Surgical steps[1]: LCP Metaphyseal Plate

Indication

Juxta-articular fractures extending into the shaft area.

Fig. 1

Implant preparation

Adapt the LCP Metaphyseal Plate to the anatomy of the bone.

Plate fixation

The two distal holes in the thinned area of the plate, which are angled at 11° towards the centre of the plate, allow for an optimal application of the locking head screws in the epiphyseal area (Fig. 1).
Take this into consideration when bending the plate and threading in the threaded LCP Drill Guide for 2.8mm drill bits (323.027).

The threaded LCP drill guides ensure easy and axially correct pre-drilling.

Insert Kirschner wires to determine the direction of the screws or to temporarily fix the plate using the guide sleeve for Kirschner wires (Fig. 2).

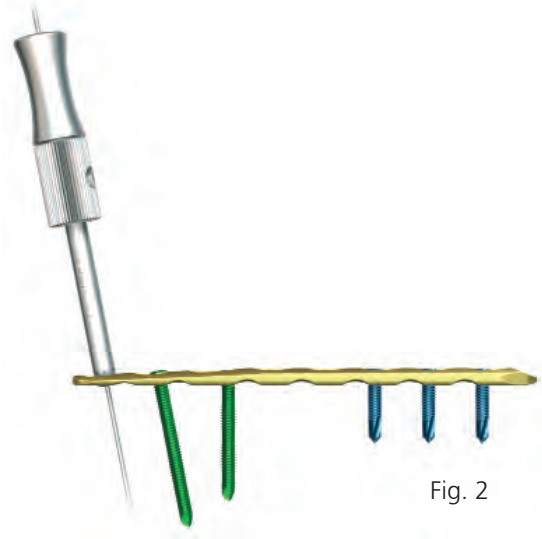


Fig. 2

Small fragment
Guide Sleeve for 1.25mm Kirschner wires (324.081)

Large fragment
Guide Sleeve for 2.0mm Kirschner wires (324.168)

The simultaneous use of two threaded LCP drill guides in the thinned plate area also assists insertion in the minimally invasive surgical technique (Fig. 3).

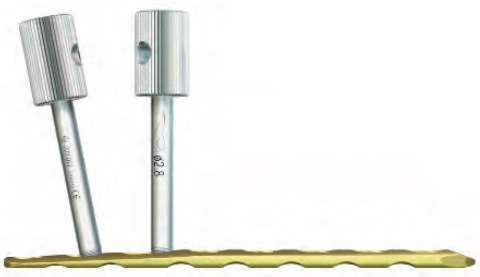
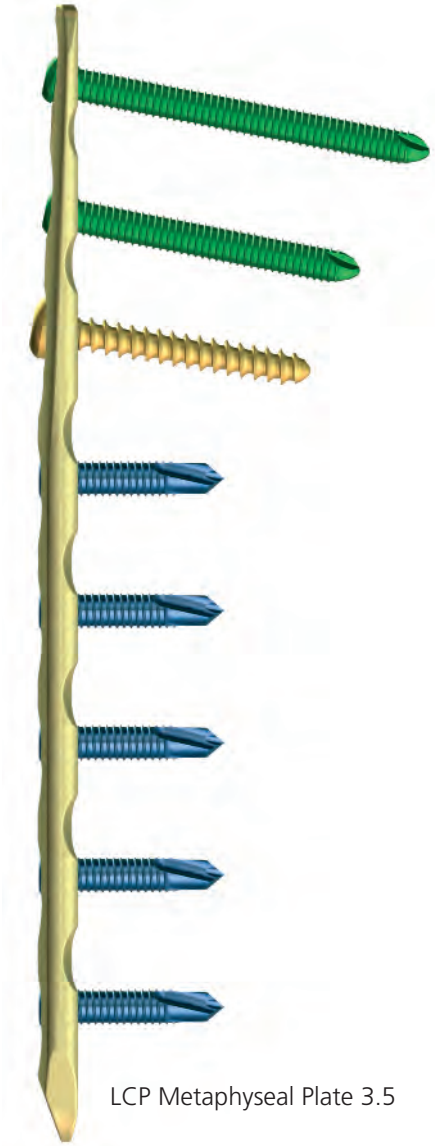


