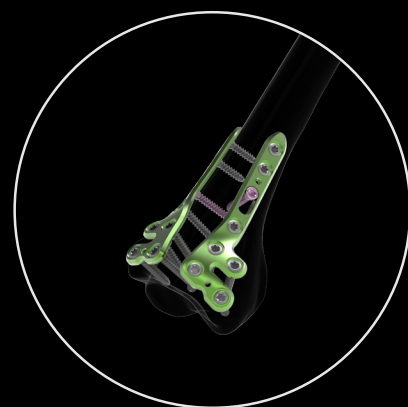




NEWCLIP-TECHNICS

INNOVATION MEANS MOTION



## XPERT WRIST 2.4 - FRAGMENT SPECIFIC PLATES

Dorsal plates, radial column plates and distal ulna plates

- ▶ Precontoured implants
- ▶ 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 the fixation of 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**



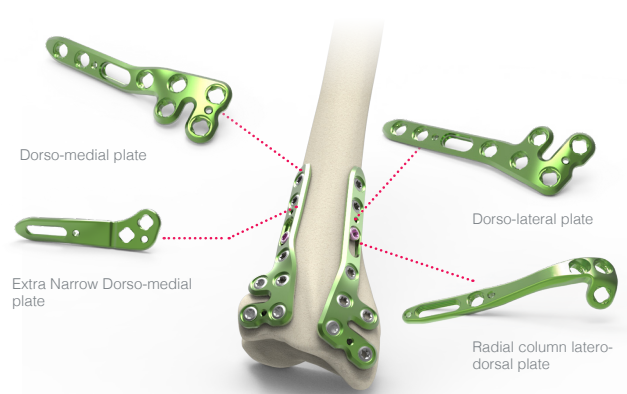
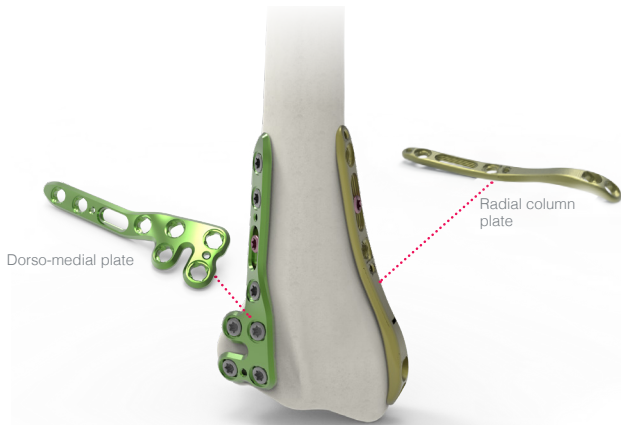
➤ **Dorso-lateral plates**



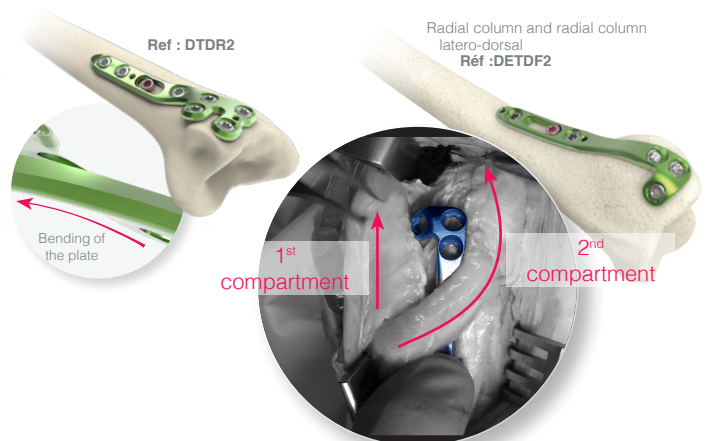
➤ **Radial column latero-dorsal plates**



➤ **Radial column plates**



• **Precontoured plates** for anatomical fit.



