



NEWCLIP-TECHNICS

INNOVATION MEANS MOTION



ALIANS ELBOW DISTAL HUMERUS

POLYAXIAL LOCKING FIXATION
DUALTEC SYSTEM II®

- › 3 types of construct
- › Polyaxial locking technology
- › Bendable precontoured implant

ALIANS ELBOW

DISTAL HUMERUS PLATES

The ALIANS ELBOW range of plates is designed for the treatment of distal humerus fractures. The mechanical features of these implants enable primary fixation of the bone fragments until complete healing. These implants may be left in the body or removed using the appropriate screwdrivers.

THE ALIANS ELBOW RANGE OF PLATES FOR DISTAL HUMERUS OFFERS THREE TYPES OF CONSTRUCT :



PARALLEL FIXATION

- 1 medial plate
- 1 lateral plate



PERPENDICULAR FIXATION
(with a removable lateral support)

- 1 medial plate
- 1 postero-lateral plate (with a removable lateral support)

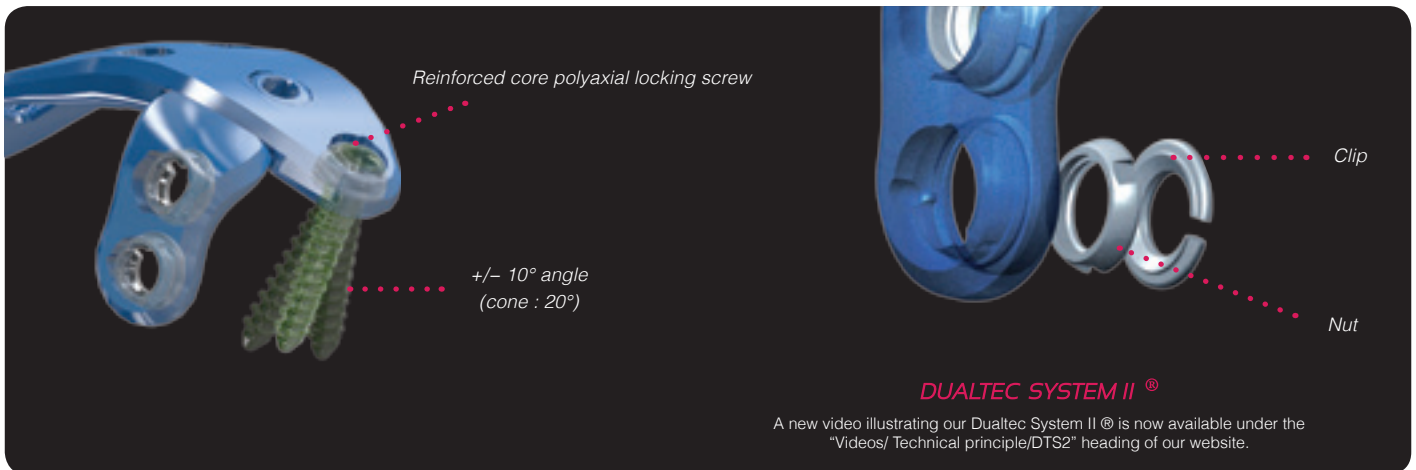


PERPENDICULAR FIXATION
(without lateral support)

- 1 medial plate
- 1 postero-lateral plate (without lateral support)

TECHNICAL FEATURES

ANGULAR RANGE: +/- 10° POLYAXIAL LOCKING FIXATION

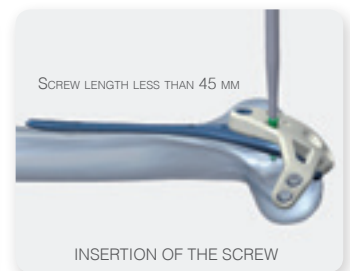
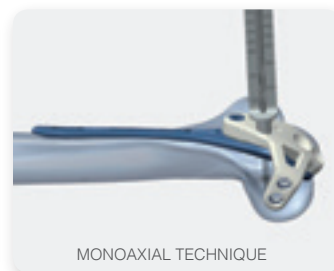