Fig. 3

Features and benefits



LCP Metaphyseal Plate 3.5

LCP combination holes allow uncompromising combinations

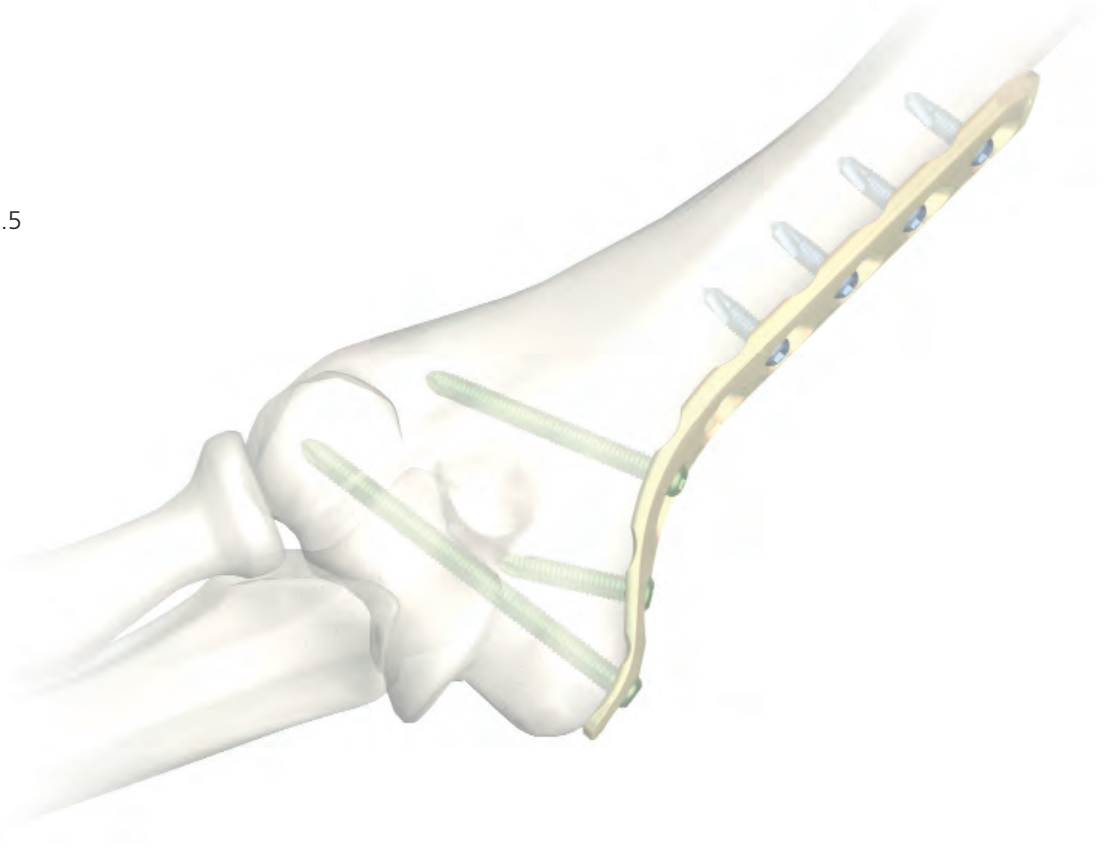
The combination hole allows an internal plate fixation using standard screws, angle-stable locking head screws, or a combination of both. This takes into account the most diverse intraoperative requirements.

Angular stability allows for better fixation

The angle- and axis-stable locking head screws prevent loss of reduction under load. A precise anatomical contouring of the plate is unnecessary when using this system as a locking internal fixator.

Easier plate contouring due to thinned plate profile

This plate design facilitates anatomical contouring considerably, whilst taking into account the distinctive features of the metaphyseal bone area (e.g. complex bone shapes, thin soft tissue envelope).



Surgical steps[1]: LCP Metaphyseal Plate

head Plate fixation

Use the LCP Metaphyseal Plate according to the LCP principles; see LCP Application Notes (0336.163).

LCP Metaphyseal Plates 3.5 and 3.5/4.5/5.0

Fixation of 3.5mm locking head screws (LHS)

1. Axially correct pre-drilling for the self-tapping 3.5mm LHS requires the threaded LCP Drill Guides for 2.8mm drill bits (323.027).

2a. Use the small hexagonal Screwdriver (314.070) to manually insert and lock the 3.5mm LHS.

2b. Use the Torque-limiting Attachment 1.5Nm and the Screwdriver Shaft for the motor-driven insertion of the 3.5mm LHS along the threaded axis of the hole.
Stop the motor before locking, fix the torque-limiting attachment and the screwdriver shaft to the Handle with quick coupling (311.431), and tighten the screw until clicking occurs.

Fixation of 4.5/5.0mm locking head screws (LHS)

1. Axially correct pre-drilling for the self-tapping 5.0mm LHS requires the threaded LCP Drill Guides for 4.3mm drill bits (323.042).

