



Cannulated Screws 2.0/2.7



▶ Introduction.....	2
▶ Surgical Technique.....	3
▶ Instruments.....	6
▶ Implants.....	8

Disclaimer

This surgical technique is solely for the use of medical professionals, particularly physicians, and therefore cannot be regarded as a source of information for non-medical persons. The description of this surgical technique does not constitute medical advice or medical recommendations nor does it convey any diagnostic or therapeutic information on individual cases. Therefore, the attending physician is fully responsible for instructing and obtaining the informed consent of the patient which this surgical technique cannot supersede.

The description of this surgical technique has been compiled by medical experts and trained staff of aap Implantate AG with utmost diligence and to the best of their knowledge.

However, aap Implantate AG does not warrant completeness, accuracy, currentness, or quality of the information nor is it liable for material or immaterial damages arising from the use of this information.

Cannulated Screws 2.0/2.7

Over the past years cannulated screws have become a proven feature of modern minimally invasive surgery. **aap** offers cannulated screws in 8 different diameters and a wide choice of various threads.

This Set of Cannulated Screws 2.0/2.7 offers new options of application by combining the well-established screws 2.7 with a specially designed size for hand and foot surgery:

► Cannulated Screw 2.0

Features

- Self-tapping: cuts easily and safely with less effort
- Self-drilling: saves surgery time
- Self-tapping, reverse: facilitates explantation
- Flat screw head: minimizes soft-tissue irritation
- Partial thread: optimizes compression
- Titanium alloy: for high biocompatibility

Benefits

► Fracture Set Cannulated Screws 2.0/2.7

Indications

- Diaphyseal and condylar fractures of the proximal, middle and distal phalanges
- Unstable scaphoid fractures
- Bennett fractures
- Displaced fractures of the radial head
- Small joint arthrodesis
- Osteotomy fixation

Contraindications

- Infection or inflammation (local or systemic)
- Unacceptably high risk for anesthesia
- Inadequate soft-tissue coverage
- Any concomitant disorders possibly affecting implant function
- Diaphyseal fractures of the long bones
- Osteopathy with loss of bone substance such as severe osteoporosis

◆ CAUTION:

aap bone screws are not approved for screw attachment or fixation to the posterior elements (Pediculi) of the cervical, thoracic or lumbar spine.

► Surgical Technique

1. Inserting guide wire:

- Insert a K-wire using the wire guide at the intended angle and position (final position of the screw). Use gentle and steady pressure to avoid bending the guide wire.
- In case of dense bone penetrate the proximal cortex with a drill.



◆ NOTE:

Always use a pre-measured K-wire. Manufacturing tolerances may influence the indicated measurement and thus the choice of the right screw length.

2. Pre-drilling (optional):

- Pre-drilling is recommended for hard bones to prevent a damage of the screw during insertion as well as a loss of reduction due to the applied forces.
- Use the cannulated drill bit according to your screw diameter and the respective drill sleeve. In order to avoid damaging the drill or K-wire use low speed or drill manually using the cannulated handle. Apply pressure continuously.



3. Countersinking screw head (optional):

- When soft-tissue coverage and/or screw position demand a further recess of the screw head use the countersink with the enclosed cannulated handle.
- This step should be done before measuring as it affects the correct reading.

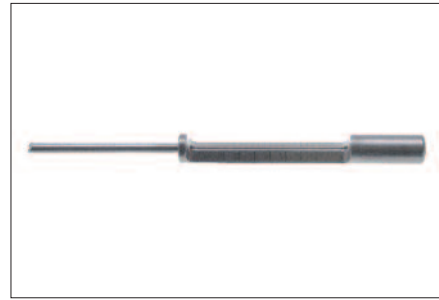


4. Measuring screw length:

- Slide the direct measuring device over the K-wire down to the bone.
- This provides a direct reading of the screw length on the scale.

◆ NOTE:

Consider potential deviations through compression and the use of washers.



5. Inserting screw:

- Assemble the appropriate screwdriver bit to the cannulated handle. Slide screw and the assembled screwdriver over the K-wire onto the bone.
Insert the screw by turning the screwdriver clockwise. Remove and discard the K-wire.