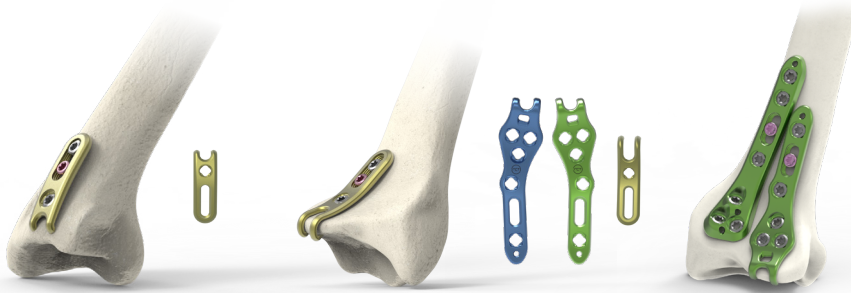
# TECHNICAL FEATURES

## → RIM HOOK PLATES

### ▶ Posterior hook

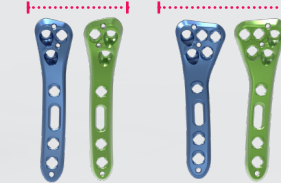
### ▶ Anterior hook

### ▶ Volar radial



Assembly possible of an anterior hook plate with a radial volar plate to reach the radial styloid. Each plate can be used alone depending on the fracture pattern.

#### Narrow Head Standard Head



#### CAUTION

The choice to associate an anterior hook (size 2 or 3) with a radial volar plate (narrow or standard head) is at the discretion of the surgeon.

## → VOLAR RIM PLATES

- Precontoured plates for anatomical fit.

#### Narrow Head Standard Head Wide Head

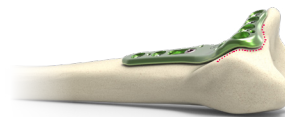


#### CAUTION

The window's hole is for **monoxial** fixation only.

### Post-operative Consideration

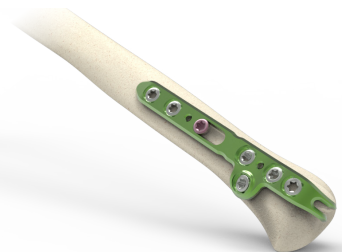
The plate positioning onto the watershed line may increase the risk of tendon injury. Surgeon should take this into consideration during subsequent follow-up of the patient. Plate removal post-healing is mandatory.



Lateral Lip allowing the plate positioning on the watershed line.

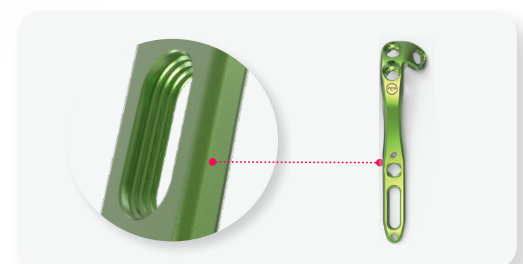
## DISTAL ULNA PLATES

- Antero-lateral positioning, with an anterior bracket.



## FIXATION TECHNICAL FEATURES

- **A single screw diameter:** Ø2.4 mm locking screws (SDT2.4Lxx) and Ø2.4 mm non-locking screws (CT2.4Lxx).
- **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 during surgery.
- **Hexalobular stamp**
- **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

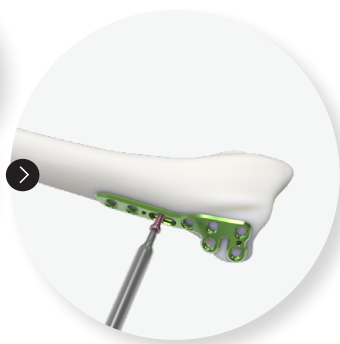
## DORSO-MEDIAL AND RADIAL COLUMN PLATES

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).



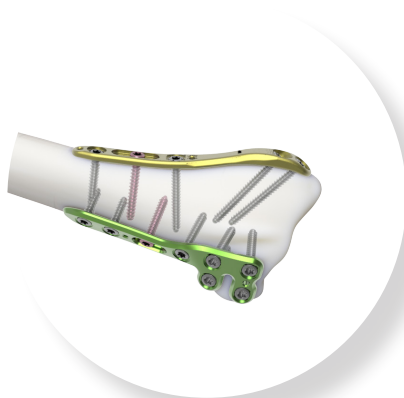
7. Insert the 2 locking screws (SDT2.4Lxx) in the most distal holes of the radial column plate using the polyaxial drill guide (ANC687) and the drill bit (ANC696).