→ FAST GUIDE TECHNOLOGY

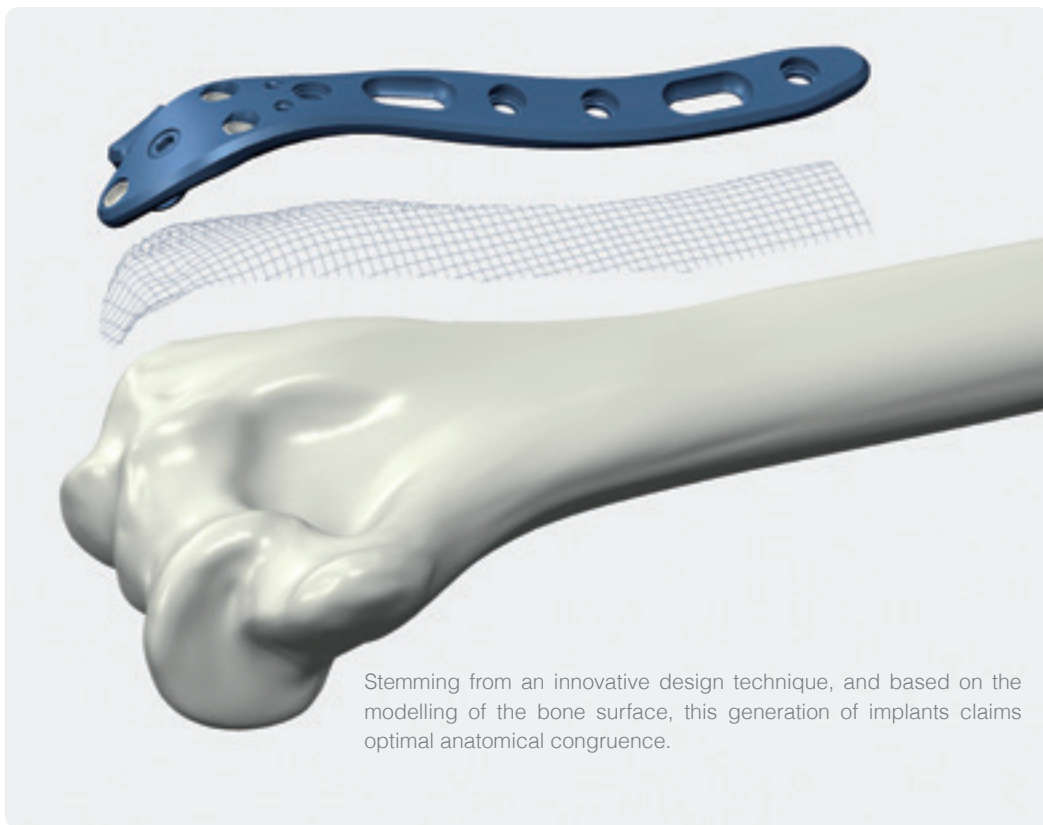
OPTIMIZED FIXATION FOR POLYAXIAL AND MONOAXIAL SCREW LOCKING

Pre-determined orientation of the screws using the Fast Guide allowing quicker and easier surgical technique.

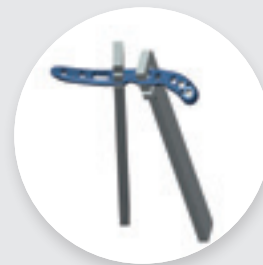
The use of Fast Guides is optional and compatible with polyaxial technology.



PRECONTOURED IMPLANT



Stemming from an innovative design technique, and based on the modelling of the bone surface, this generation of implants claims optimal anatomical congruence.



To compensate for anatomical variations of the distal humerus, medial and lateral implants include metaphyseal bendable sections. Bending is only allowed on these sections.

A COMPREHENSIVE RANGE OF PLATES

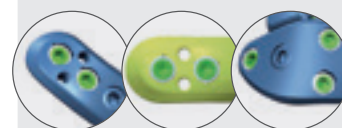
LATERAL PLATE



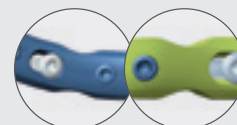
MEDIAL PLATE



POSTERO-LATERAL PLATE



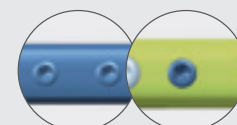
DTS2 polyaxial holes for locking and non-locking $\text{\O}2.8$ mm screws



Bendable sections



Slotted holes for cortical compression $\text{\O}3.5$ mm screws



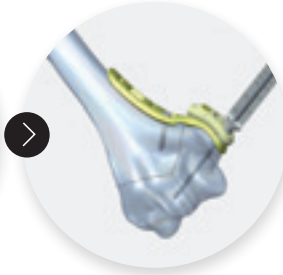
Holes for locking and non-locking $\text{\O}3.5$ mm screws

