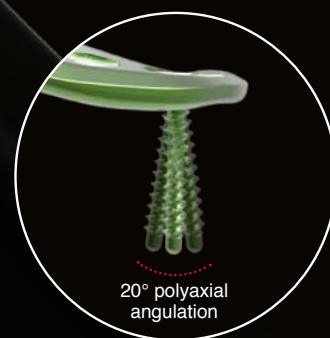




NEWCLIP-TECHNICS

INNOVATION MEANS MOTION



ALIANS CLAVICLE

POLYAXIAL LOCKING FIXATION
DUALTEC SYSTEM® II

- ▶ Precontoured and bendable implants
- ▶ Comprehensive range of plates: superior and anterior implants
- ▶ Pre-angled screws allowing a 20° polyaxial angulation

ALIANS CLAVICLE

Indications: Implants of the Alians Clavicle range are dedicated to the fixation of fractures, mal-unions, non-unions, and osteotomies of the clavicle in adults.

Contraindications:

- Serious vascular deterioration, bone devitalization,
- Pregnancy.
- Acute or chronic, local or systemic infections.
- Lack of musculo-cutaneous cover, severe vascular deficiency touching the focus.
- Insufficient bone quality preventing a good fixation of the screws into the bone.
- Muscular deficit, neurological deficiency or behavioural disorders which could submit the osteosynthesis to abnormal mechanical strains.
- Foreign body sensitivity or allergy to one of the materials used.
- Patients with mental or neurological conditions who are unwilling or incapable of following post-operative care instructions.
- Patients with poor physical condition and/or mental instability.

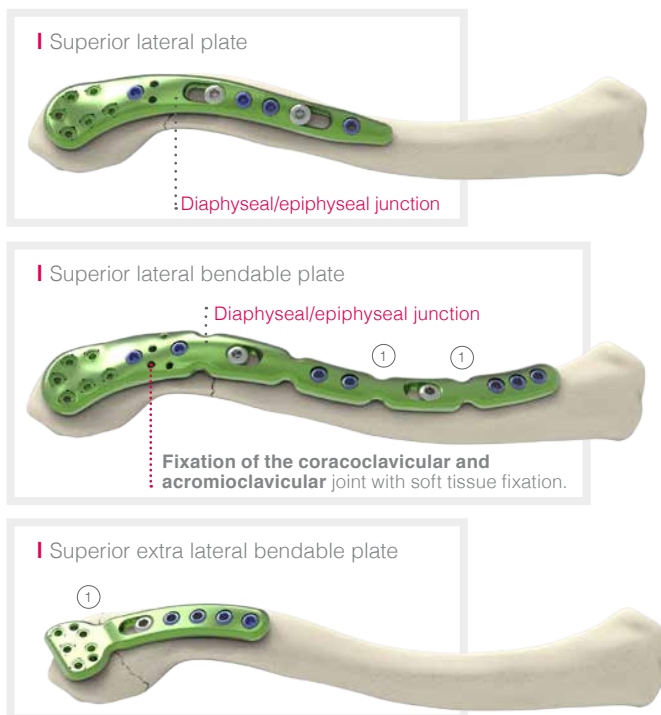
A COMPREHENSIVE RANGE OF PLATES

→ PLATES DEDICATED TO THE MIDDLE THIRD OF THE CLAVICLE:



***Interaxial section:** The interaxial section of the plate is positioned above the fracture so as to improve the torsional resistance of the device.

→ PLATES DEDICATED TO THE LATERAL CLAVICLE:



FIXATIONS

- DTS2® polyaxial holes for Ø2.8 mm locking screws (SDT2.8Lxx), for lateral plates only.



- Holes for Ø3.5 mm locking (SOT3.5Lxx) and non-locking (QOT3.5Lxx) screws.



- Oblong holes for Ø3.5 mm (CT3.5Lxx) cortical screws.



①: Thanks to their bendable sections, the bendable plates ensure an optimized fit in case of complex fractures and non-unions.

TECHNICAL FEATURES

A PRECONTOURED IMPLANT

→ OPTIMIZED ANATOMICAL CONGRUENCE

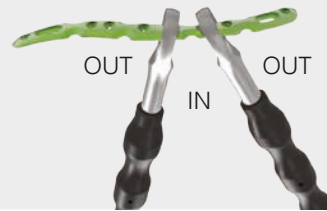
The design of this implant is the result of a proprietary state-of-the-art mapping technology to establish an optimized congruence between the plate and the bone.



