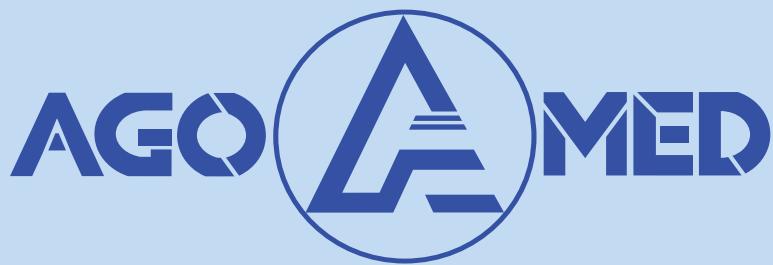


SURGICAL  
TECHNIQUE GUIDE

INCLUDING



IN COOPERATION WITH



# ANTERIOR PLATING SYSTEM 4.0

Made in Germany



**EN** Working with AGOMED means working with a company committed to excellence. Our products are German engineered, biocompatible, and cutting-edge. Our team members collectively bring decades of medical technology experience to the table.

**We're reliable. We're flexible.  
We're inventive.**

AGOMED collaborates with distributors, hospitals, and doctors worldwide to create and develop exacting, state-of-the-art solutions for complex surgical problems. We work closely with specialists to insure that our implant systems for Traumatology/Orthopaedics of upper and lower extremities improve the patient's quality of life. Patient safety is always our number one priority.

**DE** Mit AGOMED zu arbeiten, bedeutet mit einem Unternehmen zu arbeiten, das sich zur Exzellenz und Hochleistung verpflichtet.

Unsere Produkte werden von deutschen Ingenieuren entwickelt, sind biokompatibel, innovativ und auf dem neuesten Stand der Technik. Unser Team hat jahrzehntelange Erfahrung im Bereich der Medizintechnik.

**Wir sind zuverlässig. Wir sind flexibel. Wir sind innovativ.**

AGOMED arbeitet weltweit mit Unternehmen, Krankenhäusern und Ärzten zusammen, um anspruchsvolle, hochmoderne Lösungen für komplexe chirurgische Probleme zu entwickeln. Wir arbeiten eng mit Spezialisten zusammen, um sicherzustellen, dass unsere Implantat-Systeme für Traumatologie/Orthopädie der oberen und unteren Extremitäten die Lebensqualität der Patienten verbessern. Die Sicherheit der Patienten steht bei uns immer an erster Stelle.

**ES** Trabajar con AGOMED significa trabajar con una empresa comprometida con la excelencia. Nuestros productos son diseñados en Alemania, biocompatibles y de vanguardia. Los miembros de nuestro equipo aportan, de manera colectiva, décadas de experiencia en tecnología médica.

**Somos fiables. Somos flexibles.  
Somos innovadores.**

AGOMED colabora con distribuidores, hospitales y doctores a nivel mundial con el objetivo de desarrollar soluciones rigurosas para problemas quirúrgicos complejos con tecnología punta. Cooperamos estrechamente con especialistas para garantizar que nuestros sistemas de implantes y instrumentos para Traumatología/Ortopedia de las extremidades superiores y inferiores mejoren la calidad de vida de los pacientes. La seguridad de los pacientes siempre es nuestra prioridad.

## QUALITY IS PART OF OUR DNA



DIN EN ISO  
13485

AGOMED MEANS QUALITY. WE EXCEED DIN EN ISO 13485 STANDARDS. ALL OUR PRODUCTS BEAR THE CE MARK.

EN

AGOMED BEDEUTET QUALITÄT.  
WIR SIND ZERTIFIZIERT NACH DIN EN ISO 13485. ALLE UNSERE PRODUKTE TRAGEN DAS CE ZEICHEN.

DE

AGOMED ES SINÓNIMO DE CALIDAD.  
SUPERAMOS LOS ESTÁNDARES DIN EN ISO 13485. TODOS LOS PRODUCTOS LLEVAN EL SIGNO CE.