FIXATION TECHNIQUE

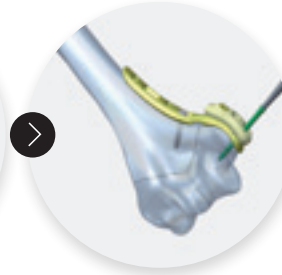
STAGE 1 : FIXATION OF THE MEDIAL PLATE



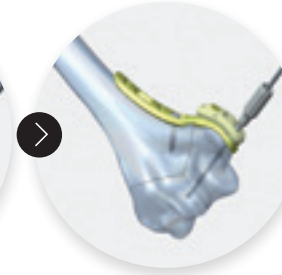
Lock the Fast Guide onto the medial plate. Adjust the position of the plate using the slotted hole.



When monoaxial screwing is possible, insert the guide gauge in the Fast Guide, drill using a $\varnothing 2.3$ mm drill bit, and directly check the depth of the drilling on the graduations of the guide gauge.



Insert the $\varnothing 2.8$ mm distal screws through the Fast Guide.



Polyaxial technique : The distal holes allow for polyaxial screw placement if necessary. For this purpose, screw the polyaxial drill guide into the plate hole, position it as appropriate, lock it and drill using the $\varnothing 2.3$ mm drill bit. This method does not require the removal of the Fast Guide.



Remove the Fast Guide if need be, drill using the $\varnothing 2.7$ mm drill bit and insert the last $\varnothing 3.5$ mm distal screw.

STAGE 2 : FIXATION OF THE LATERAL OR POSTERO-LATERAL PLATE

OPTION 1 : PARALLEL FIXATION USING THE LATERAL PLATE

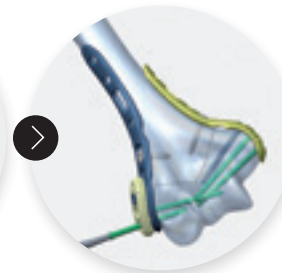
→ FIXATION OF THE LATERAL PLATE



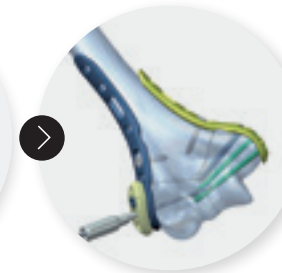
Lock the Fast Guide onto the lateral plate. Adjust the position of the plate using the slotted hole.



When monoaxial screwing is possible, insert the guide gauge in the Fast Guide, drill using the $\varnothing 2.3$ mm drill bit, and directly check the depth of the drilling on the graduations of the guide gauge.



Insert the $\varnothing 2.8$ mm distal screws through the Fast Guide.



Polyaxial technique : The distal holes allow for polyaxial screw placement if necessary. For this purpose, screw the polyaxial drill guide into the plate hole, position it as appropriate, lock it and drill using the $\varnothing 2.3$ mm drill bit. This method does not require the removal of the Fast Guide.



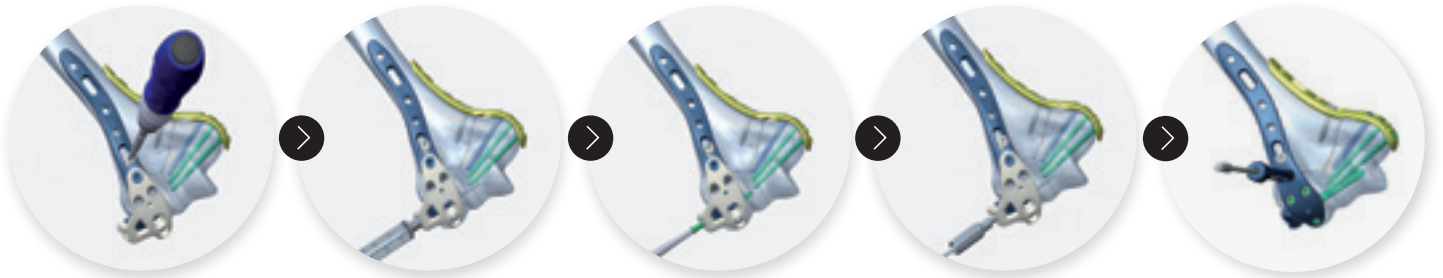
Remove the Fast Guide if need be, drill using the $\varnothing 2.7$ mm drill bit and insert the last $\varnothing 3.5$ mm distal screw. Complete the fixation by inserting all the remaining $\varnothing 3.5$ mm diaphyseal screws.

