



NEWCLIP-TECHNICS

INNOVATION MEANS MOTION



XPERT WRIST 2.4 - FRAGMENT SPECIFIC PLATES

Dorsal plates, radial column plates and distal ulna plates

- ▶ Precontoured implants
- ▶ Pre-angled screws and polyaxiality of 20°
- ▶ Ø2.4 mm single screw diameter
- ▶ Locking oblong hole

XPERT WRIST 2.4 - FRAGMENT SPECIFIC

Indications : The implants of the Xpert Wrist range are intended for hand and forearm fractures, osteotomies and arthrodeses in adults.

Contraindications:

- 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

DISTAL RADIUS PLATES

→ COMPLETE RANGE OF IMPLANTS FOR RADIAL COLUMN AND INTERMEDIATE COLUMN

➤ **Dorso-medial plates**



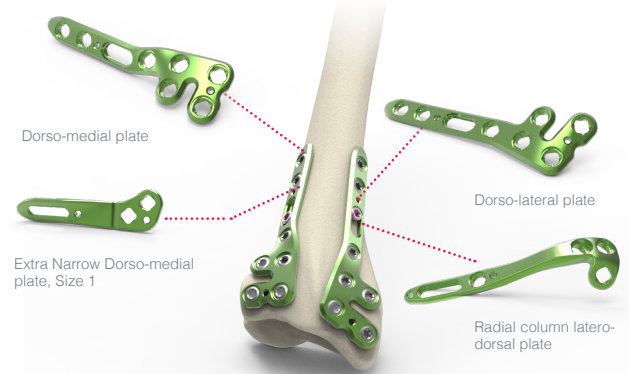
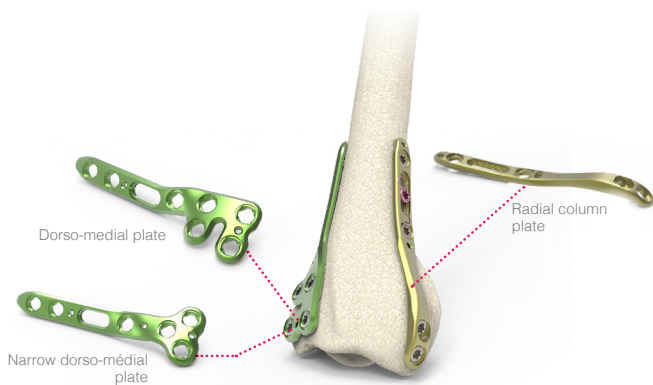
➤ **Dorso-lateral plates**



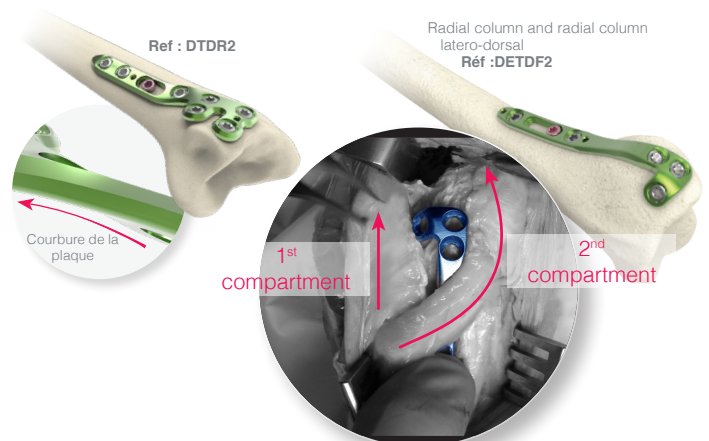
➤ **Radial column latero-dorsal plates**



➤ **Radial column distal plates**



- **Precontoured plates** for anatomical fit on the posterior area, anatomical reduction and limited contact with extensor tendons,
- **Anatomical and low profile plates** to minimize tendons and soft tissues irritation,
- **Twisted shape** of the metaphysis part of the dorsal plates to limit the contact with extensors compartments,
- **Multiple points of fixation** and the ability to reach small fragments (dorsal lip comminution), allowing to treat high comminutive fractures.
- **Smooth zone in metaphyseal part to limit contact with the long and short thumb abductor.**



TECHNICAL FEATURES

→ RIM HOOK PLATES



➤ Posterior hook



➤ Anterior hook



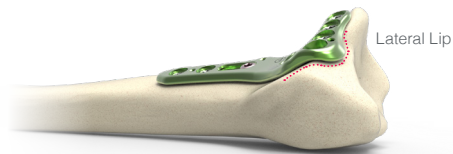
→ VOLAR RIM PLATES

Application: Stabilization of complex intra-articular fractures of the distal radius.