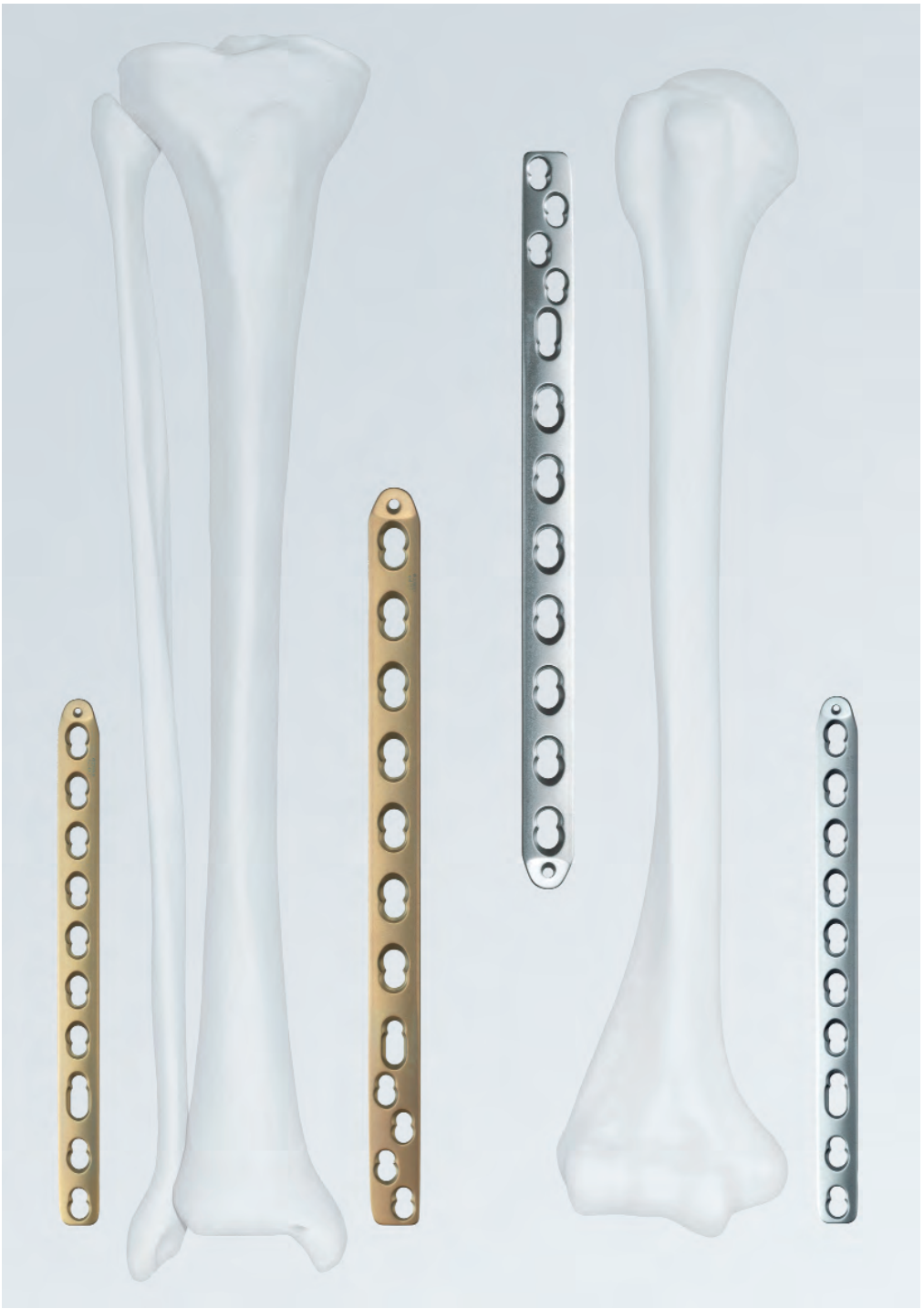
2. Use the Screwdriver Shaft (314.152) for the motor-driven insertion of the 5.0mm LHS along the threaded axis of the hole.

3. For correct tightening of the screw, stop the motor before locking and use the Torque-limiting Screwdriver (324.052) to tighten the screw manually until clicking occurs.

[1] For patient positioning and surgical approach refer for example to „AO Principles of Fracture Management", R. P. Rüedi, W. M. Murphy, Thieme Publisher, 2000.

