

# intercus

# Cannulated screws Overview of surgical technique

#### Indication

For fixation in osteotomies, arthrodeses and fractures of small and large bones.

# 2 Description

This surgical technique is for general handling of the cannulated screw.

# Use without drill guide system

# 3 Reposition

After repositioning of the fracture, it is temporarily fixed with a Kirschner wire.

# 4 Entry point

Determine the optimal entry point for the intramedullary guide wire, make a stab incision and insert the guide wire to the required depth using the image converter.



# 5 Reaming the cortex

The screws are usually self-drilling and self-tapping. However, if the cortical bone is particularly hard, we recommend drilling it out over the guide wire using a cannulated drill bit. If necessary, the bone must be reamed over the entire threadless length of the guide wire.



#### Tip!

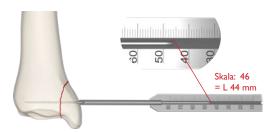
In very hard cortical bone, to avoid soft tissue reactions, a recess for the screw head can be milled into the bone with a cannulated headspace reamer.



In thin cortical bone or osteoporotic bone, however, the head space should not be reamed and an additional washer should be used to prevent the cortical bone from splitting and the screw from sinking in.

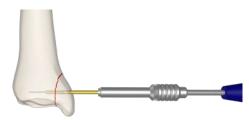
## 6 Determine the screw length

The gauge is pushed over the guide wire until it touches the cortex. The screw length shown includes the screw head. To avoid penetration of the countercortical bone, the next smaller screw length should be selected.



### 7 Insertion of the screw

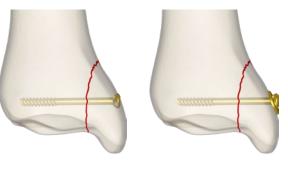
The screw is inserted with the cannulated screwdriver with holding sleeve over the guide wire.



### 8 Position control

Before removing the guide wire, a check is made in both planes.

Unscrewing the guide wire.



Hard cortex with countersunk screw head

Thin cortex with washer

Page I from 2

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# Cannulated screws Overview of surgical technique

# Use with drill guide system

## I Reposition

After repositioning of the fracture, it is temporarily fixed with a Kirschner wire.

# 2 Entry point

Determine the optimal entry point for the intramedullary guide wire. After stab incision, advance the drill guide system to the bone. The trocar is then pulled out and the

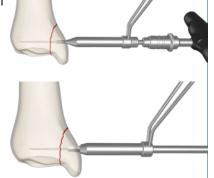
guide wire is screwed in to the necessary depth with the help of the image converter.



# 3 Reaming the cortex

The screws are usually self-drilling and self-tapping. However, if the cortical bone is particularly hard, we recommend drilling it out over the guide wire using a cannulated drill bit.

For this, the first drill sleeve (for the wire) must be removed.



#### Tip!

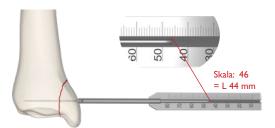
In very hard cortical

bone, to avoid soft tissue reactions, a recess for the screw head can be milled into the bone with a cannulated headspace reamer. This hole is drilled through the tissue protection sleeve.

In thin cortical bone or osteoporotic bone, however, the head space should not be reamed and an additional washer should be used to prevent the cortical bone from splitting and the screw from sinking in. In this case, the protective sleeve must be removed after measuring and the screw screwed in freehand.

## 4 Determine the screw length

The gauge is pushed through the tissue protection sleeve (last sleeve) over the guide wire until it touches the cortex. The screw length shown includes the screw head. To avoid penetration of the countercortical bone, the next smaller screw length should be selected.



## 5 Insertion of the screw

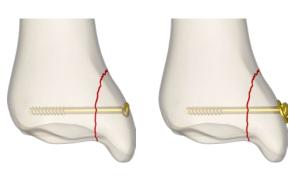
The screw is inserted with the cannulated screwdriver without holding sleeve via the tissue protection sleeve and the guide wire. Afterwards, the drill guide system (the tissue protection sleeve) can be completely removed.



## 6 Position control

Before removing the guide wire, a check is made in both planes.

Unscrewing the guide wire.



Hard cortex with countersunk screw head

Thin cortex with washer

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