- **Precontoured plates** for anatomical fit on anterior area, anatomical reduction and limited contact with flexor tendons,
- **Low-profile plates** to minimize tendons and soft tissues irritation,
- **Lateral lip** allowing the plate positioning on the watershed line.



CAUTION
The window's hole is for **monoaxial** fixation only.

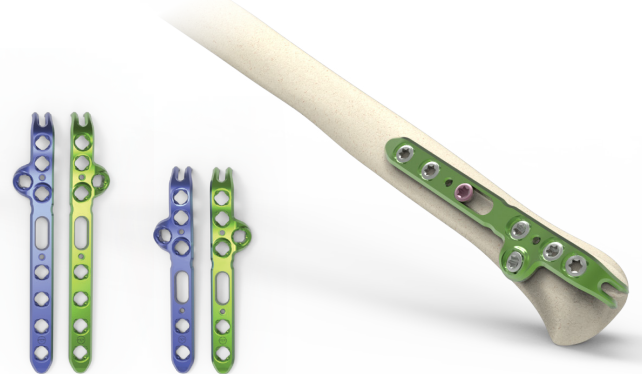


Post-operative Consideration

The plate positioning onto the watershed line may increase the risk of tendon injury. Surgeon should take this into consideration during subsequent follow-up of the patient. Plate removal post-healing is mandatory.

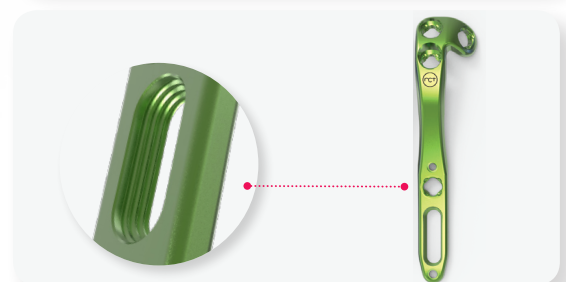
DISTAL ULNA PLATES

- **Antero-lateral positioning**, with an anterior bracket improving the stability of the plate and acting as a reference point for the plate positioning,
- **Anatomical and low profile** design to minimize tendon and soft tissues irritation,
- **Pointed hooks** to grip the ulnar styloid process and act as a reference point for the plate positioning,
- **Intercrossing locking screws:**
 - Hold securely the ulnar head,
 - Increase the stability and provide secure and stable fixation.



FIXATION TECHNICAL FEATURES

- **A single screw diameter:** Ø2.4 mm locking screws (SDT2.4Lxx) and Ø2.4 mm non-locking screws (CT2.4Lxx) for operative time saving.
- **Pre-oriented holes** for optimized screw positioning (ANC694).
- **New patented polyaxial platform, allowing angulation of ± 10°**, thanks to the use of the **polyaxial drill guide (ANC687)**, and allowing to adjust the orientation of the screws according to the ulnar and radiocarpal joints.
- **Hexalobular stamp**
- **Blunt tip**
- **Locking Oblong hole:** Depending on the surgical technique, the cortical screws can be used either to finalize the reduction by compressing the plate on the bone, or to temporarily stabilize the plate. In case of poor bone quality, the use of a locking screw can also increase the stability.



⚠ When using the polyaxial drill guide, make sure that the guide is held in the axis to prevent over-angulation of the drill, which could lead to failure of the locking mechanism.

SURGICAL TECHNIQUE

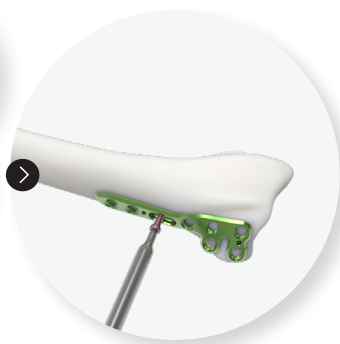
DORSO-MEDIAL AND RADIAL COLUMN PLATES

Example: Double column assembly with dorso-medial plate (DTDR2) and radial column plate (DETSL2).



1. Position the dorso-medial plate and drill (ANC696) using the threaded guide gauge (ANC694) or the non-threaded bent guide gauge (ANC695) into the oblong hole.

Determine the screw length directly on the guide gauge or use the length gauge (ANC102).