ES



CE  
CERTIFICATE

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## ANTERIOR SYSTEM 4.0

S-1487

### FEATURES & BENEFITS

- Low profile plates with a thickness of 3.0 mm - 4.0 mm
- Plate hole accepts 4.0 mm locking and non-locking screws
- Maximum fixation points within each plate
- Anatomically designed for use surgical approaches: anterior
- External Compression Device facilitates controlled compression across the joint
- Four compression modes available in the system
  - Anatomic compression hole
  - Oblong compression hole

#### Oblong Compression Hole

For eccentric screw placement and compression.

#### Anatomical Plate Designs

Pre-contoured plate designs closely match the curvature of the anatomy, minimizing the need for additional plate contouring.



#### Strong low profile plate

Decreases the chance of soft tissue irritation and skin closure

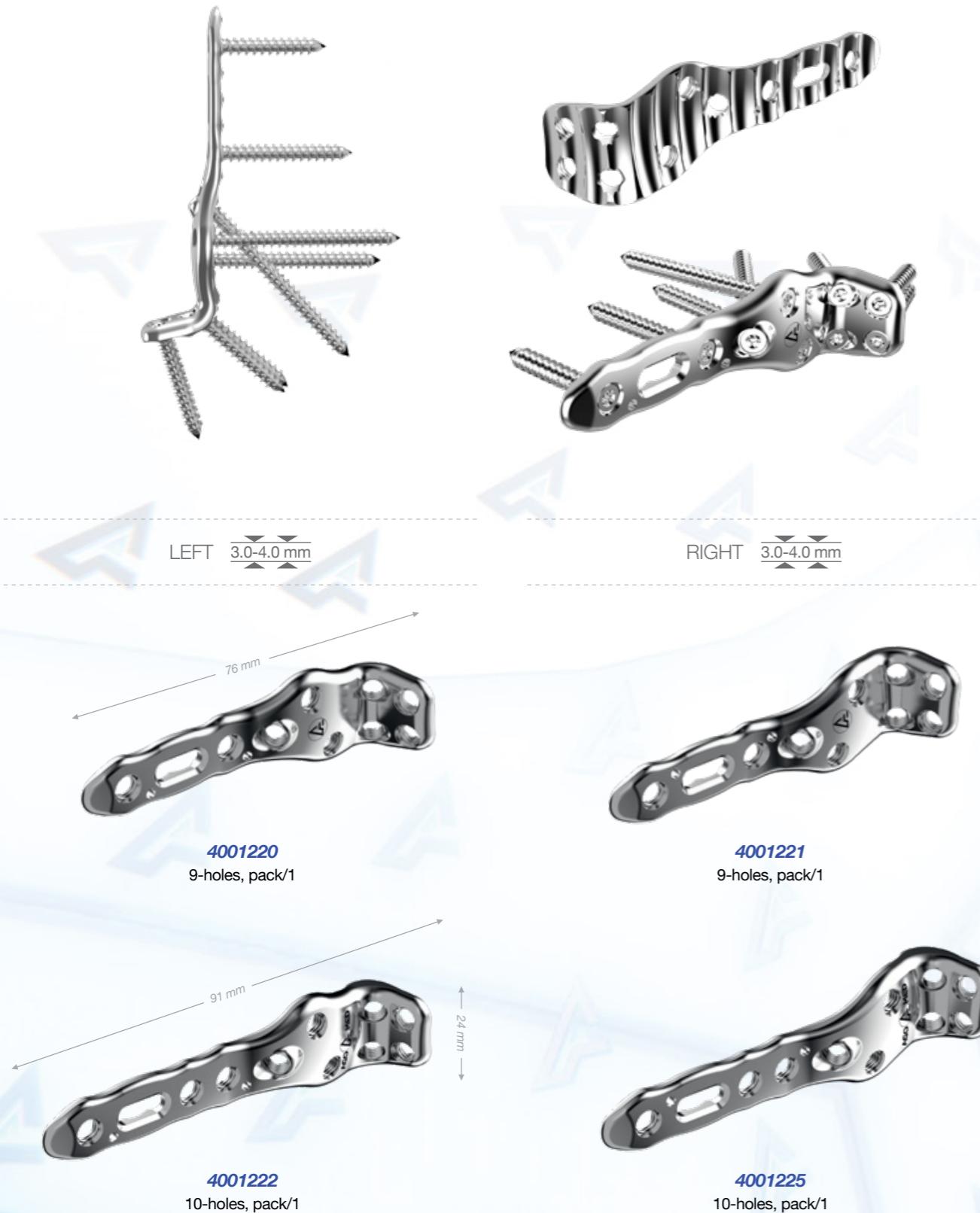
#### Anatomic Compression Hole

Allows lag compression through the center of the arthrodesis site for maximal compression.



Anterior plates are fully compatible with the Agofix 4.0 System S1439

## ANTERIOR PLATES



## TITANIUM SCREWS 4.0



L	Ø 4.0 mm	Ø 4.0 mm	Pack
18 mm	5004018	5004118	5
20 mm	5004020	5004120	5
22 mm	5004022	5004122	5
24 mm	5004024	5004124	5
26 mm	5004026	5004126	5
28 mm	5004028	5004128	5
30 mm	5004030	5004130	5
32 mm	5004032	5004132	5