BENDABLE PLATES

Some plates from ALIANS CLAVICLE range offer bending areas. It is possible to bend the plate with the bending irons (ANC218)* 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 of the fixation. There is a risk of distortion of the holes when bending the plate.



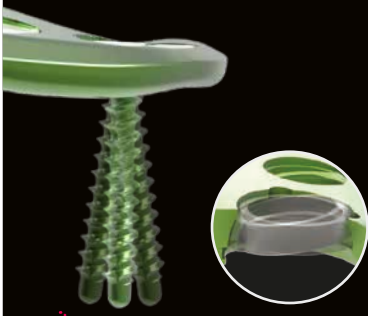
*The bending irons (ANC218) are not compatible with extra lateral bendable plates (CBTxLN1 / CBTxLN2).

ANGULAR RANGE: +/- 10° POLYAXIAL LOCKING FIXATION

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

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.



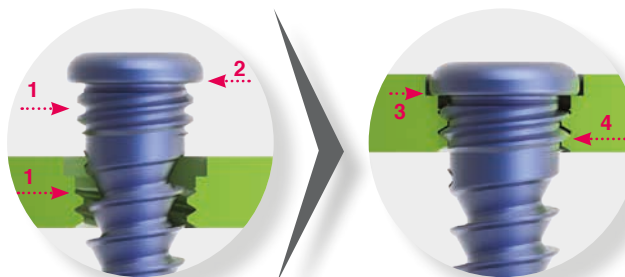
Polyaxiality of 20°



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 screw head reaches a mechanical stop in the slot, insuring the locking,
 - The screw head is buried in the plate,
- > Construct limiting the risk of cold welding,
- > Construct allowing a perfect coaptation of both profiles when locking (4).

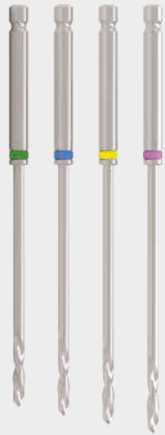
SURGICAL TECHNIQUE

MEDIAL PLATE

Surgical technique example with the medial lateral plate, Size 2 (CTDML2).

RANGE OF QUICK COUPLING SELF-LIMITING DRILL BITS

The Alians Clavicle kit offers a range of self-limiting drill bits designed for the insertion of Ø3.5 mm screws, to avoid any risks of excessive penetration and to protect the subclavian artery.

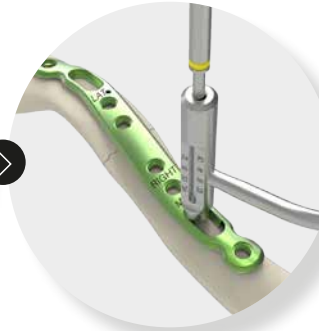


SELF-LIMITING DRILL BITS

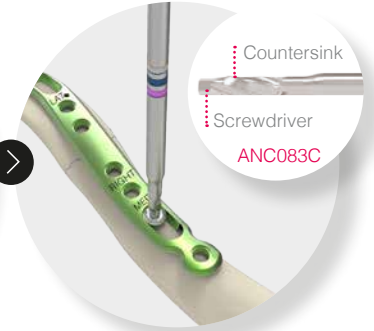
Ref.	Ring color	Length of corresponding screws
ANC187	Green	12 mm
ANC188	Blue	14 mm
ANC189	Yellow	16 mm
ANC190	Pink	18 mm



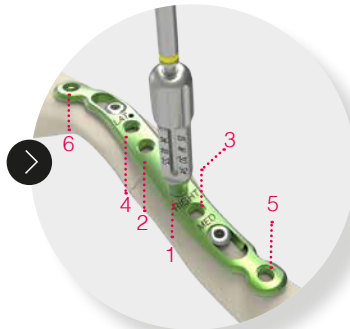
1. Position the plate making sure that the "LAT" and "MED" marks are correctly matched.



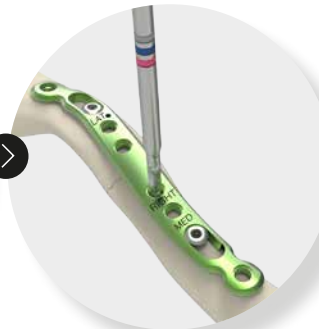
2. Perform the drilling using the non threaded bent guide gauge (ANC191) and the self-limiting drill bits (see herein) into the medial oblong hole.