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). The final tightening of the screws must be performed by hand.

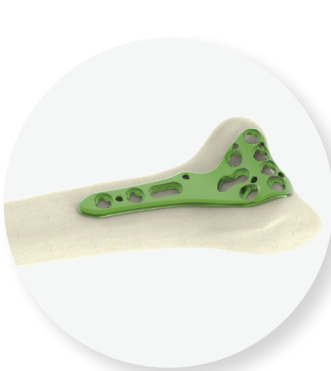


FINAL RESULT

# 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.

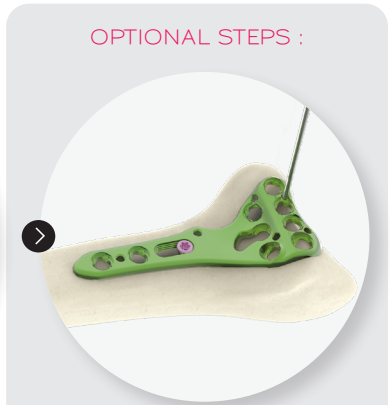


2. Drill (ANC696) using the threaded guide gauge (ANC694) or the non-threaded bent guide gauge (ANC695) into the oblong hole.

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 pin hole of the plate and verify its positioning 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).



6. Insert a Ø2.4 mm locking screw (SDT2.4Lxx) using the screwdriver (ANC575). The final tightening of the screws must be performed by hand.



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.

**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).



## FINAL RESULT

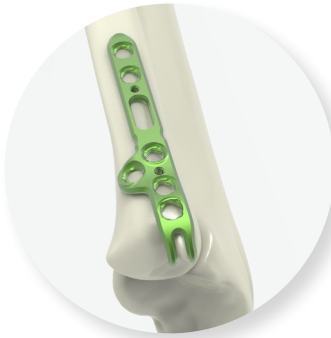
**⚠** The plate positioning onto the watershed line may increase the risk of tendon injury. Surgeon should take this into consideration during subsequent follow-up of the patient. Plate removal post-healing is mandatory.



# 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). The final tightening of the screws must be performed by hand.



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**

# IMPLANT REFERENCES

## DORSO-MEDIAL PLATES

Ref.	Description
DTGRNS1	Dorso-medial plate for distal radius - Extra narrow head - Left - Size 1
DTDRNS1	Dorso-medial plate for distal radius - Extra narrow head - Right - Size 1
DTGRNS2	Dorso-medial plate for distal radius - Extra narrow head - Left - Size 2
DTDRNS2	Dorso-medial plate for distal radius - Extra narrow head - Right - Size 2
DTGRNS3	Dorso-medial plate for distal radius - Extra narrow head - Left - Size 3
DTDRNS3	Dorso-medial plate for distal radius - Extra narrow head - Right - Size 3
DTGR2	Dorso-medial plate for distal radius - Left - Size 2
DTDR2	Dorso-medial plate for distal radius - Right - Size 2



# IMPLANT REFERENCES

## DORSO-LATERAL PLATES

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



## RADIAL COLUMN PLATES

Ref.	Description
DETSL1	Radial column distal plate - Symmetrical - Size 1
DETSL2	Radial column distal plate - Symmetrical - Size 2
DETSL3	Radial column distal plate - Symmetrical - Size 3



## RADIAL COLUMN LATERO-DORSAL PLATES

Ref.	Description
DETF1	Radial column latero-dorsal plate - Left - Size 1
DETF1	Radial column latero-dorsal plate - Right - Size 1
DETF2	Radial column latero-dorsal plate - Left - Size 2
DETF2	Radial column latero-dorsal plate - Right - Size 2
DETF3	Radial column latero-dorsal plate - Left - Size 3
DETF3	Radial column latero-dorsal plate - Right - Size 3