2. Insert the $\text{\O}2.4$ mm standard cortical screw (CT2.4Lxx) using the screwdriver (ANC575).



3. Position the radial column plate and drill (ANC696) using the threaded guide gauge (ANC694) or the non-threaded bent guide gauge (ANC695) into the oblong hole.

Determine the screw length directly on the guide gauge or use the length gauge (ANC102).



4. Insert the $\text{\O}2.4$ mm standard cortical screw (CT2.4Lxx) using the screwdriver (ANC575).



5. Insert two $\text{\O}2.4$ mm locking screws (SDT2.4Lxx) in the most distal holes of the dorso medial plate using the polyaxial drill guide (ANC687) or the threaded guide gauge (ANC694) and the drill bit (ANC696).



6. The drilling depth can be measured by inserting the length gauge (ANC102).



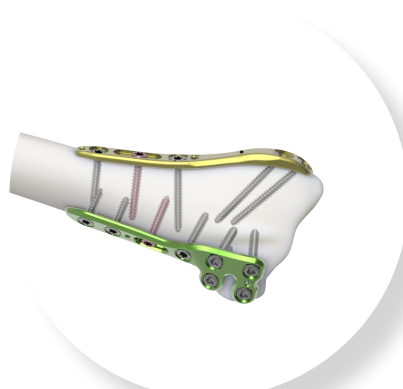
7. Insert the 2 locking screws (SDT2.4Lxx) in the most distal holes of the radial column plate using the polyaxial drill guide (ANC687) and the drill bit (ANC696).



8. The drilling depth can be measured by inserting the length gauge (ANC102).



9. Repeat the same steps for the remaining $\text{\O}2.4$ mm locking screws (SDT2.4Lxx).



FINAL RESULT

SURGICAL TECHNIQUE

EXTRA-DISTAL RADIUS PLATE

Example with an extra-distal plate for distal radius - Narrow head (DETDVN1)



1. Position the plate on the watershed line using the lateral lip of the plate.



2. Drill (ANC696) using the threaded guide gauge (ANC694) or the non-threaded bent guide gauge (ANC695) into the oblong hole.

Determine the screw length directly on the guide gauge (ANC694) or use the length gauge (ANC102).



3. Insert the Ø2.4 mm standard cortical screw (CT2.4Lxx) using the screwdriver (ANC575).



OPTIONAL STEPS :

4. To ensure that the screws do not go into the joint, insert the pin (33.0212.120) into the radioulnar locking hole using the pin guide (ANC859) and verify its position by X-Ray.

If necessary, remove the pin and readjust the plate positioning using the oblong hole.



5. Lock the threaded guide gauge (ANC694) in the radioulnar locking hole.

Determine the screw length directly on the guide gauge (ANC694) or use the length gauge (ANC102).

NB : It is possible to modify the angulation using the polyaxial drill guide (ANC687) and the drill (ANC696). Then measure the depth using the length gauge (ANC102).



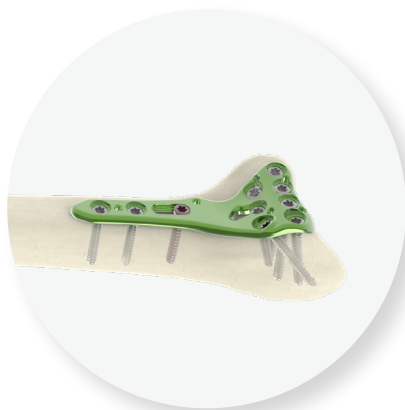
6. Insert a Ø2.4 mm locking screw (SDT2.4Lxx) using the screwdriver (ANC575).



7. Repeat the last 2 steps for the remaining locking screws (SDT2.4Lxx) going from the distal to the proximal part of the plate.



8. In order to support the distal part, proceed in the same way as steps 5 and 6 for the monoaxial hole in the window.

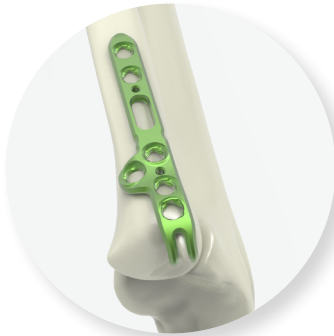


FINAL RESULT

SURGICAL TECHNIQUE

DISTAL ULNA PLATE

Example with distal ulna plate (HTDE1)



1. Grab the ulnar styloid with the hooks and position the plate onto the bone using both the hooks and anterior bracket as reference points.