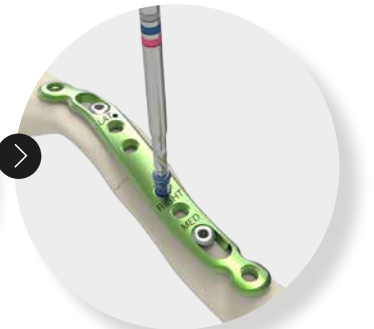
3. Insert the cortical screw (CT3.5Lxx) using the screwdriver part of the 2-in-1 instrument (ANC083C). Repeat the same procedure for the remaining lateral oblong hole.



4. Insert the threaded guide gauge (ANC186C), for the Ø3.5 mm locking screws (SOT3.5Lxx) starting from the holes located near the fracture to those located at each end of the plate. Perform drilling using either the self-limiting drill bits or the Ø2.7 mm drill bit (ANC089C).



5. To ease the insertion of the Ø3.5 mm locking screws (SOT3.5Lxx), use the countersink part of the 2-in-1 instrument (ANC083C) in the hole previously drilled. This instrument has to be used for the 3 remaining locking screws (SOT3.5Lxx) insertion.



6. Insert the Ø3.5 mm locking screw (SOT3.5Lxx) using the screwdriver part of the 2-in-1 instrument (ANC083C). Repeat these procedures for the remaining Ø3.5 mm locking screws (SOT3.5Lxx).

FINAL RESULT



SURGICAL TECHNIQUE

LATERAL PLATE

Surgical technique example with the lateral plate, Size 2 (CTDL2).

→ MONOAXIAL SURGERY



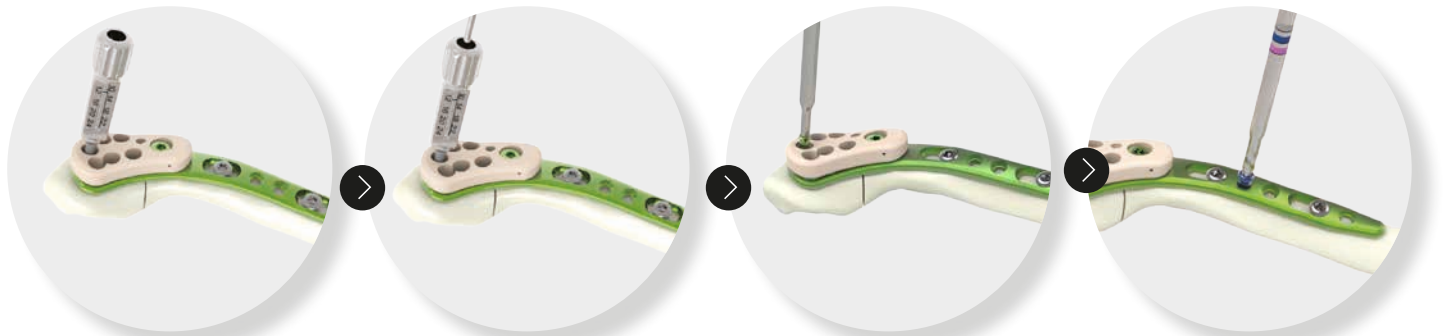
1. Secure temporarily the fracture using wires. Lock the fast guide (ANC193 or ANC194 depending on the operated side) onto the plate and position the latter above the fracture.

2. In the oblong hole, drill (range of self-limiting drill bits or ANC089C) then directly read the drilling depth on the $\varnothing 2.7$ mm non threaded bent guide gauge (ANC191) (cf a). Insert the cortical screw (CT3.5Lxx) using the screwdriver part of the 2-in-1 instrument (ANC083C) (cf b). If needed, readjust the position of the plate using the oblong hole.

3. Drill (ANC088C) then directly read the drilling depth on the $\varnothing 2.0$ mm non threaded guide gauge (ANC046C) (cf. c). The $\varnothing 2.8$ mm epiphyseal locking screws (SDT2.8Lxx) are inserted into the plate through the fast guide, using the screwdriver (ANC082C) (cf d).

4. To ease the insertion of the $\varnothing 3.5$ mm locking screws (SOT3.5Lxx), use the countersink part of the 2-in-1 instrument (ANC083C) to widen the first cortex previously drilled. Then, insert the $\varnothing 3.5$ mm locking screw (SOT3.5Lxx) with the screwdriver part of the 2-in-1 instrument (ANC083C).