## EXTRA DISTAL VOLAR PLATE

Ref.	Description
DETVN1	Extra distal plate for distal radius - Narrow head - Left - Size 1
DETVN1	Extra distal plate for distal radius - Narrow head - Right - Size 1
DETVS1	Extra distal plate for distal radius - Standard head - Left - Size 1
DETVS1	Extra distal plate for distal radius - Standard head - Right - Size 1
DETVW1	Extra distal plate for distal radius - Wide head - Left - Size 1
DETVW1	Extra distal plate for distal radius - Wide head - Right - Size 1



## RADIAL HOOK PLATE

Ref.	Description
DTSH2	Volar rim hook – Symmetrical - Size 2
DTGH3	Volar rim hook - Left - Size 3
DTDH3	Volar rim hook - Right - Size 3
DTSTH2	Dorsal rim hook – Symmetrical - Size 2



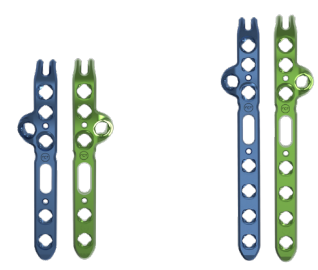
## RADIAL VOLAR PLATE

Ref.	Description
DTGBN2	Radial volar plate for distal radius - Narrow head - Size 2 - Left
DTDBN2	Radial volar plate for distal radius - Narrow head - Size 2 - Right
DTGBS2	Radial volar plate for distal radius - Standard head - Size 2 - Left
DTDBS2	Radial volar plate for distal radius - Standard head - Size 2 - Right



## DISTAL ULNA PLATES

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



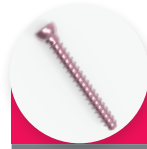
# IMPLANT REFERENCES



## Ø2.4 mm LOCKING SCREWS \*

Ref.	Description
SDT2.4L08	Locking screw with conical head - Ø2.4 mm - L08 mm
SDT2.4L10	Locking screw with conical head - Ø2.4 mm - L10 mm
SDT2.4L12	Locking screw with conical head - Ø2.4 mm - L12 mm
SDT2.4L14	Locking screw with conical head - Ø2.4 mm - L14 mm
SDT2.4L16	Locking screw with conical head - Ø2.4 mm - L16 mm
SDT2.4L18	Locking screw with conical head - Ø2.4 mm - L18 mm
SDT2.4L20	Locking screw with conical head - Ø2.4 mm - L20 mm
SDT2.4L22	Locking screw with conical head - Ø2.4 mm - L22 mm
SDT2.4L24	Locking screw with conical head - Ø2.4 mm - L24 mm
SDT2.4L26	Locking screw with conical head - Ø2.4 mm - L26 mm
SDT2.4L28	Locking screw with conical head - Ø2.4 mm - L28 mm
SDT2.4L30	Locking screw with conical head - Ø2.4 mm - L30 mm

\* Non anodized



## Ø2.4 mm CORTICAL SCREWS \*

Ref.	Description
CT2.4L08	Standard cortical screw - Ø2.4 mm - L08 mm
CT2.4L10	Standard cortical screw - Ø2.4 mm - L10 mm
CT2.4L12	Standard cortical screw - Ø2.4 mm - L12 mm
CT2.4L14	Standard cortical screw - Ø2.4 mm - L14 mm
CT2.4L16	Standard cortical screw - Ø2.4 mm - L16 mm
CT2.4L18	Standard cortical screw - Ø2.4 mm - L18 mm
CT2.4L20	Standard cortical screw - Ø2.4 mm - L20 mm
CT2.4L22	Standard cortical screw - Ø2.4 mm - L22 mm
CT2.4L24	Standard cortical screw - Ø2.4 mm - L24 mm
CT2.4L26	Standard cortical screw - Ø2.4 mm - L26 mm
CT2.4L28	Standard cortical screw - Ø2.4 mm - L28 mm
CT2.4L30	Standard cortical screw - Ø2.4 mm - L30 mm

\*Pink anodized

### Remark:

All implants are also available in sterile version.

Ex : «SDT2.4L10-ST»

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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