2. Drill (ANC696) using the threaded guide gauge (ANC694) or the non-threaded bent guide gauge (ANC695) into the oblong hole.

Determine the screw length directly on the guide gauge (ANC694) or use the length gauge (ANC102).



3. Insert the Ø2.4 mm standard cortical screw (CT2.4Lxx) using the screwdriver (ANC575).



4. In the most distal locking hole, lock the polyaxial drill guide (ANC687). Angulate the drill bit (ANC696) if necessary and drill.

The threaded guide gauge (ANC694) can also be used for a monoaxial use.



5. The drilling depth can be measured by inserting the length gauge (ANC102).

It can also be directly read on the threaded guide gauge (ANC694).



6. Insert the Ø2.4 mm locking screw (SDT2.4Lxx) using the screwdriver (ANC575).



7. Repeat these same steps for the remaining locking screws (SDT2.4Lxx) going from the distal to the proximal part of the plate.



FINAL RESULT

IMPLANTS REFERENCES

DORSO-MEDIAL PLATES

Ref.	Description
DTDRNS1	Dorso-medial plate for distal radius - Extra narrow head - Right - Size 1
DTGRNS1	Dorso-medial plate for distal radius - Extra narrow head - Left - Size 1
DTDRNS2	Dorso-medial plate for distal radius - Extra narrow head - Right - Size 2
DTGRNS2	Dorso-medial plate for distal radius - Extra narrow head - Left - Size 2
DTDR2	Dorso-medial plate for distal radius - Right - Size 2
DTGR2	Dorso-medial plate for distal radius - Left - Size 2



IMPLANTS REFERENCES

DORSO-LATERAL PLATES

Ref.	Description
DTDQ2	Dorso-lateral plate for distal radius - Right - Size 2
DTGQ2	Dorso-lateral plate for distal radius - Left - Size 2



RADIAL COLUMN PLATES

Ref.	Description
DETSL1	Radial column distal plate – Symmetrical - Size 1
DETSL2	Radial column distal plate – Symmetrical - Size 2



RADIAL COLUMN LATERO-DORSAL PLATES

Ref.	Description
DETDf1	Radial column latero-dorsal plate - Right - Size 1
DETDf2	Radial column latero-dorsal plate - Right - Size 2
DETDG1	Radial column latero-dorsal plate - Left - Size 1
DETDG2	Radial column latero-dorsal plate - Left - Size 2



EXTRA DISTAL VOLAR PLATE

Ref.	Description
DETDVN1	Extra distal plate for distal radius - Narrow head - Right - Size 1
DETDVN1	Extra distal plate for distal radius - Narrow head - Left - Size 1
DETDVS1	Extra distal plate for distal radius - Standard head - Right - Size 1
DETDVS1	Extra distal plate for distal radius - Standard head - Left - Size 1



RADIAL HOOK PLATE

Ref.	Description
DTSH2	Volar rim hook – Symmetrical - Size 2
DTSTH2	Dorsal rim hook – Symmetrical - Size 2



DISTAL ULNA PLATES

Ref.	Description
HTDE1	Distal ulna plate - Right - Size 1
HTGE1	Distal ulna plate - Left - Size 1
HTDE2	Distal ulna plate - Right - Size 2
HTGE2	Distal ulna plate - Left - Size 2



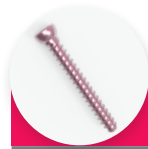
IMPLANTS REFERENCES



Ø2.4 mm
LOCKING SCREWS*

Ref.	Description
SDT2.4L08	Locking screw with conical head - Ø2.4 mm - L 08 mm
SDT2.4L10	Locking screw with conical head - Ø2.4 mm - L 10 mm
SDT2.4L12	Locking screw with conical head - Ø2.4 mm - L 12 mm
SDT2.4L14	Locking screw with conical head - Ø2.4 mm - L 14 mm
SDT2.4L16	Locking screw with conical head - Ø2.4 mm - L 16 mm
SDT2.4L18	Locking screw with conical head - Ø2.4 mm - L 18 mm
SDT2.4L20	Locking screw with conical head - Ø2.4 mm - L 20 mm
SDT2.4L22	Locking screw with conical head - Ø2.4 mm - L 22 mm
SDT2.4L24	Locking screw with conical head - Ø2.4 mm - L 24 mm
SDT2.4L26	Locking screw with conical head - Ø2.4 mm - L 26 mm
SDT2.4L28	Locking screw with conical head - Ø2.4 mm - L 28 mm
SDT2.4L30	Locking screw with conical head - Ø2.4 mm - L 30 mm