34 mm	5004034	5004134	5
36 mm	5004036	5004136	5
38 mm	5004038	5004138	5
40 mm	5004040	5004140	5
42 mm	5004042	5004142	5
44 mm	5004044	5004144	5
46 mm	5004046	5004146	5
48 mm	5004048	5004148	5
50 mm	5004050	5004150	5
55 mm	5004055	5004155	5

Drill-ø 3.2 mm



## INDICATIONS

- Arthrodesis of the ankle including tibiotalocalcaneal and tibiotalar joints and tibiocalcaneal arthrodeses, in conjunction with osteotomies and fractures of the distal tibia, talus, and calcaneus.



## CONTRAINDICATIONS

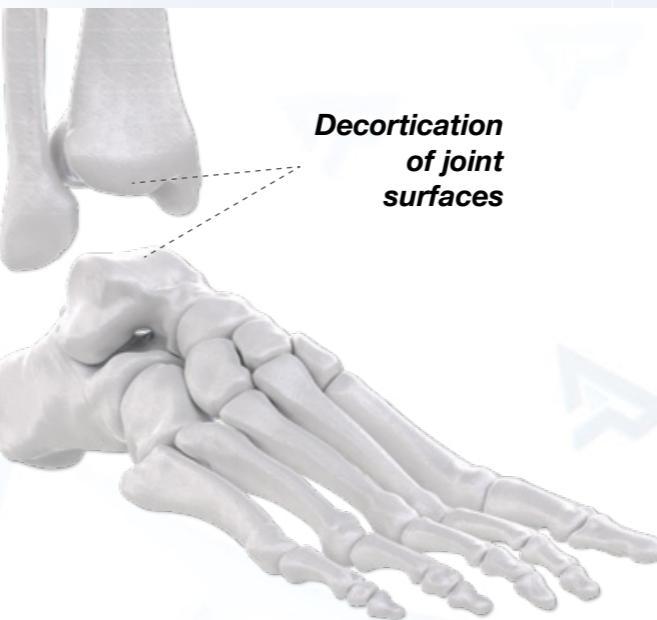
- Active Infection
- Psychologically inadequate patient
- Insufficient quantity or quality of bone to permit stabilization of the arthrodesis
- Possibility for conservative treatment
- Growing patients with open epiphyses
- Suspected or documented metal allergy or intolerance

## OPERATION TECHNIQUE

### Patient Positioning

- Position the patient in the supine position, with the heel at end of the table. Place a bump proximal to the ankle.

### STEP 1



### Bone Preparation

- Prepare the joint in the usual manner. Use burrs, curettes, and osteotomes (such as a Charcot chisel or special osteotomes for joint surface preparation) to decorticate the involved joint surfaces. Due to arthritic changes of the ankle, a small portion of the anterior tibia may need to be removed for plate placement.
- Ensure that the joint surfaces are prepared congruently.

