# XPERT WRIST 2.4 - VOLAR

# MINIMALLY INVASIVE TECHNIQUE - XS PLATES

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.

### REFERENCES

	DISTAL RADIUS VOLAR PLATES
Ref.	Description
DTGVNS1	2.4 Polyaxial plate for distal radius - Narrow head - Extra Short - Left
DTDVNS1	2.4 Polyaxial plate for distal radius - Narrow head - Extra Short - Right
	MINIMALLY INVASIVE INSTRUMENTS

	MINIMALLY INVASIVE INSTRUMENTS	
Ref.	Description	Qté
ANC102*	Length gauge for Ø2.8 mm screws	1
ANC350	Ø4.5 mm AO quick coupling handle - Size 1	1
ANC696	Ø1.8 mm quick coupling drill bit - L125 mm	2
ANC1061	MIS distal guide for distal radius - Extra short - Right	1
ANC1062	MIS distal guide for distal radius - Extra short - Left	1
ANC908	Ø1.8 mm non threaded guide gauge	1
ANC909	Ø1.8 mm threaded guide gauge - MIS Xpert	2
ANC910	T8 screwdriver with AO quick coupling system	1
33.0218.080	Pin Ø1.8 L80 mm	2

<sup>\*</sup> Available in Xpert Wrist 2.4 kit

# DTGVNS1 DTDVNS1 ANC1062 ANC1061 ANC350 ANC696 ANC908 ANC909 ANC910

# SURGICAL TECHNIQUE

Example using an extra short plate (DTDVNS1) and the MIS guide for distal radius (ANC1061)



1. Position the MIS guide (ANC1061) onto the plate and lock into place using the cannulated fixation screw.



2. With a 5 mm radial incision of the pronator quadratus muscle, slide the plate underneath the pronator quadratus muscle on the volar aspect and below the watershed line.



3. Insert a  $\emptyset$ 1.8 L 80 mm pin (33.0218.080) into the radial part of the guide to stabilize the plate distally.



4. Insert the non threaded guide gauge (ANC908) into the ulnar hole of the MIS guide (ANC1061). Drill using the drill bit (ANC696). Check the positioning of the drill bit (sigmoid notch and radiocarpal joint) and reajust the plate positioning if necessary. Measure the length of the screw on the guide gauge.

## SURGICAL TECHNIQUE



5. Using the T8 screwdriver (ANC910) insert a locking screw (SDT2.4Lxx).



6. Use the same techique as steps 4 and 5 for the second ulnar hole.



7. Drill through the hole which is adjacent to the radial hole using the drill bit (ANC696), then drill the last radial hole.

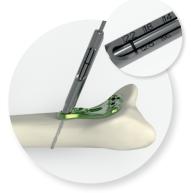
Then, remove the pin and guide.



8. For the 2 radial holes, measure the length of the screws using the length gauge (ANC102) and insert 2 locking screws (SDT2.4Lxx).



9. Lock the threaded guide gauge (ANC909) into the proximal diaphyseal hole using the T8 screwdriver (ANC910).



10. Drill using the drill bit (ANC696) and measure the screw length using the guide gauge (ANC909).

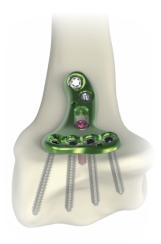


11. Using the T8 screwdriver (ANC910) insert a locking screw (SDT2.4Lxx) into the proximal diaphyseal hole.



12. Add a last locking screw (SDT2.4Lxx) in the diaphyseal part .

If necessary a locking screw (SDT2.4Lxx) or a cortical screw (CT2.4Lxx) can be added in the oblong hole.



**FINAL RESULT** 

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.

# XPERT WRIST 2.4 - VOLAR

# MINIMALLY INVASIVE TECHNIQUE - SIZE 1 PLATES

▶ 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.