◆ CAUTION:

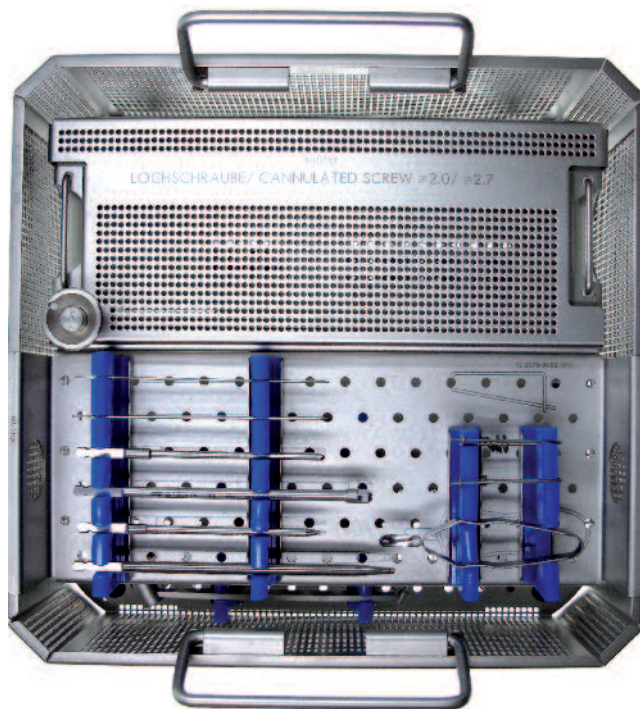
Single-use products like K-wires or drills marked accordingly have to be discarded after use.

► Additional Notes

- To obtain rotational stability place a second K-wire using the wire guide (fig. right)
- Always insert the screws manually (especially $\varnothing 2.0$). Using a power driver is not recommended.
- Countersink or pre-drill the proximal cortex if the angle of approach is rather steep. Preferably all screw tips should grip simultaneously to avoid damaging the screw.
- For replacement of a screw during surgery select a longer screw or larger diameter to prevent a loss of stability in the bone.



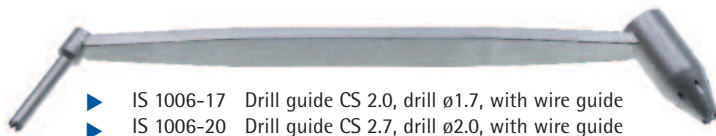
INSTRUMENTS ▶ IC 2075-00



ARTICLE	QUANTITY	ART.-NO.
Tray for instruments CS 2.0/2.7, empty	1	IC 2075-01
Lid for trays, small	1	IC 2007-00
Screw rack CS 2.0/2.7, empty	1	IC 2051-00
Clamp for washers	2	IC 0005-00
Drill guide CS 2.0, drill \varnothing 1.7, with wire guide	1	IS 1006-17
1 Drill guide CS 2.7, drill \varnothing 2.0, with wire guide	1	IS 1006-20
2 Screwdriver cannul. CS 2.0, T6, quick coupling	1	IS 1205-08
3 Screwdriver cannul. CS 2.7, hex 2.5, quick coupling	1	IS 1205-12
4 Countersink CS 2.0, quick coupling	1	IS 1305-08
5 Countersink CS 2.7-4.5, quick coupling	1	IS 1305-16
Cleaning wire \varnothing 0.8, CS 2.0	1	IS 1702-08
6 Cleaning wire \varnothing 1.2, CS 2.7-4.0	1	IS 1702-12
7 Direct measuring device, L 100, close, CS 2.0	1	IS 7910-00
8 Small cannulated handle, quick coupling	1	IU 7704-00
9 Drill CS 2.0, \varnothing 1.7, L 85, quick coupl., sterile, single use	1	IU 7017-13
10 Drill CS 2.7, \varnothing 2.0, L 85, quick coupl., sterile, single use	1	IU 7020-13
11 Screw forceps, self-holding, small	1	IU 8000-00
K-wire with trocar point \varnothing 0.8, L 100	5	NK 0008-10
K-wire with trocar point \varnothing 1.2, L 100	5	NK 0012-10


INSTRUMENTS

1



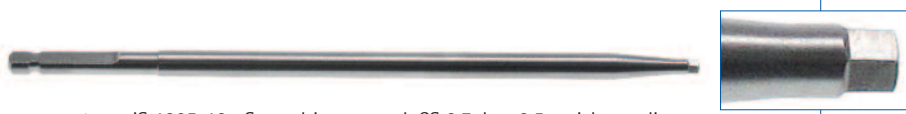
- ▶ IS 1006-17 Drill guide CS 2.0, drill \varnothing 1.7, with wire guide
- ▶ IS 1006-20 Drill guide CS 2.7, drill \varnothing 2.0, with wire guide

2



- ▶ IS 1205-08 Screwdriver cannul. CS 2.0, T6, quick coupling

3



- ▶ IS 1205-12 Screwdriver cannul. CS 2.7, hex 2.5, quick coupling

4



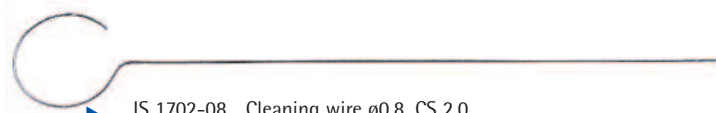
- ▶ IS 1305-08 Countersink CS 2.0, quick coupling