### STEP 2



- Provisional fixation of the reduction can be accomplished with a 1.6 mm x 180 mm K-wire (1101058) posterior to where the plate will reside. The wire can be targeted from either the medial or lateral aspect of the tibia.
- If necessary, use the appropriate Cannulated Drill Bit to predrill over the Guide Wire. Using the appropriate Driver, insert the cannulated compression 7.5 mm short thread screw (5010036-5010130) to compress the ankle joint. Tighten the screw until the desired compression is achieved, care should be taken to avoid complete penetration of the medial cortex of the tibia.

**STEP 3****Plate Placement**

- Frequently there is an irregular surface remaining over the anterior joint which requires debridement to a smooth surface with either a rongeur or saw. Retrieve the appropriate anterior TT plate based on the patient's anatomy.
- If necessary, the anterior metaphyseal flare can be removed along the frontal plane using a saw or chisel. This bone can be translated distally as autograft to fill the void between the plate and anterior margin of the joint. Resect any bony prominence on the dorsal talar neck and check for a proper fit of the plate.

**STEP 5****Screw Insertion**

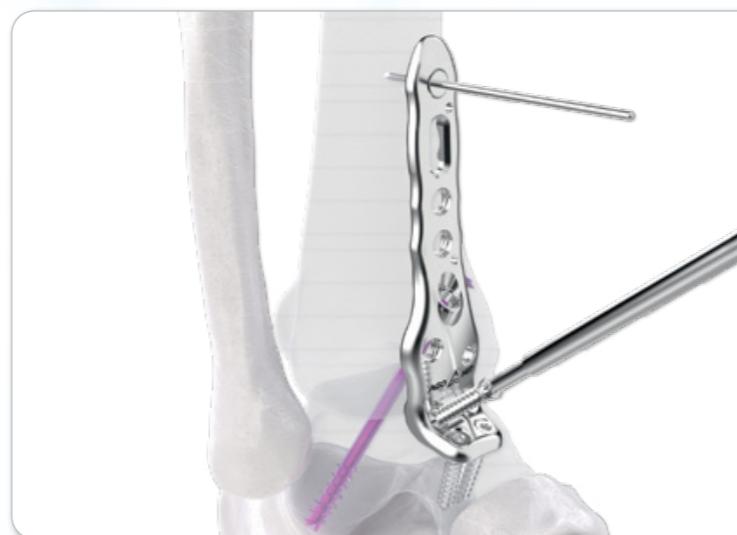
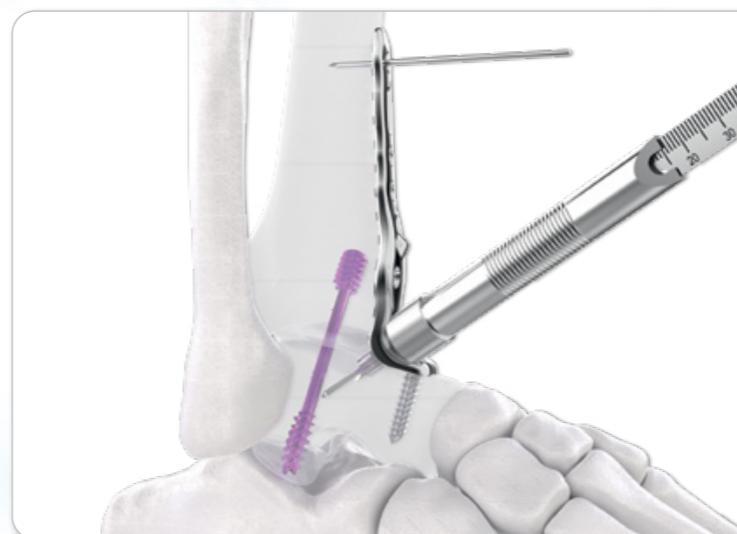
- Secure the plate distally in the talus using a 4.0 mm locking or nonlocking screw drilling with the 3.2 mm drill.