# REFERENCES

DISTAL RADIUS VOLAR PLATES			
Ref.	Description		
DTGVN1	2.4 Polyaxial plate for distal radius - Narrow head - Size 1 - Left		
DTDVN1	2.4 Polyaxial plate for distal radius - Narrow head - Size 1 - Right		
DTGVS1	2.4 Polyaxial plate for distal radius - Standard head - Size 1 - Left		
DTDVS1	2.4 Polyaxial plate for distal radius - Standard head - Size 1 - Right		

MINIMALLY INVASIVE INSTRUMENTS				
Ref.	Description	Qty		
ANC102*	Length gauge for Ø2.8 mm screws	1		
ANC350	Ø4.5 mm AO quick coupling handle - Size 1	1		
ANC695	Ø1.8 mm non threaded bent guide gauge for Ø2.4 mm screws	1		
ANC696	Ø1.8 mm quick coupling drill bit - L125 mm	2		
ANC904	MIS distal guide for distal radius - Narrow head - Left	1		
ANC905	MIS distal guide for distal radius - Narrow head - Right	1		
ANC906	MIS distal guide for distal radius - Standard head - Left	1		
ANC907	MIS distal guide for distal radius - Standard head - Right	1		
ANC908	Ø1.8 mm non threaded guide gauge	1		
ANC909	Ø1.8 mm threaded guide gauge - MIS Xpert	2		
ANC910	T8 screwdriver with AO quick coupling system	1		
33.0218.080	Pin Ø1.8 L80 mm	4		

DTGVN1 DTDVN1 DTGVS1 DTDVS1

ANC904 ANC905 ANC906 ANC907

# SURGICAL TECHNIQUE

Example using a standard size 1 plate (DTDVS1) and the MIS guide for distal radius (ANC907)



1. Position the MIS guide (ANC907) onto the plate and lock into place using the two cannulated fixation screws.



2. Slide the plate under the pronator quadratus muscle and position the plate on the distal part of the radius, below the watershed line.



3. Insert a Ø1.8 L80 mm pin (33.0218.080) into the radio-ulnar part and check the positioning by x-ray. If required, remove the pin and reposition the plate.



4. Insert a pin into the radial part and check the positioning of the diaphyseal part of the plate (along the radial shaft).



<sup>\*</sup> Available in Xpert Wrist 2.4 kit

## SURGICAL TECHNIQUE



5. Insert the non threaded guide gauge (ANC908) into one of the holes in the center of the MIS guide (ANC907).

Then, drill using the quick coupling drill bit (ANC696) and measure the length of the screw on the guide gauge (ANC908).



6. Using the T8 screwdriver (ANC910) insert a locking screw (SDT2.4Lxx).

Use the same technique as steps 5 and 6 for the second central hole.



7. Remove the two pins and the MIS guide.

Then, measure the length of the screw using the length gauge (ANC102).



8. Insert a locking screw (SDT2.4Lxx) using the T8 screwdriver (ANC910).



9. Use the same technique as steps 7 and 8 for the radio ulnar screw.

# OPTIONAL STEP 10



If required and depending on the type of fracture, screws can be added in the second distal row by locking the threaded guide gauge (ANC909) using the T8 screwdriver (ANC910)

NC909 ANC910



11. Through the proximal incision, lock the threaded guide gauge (ANC909) using the T8 screwdriver (ANC910). Use the "lift off" technique to reduce the fracture.



12. Drill using the quick coupling drill bit (ANC696) and leave the drill bit inserted to maintain the reduction.



13. Position the non threaded bent guide gauge (ANC695) in the oblong hole. Drill using the second quick coupling drill bit (ANC696).

Mesure the screw length on the guide gauge (ANC695). Then insert a cortical screw (CT2.4Lxx) or a locking screw (SDT2.4Lxx) into the oblong hole to finalize and stabilize the reduction.



14. For the proximal diaphysis hole: measure the screw length on the threaded guide gauge (ANC909) (A).

Remove the drill bit and guide gauge and insert a locking screw (SDT2.4Lxx).



15. Drill, then mesure the screw length, To finish, add the last locking screw in the diaphyseal part.



**FINAL RESULT** 

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