→ POLYAXIAL SURGERY



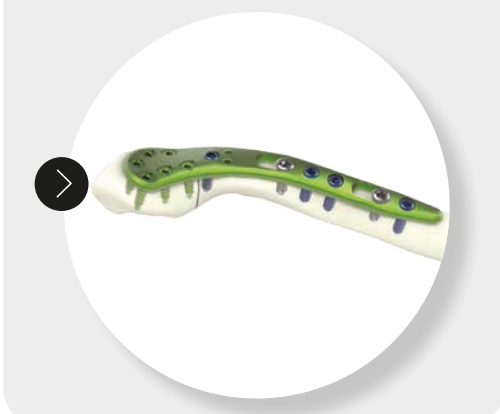
1. Insert the polyaxial guide gauge (ANC268C) into the plate through the fast guide (ANC193 or ANC194 depending on the operated side).

2. Then angulate as required and drill using the $\varnothing 2.0$ mm drill bit (ANC088C).

3. The $\varnothing 2.8$ mm epiphyseal screws (SDT2.8Lxx) are inserted into the plate through the fast guide using the screwdriver (ANC082C).

4. To ease the insertion of the $\varnothing 3.5$ mm locking screws (SOT3.5Lxx) use the countersink part of the 2-in-1 instrument (ANC083C) to widen the first cortex previously drilled. Then, insert the $\varnothing 3.5$ mm locking screw (SOT3.5Lxx) with the screwdriver part of the 2-in-1 instrument (ANC083C).

FINAL RESULT



IMPLANTS REFERENCES

→ MEDIAL PLATES



SUPERIOR MEDIAL PLATES	
Ref.	Description
CTDM1	Clavicle plate - Medial part - Size 1 - Right - 6 holes - L71 mm
CTGM1	Clavicle plate - Medial part - Size 1 - Left - 6 holes - L71 mm
CTDM2	Clavicle plate - Medial part - Size 2 - Right - 8 holes - L91 mm
CTGM2	Clavicle plate - Medial part - Size 2 - Left - 8 holes - L91 mm

SUPERIOR MEDIAL BENDABLE PLATES	
Ref.	Description
CBTDM1	Bendable clavicle plate - Medial part - Size 1 - Right - 6 holes - L84 mm
CBTGM1	Bendable clavicle plate - Medial part - Size 1 - Left - 6 holes - L84 mm
CBTDM2	Bendable clavicle plate - Medial part - Size 2 - Right - 10 holes - L127 mm
CBTGM2	Bendable clavicle plate - Medial part - Size 2 - Left - 10 holes - L127 mm

ANTERIOR MEDIAL BENDABLE PLATE	
Ref.	Description
CBTSA2	Bendable medial clavicle plate - Symmetrical - Size 2 - Anterior - 8 holes - L95 mm

→ MEDIAL LATERAL PLATES



SUPERIOR MEDIAL LATERAL PLATES	
Ref.	Description
CTDML2	Clavicle plate - Medial lateral part - Size 2 - Right - 8 holes - L93 mm
CTGML2	Clavicle plate - Medial lateral part - Size 2 - Left - 8 holes - L93 mm

→ LATERAL PLATES



SUPERIOR LATERAL PLATES	
Ref.	Description
CTDL1	Clavicle plate - Lateral part - Size 1 - Right - 10 holes - L75 mm
CTGL1	Clavicle plate - Lateral part - Size 1 - Left - 10 holes - L75 mm
CTDL2	Clavicle plate - Lateral part - Size 2 - Right - 12 holes - L96 mm
CTGL2	Clavicle plate - Lateral part - Size 2 - Left - 12 holes - L96 mm

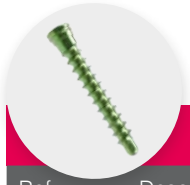
SUPERIOR LATERAL BENDABLE PLATES	
Ref.	Description
CBTDL2	Bendable clavicle plate - Lateral part - Size 2 - Right - 15 holes - L143 mm
CBTGL2	Bendable clavicle plate - Lateral part - Size 2 - Left - 15 holes - L143 mm

SUPERIOR EXTRA LATERAL BENDABLE PLATES	
Ref.	Description
CBTDLN1	Bendable clavicle plate - Lateral part - Extra - Size 1 - Right - 8 holes - L44 mm
CBTGLN1	Bendable clavicle plate - Lateral part - Extra - Size 1 - Left - 8 holes - L44 mm
CBTDLN2	Bendable clavicle plate - Lateral part - Extra - Size 2 - Right - 10 holes - L55 mm
CBTGLN2	Bendable clavicle plate - Lateral part - Extra - Size 2 - Left - 10 holes - L55 mm