LCP Metaphyseal Plate

For juxta articular fractures



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Ordering information

LCP Metaphyseal Plate 3.5

St. steel	Titanium	Holes	Length in mm
223.406	423.406	6	86
223.407	423.407	7	99
223.408	423.408	8	112
223.409	423.409	9	125
223.410	423.410	10	138
223.411	423.411	11	151
223.412	423.412	12	164
223.414	423.414	14	190
223.416	423.416	16	216
223.418	423.418	18	242

LCP Metaphyseal Plate 3.5/4.5/5.0

St. steel	Titanium	Holes	Length in mm
224.753	424.753	5 + 3	118
224.754	424.754	5 + 4	136
224.755	424.755	5 + 5	154
224.756	424.756	5 + 6	172
224.757	424.757	5 + 7	190
224.758	424.758	5 + 8	208
224.759	424.759	5 + 9	226
224.761	424.761	5 + 11	262
224.763	424.763	5 + 13	298
224.765	424.765	5 + 15	334

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Ordering information

Self-tapping
3.5mm LHS

Screws for the LCP Metaphyseal Plate 3.5

Use the LCP Metaphyseal Plate 3.5 with 3.5mm small fragment standard screws and locking head screws.

Self-tapping,
self-drilling
3.5mm LHS

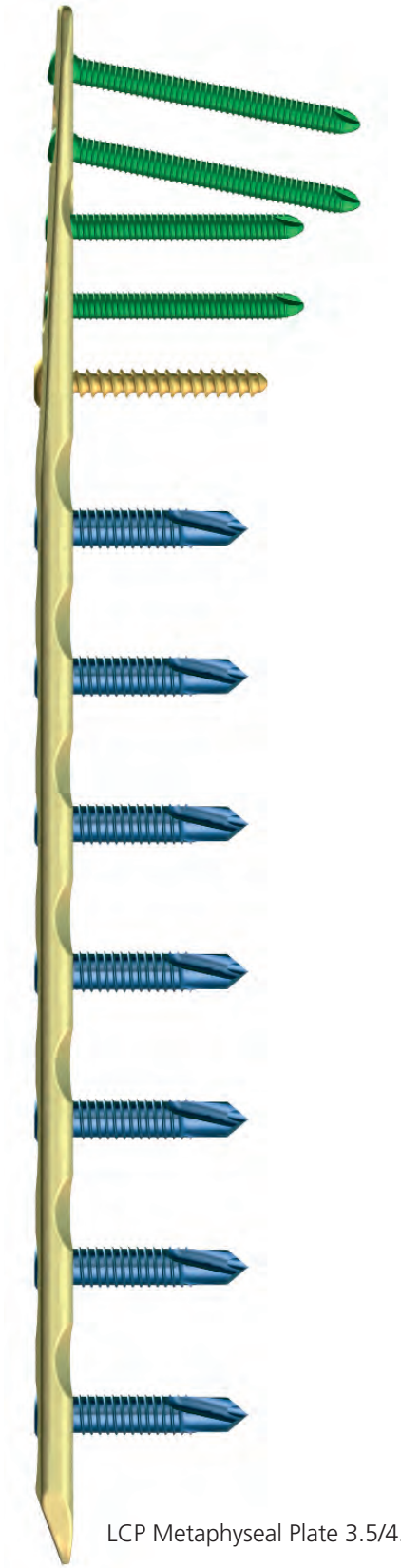
Screws for the LCP Metaphyseal Plate 3.5/4.5/5.0

In the thinned plate area, use 3.5mm small fragment standard- and locking head screws.
Use large fragment standard screws and locking head screws for the other plate area.

Self-tapping
5.0mm LHS

Self-tapping,
self-drilling
5.0mm LHS

Features and benefits



LCP Metaphyseal Plate 3.5/4.5/5.0

Juxta-articular fixation with the advantage of angled locking head screws

The two distal holes in the thinned area of the plate, which are angled at 11° towards the centre of the plate, allow an optimal application of the locking head screws in the epiphyseal area.

Increased hole density provides improved anchorage

The outstanding feature of the large fragment LCP Metaphyseal Plate 3.5/4.5/5.0, is a tight network of LCP 3.5 combination holes (small fragment) in the thinned plate area, allowing to insert the screws closer to one another.

Additional design features

- Tapered, rounded plate tip for easier application of the minimally invasive surgical technique.
- Temporary fixation can be achieved effortlessly through a suture hole.
- Improved vascularisation of the periost due to plate undercuts that reduce the plate-to-bone contact.
- The elongated hole optimises fine tuning of the reduction in the longitudinal axis.