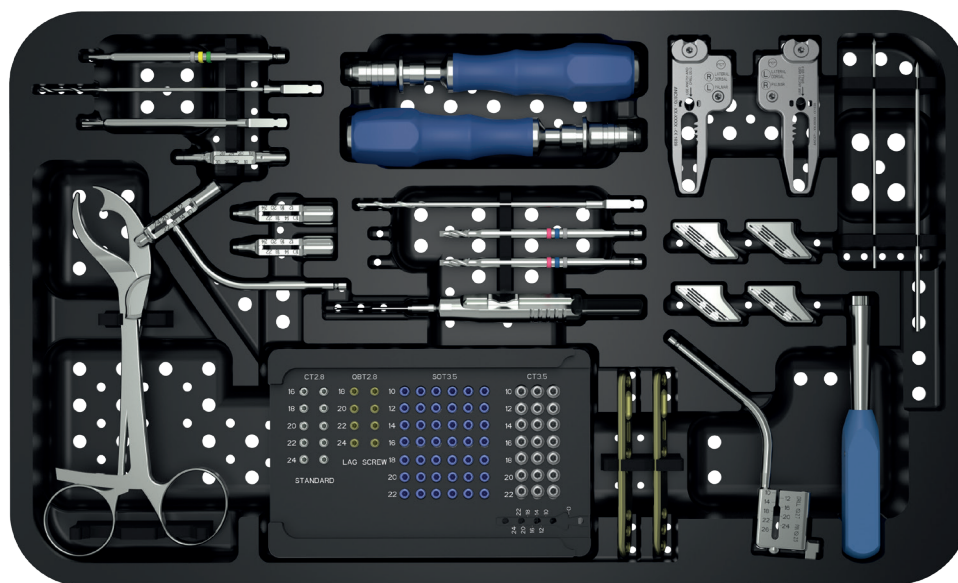
Remark:

Please note that all implants are also available in sterile packaging.
An 'ST' code is added at the end of the reference.
e.g. « CT3.5L10-ST »

INSTRUMENT REFERENCES

ALIANS ULNA 3/3 INSTRUMENTS

Ref.	Description	Qty
ANC082	2.0 mm quick coupling hexagonal prehensor screwdriver	2
ANC083C	2 in 1 : 2.5 mm hexagonal prehensor screwdriver - Ø3.5 mm countersink	2
ANC084	Ø2.8 mm quick coupling countersink	1
ANC088	Ø2.0 mm quick coupling drill bit – L125 mm	1
ANC089C	Ø2.7 mm quick coupling drill bit - L125 mm	2
ANC124	Length gauge for Ø3.5 mm screws	1
ANC171/1	Ulna cutting guide 3 - 5 mm	1
ANC171/2	Ulna cutting guide 2 - 4 - 6 mm	1
ANC186	Ø2.7 mm threaded guide gauge for Ø3.5 mm screws	2
ANC191	Ø2.7 mm non threaded bent guide gauge for Ø3.5 mm screws	1
ANC349	15 cm verbrugge forceps	2
ANC350	Ø4.5 mm AO quick coupling handle – Size 1	2
ANC669	Ø2.6 mm cannulated handle for Ulna cutting guide	1
ANC670	Left long block for Ulna plate	1
ANC671	Right long block for Ulna plate	1
ANC750	Ø2.7 mm non threaded bent guide gauge – Ø2.5 mm pin guide	1
ANC751	Ø2.0 mm non threaded guide gauge for Ulna	1
33.0216.100	Pin Ø1.6 L100	2
33.0222.120	Pin Ø2.2 L120	2



ANC796

REMOVAL KIT

If you have to remove ALIANS ULNA implants, make sure to order the **Newclip Technics** removal set which includes the following instruments:

- ANC103 for Ø2.8 mm screws
- ANC107 for Ø3.5 mm screws
- ANC350: Ø4.5 mm AO quick coupling handle - Size 1
- ANC351: Ø4.5 mm AO quick coupling handle - Size 2

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.