IMPLANTS REFERENCES

→ Ø2.8 MM SCREWS

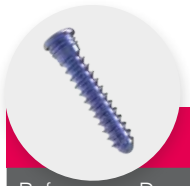


LOCKING SCREWS*

Ref.	Description
SDT2.8L10	Locking screw - Ø2.8 mm - L10 mm
SDT2.8L12	Locking screw - Ø2.8 mm - L12 mm
SDT2.8L14	Locking screw - Ø2.8 mm - L14 mm
SDT2.8L16	Locking screw - Ø2.8 mm - L16 mm
SDT2.8L18	Locking screw - Ø2.8 mm - L18 mm
SDT2.8L20	Locking screw - Ø2.8 mm - L20 mm
SDT2.8L22	Locking screw - Ø2.8 mm - L22 mm
SDT2.8L24	Locking screw - Ø2.8 mm - L24 mm

* Green anodized.

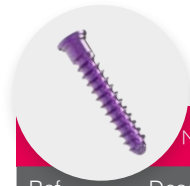
→ Ø3.5 MM SCREWS



LOCKING SCREWS*

Ref.	Description
SOT3.5L10	Locking screw - Ø3.5 mm - L10 mm
SOT3.5L12	Locking screw - Ø3.5 mm - L12 mm
SOT3.5L14	Locking screw - Ø3.5 mm - L14 mm
SOT3.5L16	Locking screw - Ø3.5 mm - L16 mm
SOT3.5L18	Locking screw - Ø3.5 mm - L18 mm
SOT3.5L20	Locking screw - Ø3.5 mm - L20 mm
SOT3.5L22	Locking screw - Ø3.5 mm - L22 mm
SOT3.5L24	Locking screw - Ø3.5 mm - L24 mm

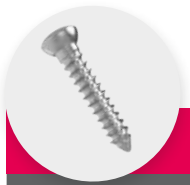
* Blue anodized.



NON LOCKING SCREWS*

Ref.	Description
QOT3.5L10	Non locking screw - Ø3.5 mm - L10 mm
QOT3.5L12	Non locking screw - Ø3.5 mm - L12 mm
QOT3.5L14	Non locking screw - Ø3.5 mm - L14 mm
QOT3.5L16	Non locking screw - Ø3.5 mm - L16 mm
QOT3.5L18	Non locking screw - Ø3.5 mm - L18 mm
QOT3.5L20	Non locking screw - Ø3.5 mm - L20 mm
QOT3.5L22	Non locking screw - Ø3.5 mm - L22 mm
QOT3.5L24	Non locking screw - Ø3.5 mm - L24 mm

* Fuchsia anodized.



CORTICAL SCREWS*

Ref.	Description
CT3.5L10	Standard cortical screw - Ø3.5 mm - L10 mm
CT3.5L12	Standard cortical screw - Ø3.5 mm - L12 mm
CT3.5L14	Standard cortical screw - Ø3.5 mm - L14 mm
CT3.5L16	Standard cortical screw - Ø3.5 mm - L16 mm
CT3.5L18	Standard cortical screw - Ø3.5 mm - L18 mm
CT3.5L20	Standard cortical screw - Ø3.5 mm - L20 mm
CT3.5L22	Standard cortical screw - Ø3.5 mm - L22 mm
CT3.5L24	Standard cortical screw - Ø3.5 mm - L24 mm

CT3.5L26 Standard cortical screw - Ø3.5 mm - L26 mm

* Not anodized.

INSTRUMENTS REFERENCES

INSTRUMENTS		
Ref	Description	Qty
ANC046C	Ø2.0 mm non threaded guide gauge for Ø2.8 mm screws	1
ANC082C	2.0 mm quick coupling hexagonal prehensor screwdriver	1
ANC083C	2 in 1 : 2.5 mm hexagonal prehensor screwdriver - Ø3.5 mm countersink	1
ANC084	Ø2.8 mm quick coupling countersink	1
ANC088C	Ø2.0 mm quick coupling drill bit - L 125 mm	1
ANC089C	Ø2.7 mm quick coupling drill bit - L 125 mm	1
ANC102	Length gauge for Ø2.8 mm screws	1
ANC103	2.0 mm hexagonal non prehensor screwdriver	1
ANC107	2.5 mm quick coupling hexagonal non prehensor screwdriver	1
ANC124	Length gauge for Ø3.5 mm cortical screws	1
ANC160	Handle for fast drilling guide	1
ANC186	Ø2.7 mm threaded guide gauge for Ø3.5 mm screws	2
ANC187	Ø2.7 mm quick coupling drill bit for 12 mm screws	1