FINAL RESULT



OPTION 2 : PERPENDICULAR FIXATION USING THE POSTERO-LATERAL PLATE

→ FIXATION OF THE POSTERO-LATERAL PLATE



Lock the Fast Guide onto the postero-lateral plate. Adjust the position of the plate using the slotted hole.

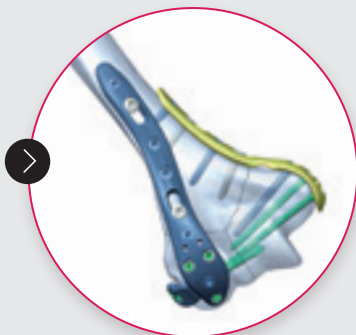
When monoaxial screwing is possible, insert the guide gauge in the Fast Guide, drill using the Ø2.3 mm drill bit, and directly check the depth of the drilling on the graduations of the guide gauge.

Insert the Ø2.8 mm distal screws through the Fast Guide.

Polyaxial technique : The distal holes allow for polyaxial screw placement if necessary. For this purpose, screw the polyaxial drill guide into the plate hole, position it as appropriate, lock it and drill using the Ø2.3 mm drill bit. This method does not require the removal of the Fast Guide.

Remove the Fast Guide if need be, drill using the Ø2.7 mm drill bit and insert the last Ø3.5 mm distal screw. Complete the fixation by inserting all the remaining Ø3.5 mm diaphyseal screws.

FINAL RESULT WITH LATERAL SUPPORT



Removable lateral support : in the case of a perpendicular fixation, the lateral support enables the insertion of 2 additional polyaxial screws, from the lateral to the medial column of the distal humerus.

FINAL RESULT WITHOUT LATERAL SUPPORT

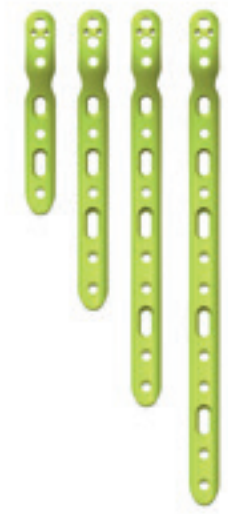


The ALIANS ELBOW postero-lateral plate can be fitted to several types of fracture. It is possible to remove the lateral support. In this case, a non-locking Ø3.5 mm screw can be inserted in the cleared hole.

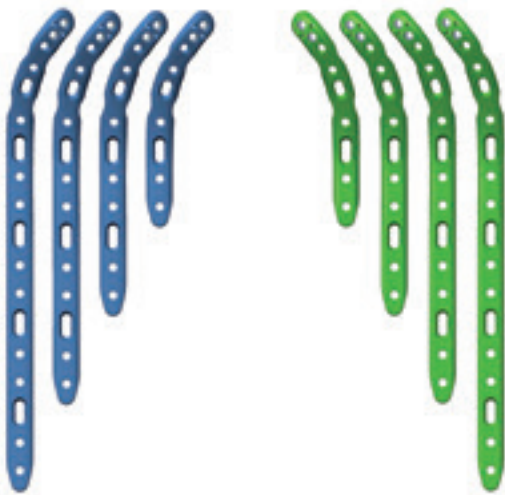
REMARKS

- ▶ In the described method, the procedure begins with the fixation of the medial plate, followed by the lateral or postero-lateral plates. However, the fixation order may be reversed.
- ▶ The monoaxial fixation technique of the Ø2.8 mm epiphyseal screws requires screw length of less than 45 mm.

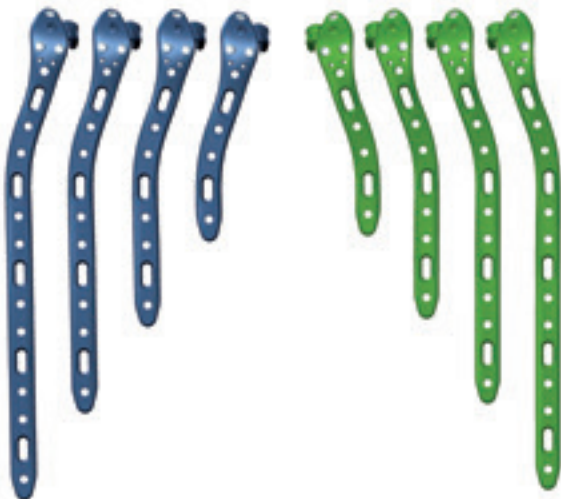
SET ALIANS ELBOW



MEDIAL PLATES	
Ref.	Description
NTSM1	Distal humeral medial plate - Size 1 - Symmetrical - 7 holes - L 77 mm
NTSM2	Distal humeral medial plate - Size 2 - Symmetrical - 10 holes - L 111 mm
NTSM3	Distal humeral medial plate - Size 3 - Symmetrical - 13 holes - L 149 mm
NTSM4	Distal humeral medial plate - Size 4 - Symmetrical - 16 holes - L 186 mm



