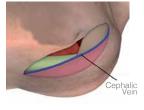
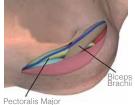
# SURGICAL TECHNIQUE

### STEP 1

# SURGICAL APPROACH











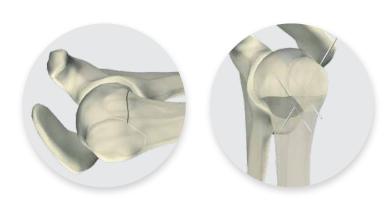
The patient is placed in the beach-chair position.

A deltopectoral approach, passing outside of the cephalic vein, is recommended.

Retract the cephalic vein laterally and the pectoralis major medially.

### STEP 2

## FRACTURE REDUCTION



Reduce the fracture through traction and manipulation and provisionally stabilize the fracture fragments with pins (33.0220.210).

In valgus fracture patterns, the head must be elevated prior to provisional fixation.

The greater tuberosity is anatomically reduced and pinned to the shaft.

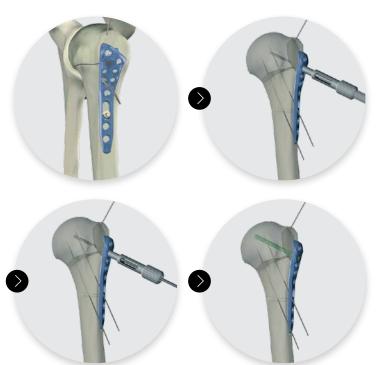
This is facilitated by manipulating the tuberosity with sutures placed through the substance of the infraspinatus. These sutures will later be used as supplemental fixation when they are secured to the plate.

Image intensification is necessary to confirm reduction.

### STEP 3

# OSTEOSYNTHESIS PROCEDURE

## -> CENTERING SCREW



Place the plate alongside the bicipital groove and approximately 1.5 cm distal to the top of the greater tuberosity.

Insert a  $\emptyset$ 4.5 mm cortical screw (CT4.5Lxx) into the oblong hole and fasten the plate to the shaft. Provisionally secure the plate to the bone with  $\emptyset$ 2.0 mm pins (33.0220.210).

Insert the drill guide (ANC131) with its reductor (ANC147) through hole #1. Insert a  $\emptyset$ 2.0 mm pin (33.0220.210) to target the center of the humeral head. Check position and trajectory with the C-arm.

Then drill at  $\emptyset$ 3.5 mm (ANC132) through the drill guide (ANC131) and insert the first  $\emptyset$ 4.5 mm locking screw (PT4.5Lxx).



# SURGICAL TECHNIQUE

# → FIXED-ANGLE DIVERGENT SCREWS

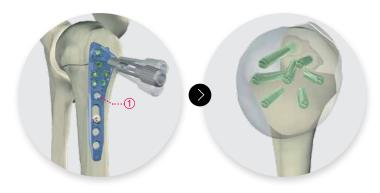


Use the Ø3.5 mm drill guide (ANC131) and drill 4 divergent Ø4.5 mm fixed-angle screws (PT4.5Lxx).

This precise screw pattern enhances resistance to varus forces.

Blunt-tipped screws limit protrusion through the articular surface.

## → POLYAXIAL LOCKING SCREWS



Orientate and lock the first 2 proximal screws and the first metaphyseal screw (1) according to the fracture pattern.

As the highest bone density is located in the inferior quadrants, every attempt should be made to keep the screws descending.

Use the  $\emptyset 3.5$  mm drill guide (ANC127) and place the remaining distal cortical screws, non locking (CT4.5Lxx) or locking (VT4.5Lxx) at the surgeon's preference.



# STEP 4 SUTURE OF THE TUBEROSITIES AND C-ARM CONTROL



Repair and fasten the tuberosity to the plate through the suture holes.

Assess the final reduction under fluoroscopy.