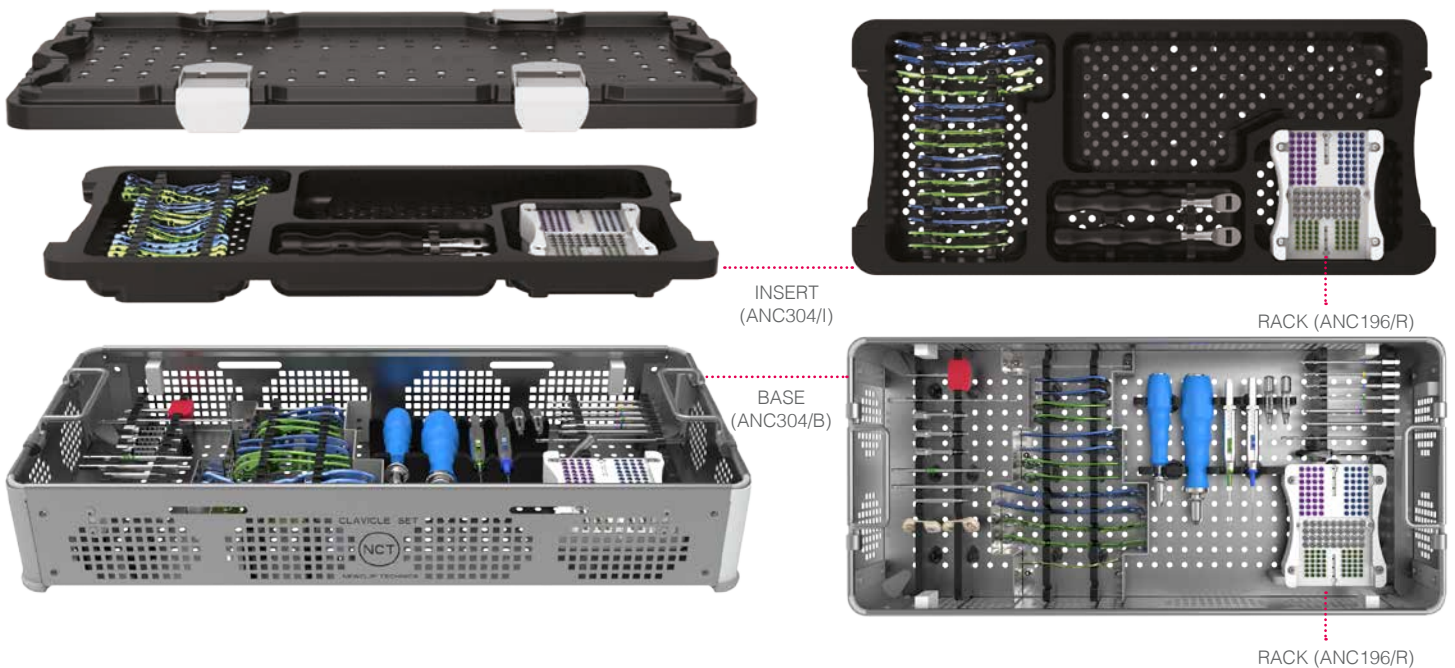
INSTRUMENTS		
Ref	Description	Qty
ANC188	Ø2.7 mm quick coupling drill bit for 14 mm screws	1
ANC189	Ø2.7 mm quick coupling drill bit for 16 mm screws	1
ANC190	Ø2.7 mm quick coupling drill bit for 18 mm screws	1
ANC191	Ø2.7 mm non threaded bent guide gauge for Ø3.5 mm screws	1
ANC193	Fast drilling guide for CTGLx and CBTGLx plates	1
ANC194	Fast drilling guide for CTDLx and CBTDLx plates	1
ANC218	Bending pliers	2
ANC268C	Ø2.0 mm threaded guide gauge for Ø2.8 mm screws	2
ANC350	Ø4.5 mm AO quick coupling handle - Size 1	1
ANC351	Ø4.5 mm AO quick coupling handle - Size 2	1
ANC463	Ø3.5 mm quick coupling countersink	1
33.0212.120	Pin Ø1.2 L120 mm	4

REMOVAL KIT

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

- ANC103 or ANC082 for Ø2.8 mm screws
- ANC107 or ANC016 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

→ 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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