LATERAL PLATES	
Ref.	Description
NTGL2	Distal humeral lateral plate - Size 2 - Left - 9 holes - L 93 mm
NTDL2	Distal humeral lateral plate - Size 2 - Right - 9 holes - L 93 mm
NTGL3	Distal humeral lateral plate - Size 3 - Left - 12 holes - L 131 mm
NTDL3	Distal humeral lateral plate - Size 3 - Right - 12 holes - L 131 mm
NTGL4	Distal humeral lateral plate - Size 4 - Left - 15 holes - L 169 mm
NTDL4	Distal humeral lateral plate - Size 4 - Right - 15 holes - L 169 mm
NTGL5	Distal humeral lateral plate - Size 5 - Left - 18 holes - L 207 mm
NTDL5	Distal humeral lateral plate - Size 5 - Right - 18 holes - L 207 mm



POSTERO-LATERAL PLATES	
Ref.	Description
NTGQ2	Distal humeral postero-lateral plate - Size 2 - Left - 11 holes - L 100 mm
NTDQ2	Distal humeral postero-lateral plate - Size 2 - Right - 11 holes - L 100 mm
NTGQ3	Distal humeral postero-lateral plate - Size 3 - Left - 14 holes - L 137 mm
NTDQ3	Distal humeral postero-lateral plate - Size 3 - Right - 14 holes - L 137 mm
NTGQ4	Distal humeral postero-lateral plate - Size 4 - Left - 17 holes - L 175 mm
NTDQ4	Distal humeral postero-lateral plate - Size 4 - Right - 17 holes - L 175 mm
NTGQ5	Distal humeral postero-lateral plate - Size 5 - Left - 20 holes - L 213 mm
NTDQ5	Distal humeral postero-lateral plate - Size 5 - Right - 20 holes - L 213 mm



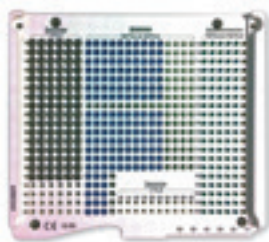
IMPLANT SET



INSTRUMENT SET



BASE



SCREW RACK

INSTRUMENTS

Ref.	Description	Qty
ANC082E	Hex screwdriver 2.0 mm	1
ANC083C	Hex screwdriver 2.5 mm	2
ANC102L	Depth gauge for DTS2 screws - long length	1
ANC103	Hex safety key 2.0 mm	1
ANC107	Hex safety key 2.5 mm	1
ANC124L	Depth gauge for Ø3.5 mm screws - long length	1
ANC160	Prehensor for fast guide	1
ANC256E	Drill bit Ø2.7mm - L180 mm	2
ANC259E	Guide gauge Ø2.7 mm for locking screws - long length	2
ANC261E	Guide gauge Ø2.7 mm for non-locking screws - long length	1
ANC287	Drill bit Ø2.3 mm - L180 mm	2
ANC305	DTS2 drill guide Ø2.3 mm	2
ANC306	Guide gauge Ø2.3 mm for non-locking screws	1
ANC309	Obturator for drill guide Ø2.3 mm	1
ANC313	Fast Guide for NTSMx plates	1
ANC314	Fast Guide for NTGLx plates	1
ANC315	Fast Guide for NTDLx plates	1
ANC316	Fast Guide for NTGQx plates	1
ANC317	Fast Guide for NTDQx plates	1
ANC346D	Bending iron - right	1
ANC346G	Bending iron - left	1
ANC463	Hand countersink Ø3.5 mm	1
33.0216.210	Pins Ø1.6 L 210 mm	5
33.0220.210	Pins Ø2.0 L 210 mm	5
ANC350	Handle AO Ø4.5 mm - size 1	1
ANC351	Handle AO Ø4.5 mm - size 2	1