* Non anodized



Ø2.4 mm
CORTICAL SCREWS*

Ref.	Description
CT2.4L08	Standard cortical screw - Ø2.4 mm - L 08 mm
CT2.4L10	Standard cortical screw - Ø2.4 mm - L 10 mm
CT2.4L12	Standard cortical screw - Ø2.4 mm - L 12 mm
CT2.4L14	Standard cortical screw - Ø2.4 mm - L 14 mm
CT2.4L16	Standard cortical screw - Ø2.4 mm - L 16 mm
CT2.4L18	Standard cortical screw - Ø2.4 mm - L 18 mm
CT2.4L20	Standard cortical screw - Ø2.4 mm - L 20 mm
CT2.4L22	Standard cortical screw - Ø2.4 mm - L 22 mm
CT2.4L24	Standard cortical screw - Ø2.4 mm - L 24 mm
CT2.4L26	Standard cortical screw - Ø2.4 mm - L 26 mm
CT2.4L28	Standard cortical screw - Ø2.4 mm - L 28 mm
CT2.4L30	Standard cortical screw - Ø2.4 mm - L 30 mm

*Pink anodized

Remark:

All implants are also available in sterile version.

Ex : «SDT2.4L10-ST»

INSTRUMENTS REFERENCES

XPERT WRIST 2.4 FRAGMENT SPECIFIC INSTRUMENTS

Ref.	Description	Qty
ANC102	Length gauge	1
AN166L	Pins support for Ø0.8 mm pin - Long	1
ANC350	Ø4.5 mm AO quick coupling handle - Size 1	1
ANC575	T8 quick coupling screwdriver	2
ANC578*	Bending plier	2
ANC687	Polyaxial drill guide - SDT2.4 hole	2
ANC694	Ø1.8 mm threaded guide gauge for Ø2.4 mm screws	2
ANC695	Ø1.8 mm non threaded bent guide gauge for Ø2.4 mm screws	1
ANC696	Ø1.8 mm quick coupling drill bit - L 125 mm	2
33.0214.120	Pin Ø1.4 L120 mm	6
TD-111401-1.0NM-B	Ø4.5 mm AO quick coupling handle with torque Driver 1Nm	1

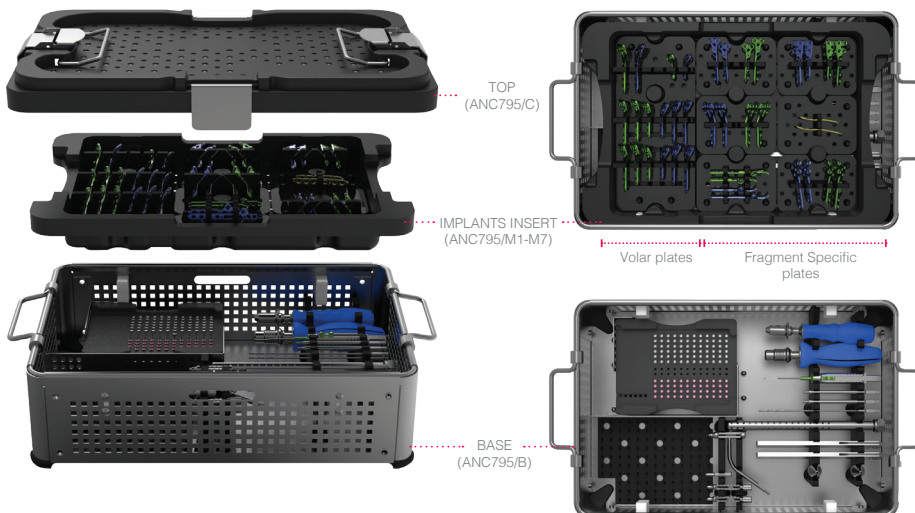
*BENDING PLIERS

The bending pliers must not be used with the XPERT WRIST 2.4 - VOLAR PLATES range. They are intended for XPERT WRIST 2.4 - FRAGMENT SPECIFIC plates.

REMOVAL KIT

If you have to remove XPERT WRIST 2.4 FRAGMENT SPECIFIC implants, make sure to order the **Newclip Technics** removal set which includes the following instruments:

- ANC575 : T8 quick coupling screwdriver
- ANC350 : Ø4.5 mm AO quick coupling handle - Size 1



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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