5



- ▶ IS 1305-16 Countersink CS 2.7-4.5, quick coupling

6



- ▶ IS 1702-08 Cleaning wire \varnothing 0.8, CS 2.0
- ▶ IS 1702-12 Cleaning wire \varnothing 1.2, CS 2.7

7




- ▶ IS 7910-00 Direct measuring device, L 100, close, CS 2.0

8



- ▶ IU 7704-00 Small cannulated handle, quick coupling


9



single use

- ▶ IU 7017-13 Drill CS 2.0, \varnothing 1.7, L 85, quick coupling, sterile


10



single use

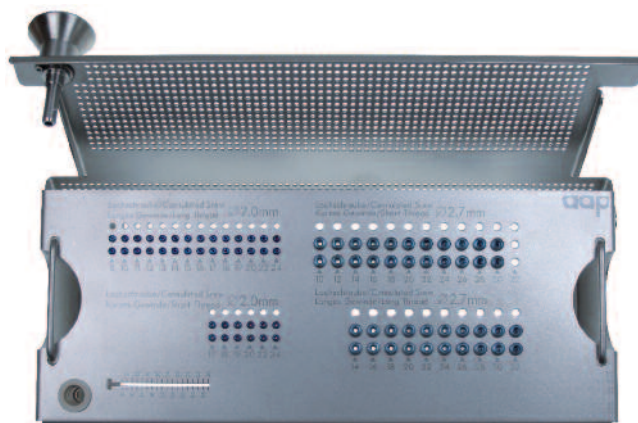
- ▶ IU 7017-13 Drill CS 2.7, \varnothing 2.0, L 85, quick coupling, sterile

11



- ▶ IU 8000-00 Screw forceps, self-holding, small

IMPLANTS



CANNULATED SCREWS $\varnothing 2.0$ mm

SCREW LENGTH mm	THREAD LENGTH mm	ART.-NO. SHORT THREAD	THREAD LENGTH mm	ART.-NO. LONG THREAD
8	-	-	4	SC 2050-08-2
10	-	-	4	SC 2050-10-2
11	-	-	5	SC 2050-11-2
12	-	-	5	SC 2050-12-2
13	-	-	6	SC 2050-13-2
14	-	-	6	SC 2050-14-2
15	-	-	6	SC 2050-15-2
16	-	-	7	SC 2050-16-2
17	5	SC 2030-17-2	8	SC 2050-17-2
18	5	SC 2030-18-2	8	SC 2050-18-2
19	5	SC 2030-19-2	9	SC 2050-19-2
20	5	SC 2030-20-2	9	SC 2050-20-2
22	5	SC 2030-22-2	10	SC 2050-22-2
24	6	SC 2030-24-2	10	SC 2050-24-2

CANNULATED SCREWS $\varnothing 2.7$ mm

SCREW LENGTH mm	THREAD LENGTH mm	ART.-NO. SHORT THREAD	THREAD LENGTH mm	ART.-NO. LONG THREAD
10	4	SC 2704-10-2	-	-
12	4	SC 2704-12-2	-	-
14	4	SC 2704-14-2	6	SC 2706-14-2
16	4	SC 2704-16-2	7	SC 2707-16-2
18	5	SC 2705-18-2	8	SC 2708-18-2
20	5	SC 2705-20-2	9	SC 2709-20-2
22	5	SC 2705-22-2	10	SC 2710-22-2
24	6	SC 2706-24-2	10	SC 2710-24-2
26	6	SC 2706-26-2	12	SC 2712-26-2
28	6	SC 2706-28-2	12	SC 2712-28-2
30	6	SC 2706-30-2	14	SC 2714-30-2
32	-	-	14	SC 2714-32-2

ARTICLE	ART.-NO.
Washer I- $\varnothing 2.2$, O- $\varnothing 4.5$	SU 0205-00-2
Washer I- $\varnothing 4.0$, O- $\varnothing 8.0$	SU 0407-00-2

Errors excepted.

Subject to change without notice.

© **aap Implantate AG**

WM 2003-16 / 1009

Layout & Illustrations:

deSIGN graphic - Wolfram Passlack

aap Implantate AG

Lorenzweg 5 • 12099 Berlin

Germany

Fon +49 30 75019-0

Fax +49 30 75019-222

customer.service@aap.de

www.aap.de



aap Implantate AG
Lorenzweg 5 • 12099 Berlin • Germany



▶ **aap Implantate AG**
Lorenzweg 5 • 12099 Berlin
Germany
Fon +49 30 75019-0
Fax +49 30 75019-222
customer.service@aap.de
www.aap.de