**Tip:** Placing the fixed drill guides in the holes prior to temporary plate fixation may facilitate plate positioning and distal screw drilling.

**STEP 4****Plate Fixation**

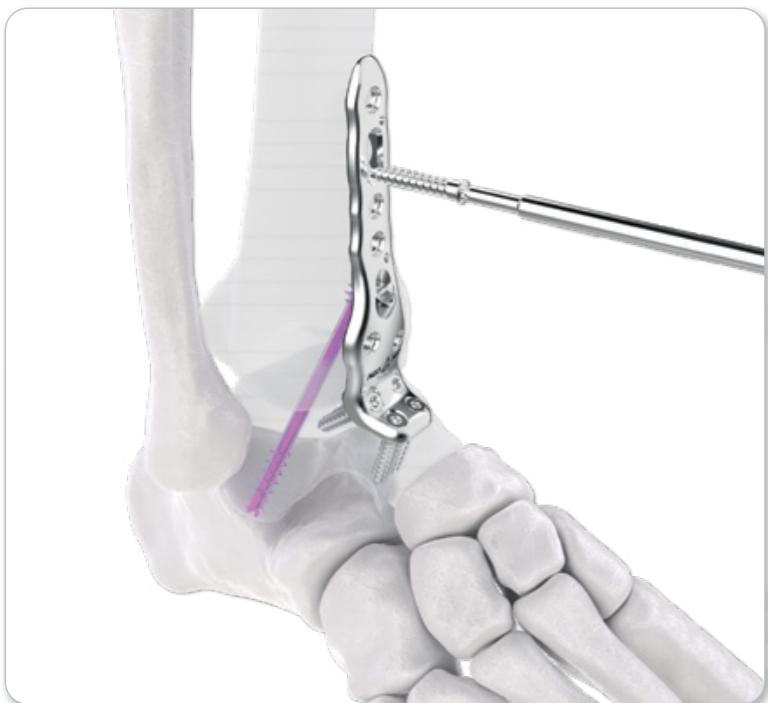
- Fixate the proper anterior plate across the ankle joint and temporarily fix in position using one positioning pin in the talus and the other in the tibia.

**Note:** The plate should be positioned proximal to the dorsal margin of the talonavicular joint to avoid impingement when dorsiflexing the foot.



- Remove the drill guide and measure screw length using the depth gauge. Confirm screw projection and length using the depth gauge under fluoroscopy. Insert the selected screw size into the plate hole using the provided driver and handle.

- Continue filling the talar holes until proper fixation is achieved. It is recommended that distal fixation be achieved in advance of proximal fixation of the oblong compression hole in the tibia.

**STEP 6**

- Remove the positioning pin from the tibial screw hole. Use the step outlined in the screw fixation section to drill, measure and fill appropriate 4.0 non-locking screw in the Proximal Slot. Obtain initial compression across the arthrodesis site and secure the tibial portion of the plate to the bone by placing a non-locking screw eccentrically in the oblong compression hole.

**STEP 8**

- Continue to use either locking or nonlocking screws through the remaining proximal plate holes until the desired fixation is achieved.

**STEP 7**

- In the anatomic lag screw hole use the drill sleeve (K-wire for cannulated drill bits is available) and 3.2 mm drill bit. Overdrill with the drill. Use the depth device to measure and place a screw.

**STEP 9****Wound Closure and Dressing**

- Use image intensification to confirm adequate plate and screw placement. Then close the wound in layers, and apply a cast in the usual manner.

## CLINICAL CASE STUDIES



ANTERIOR SYSTEM 4.0



ANTERIOR SYSTEM 4.0

## INSTRUMENTS AND TOOLS

**1301048** AgoFix agopaq system 4.0 instrument tray



**1000150** Agopaqx4 tray for implant modules w/4 lids, w/o implant modules



**1000439** Agopaqx4 Ankle Fusion Anterior plate-tray system 4.0, w/o implants







1201114

AgoFix drill-guide f. drill 2.7 sys. 4.0,  
screwable, black marking, 45 mm



1201115

AgoFix drill-guide f. drill 3.2 sys. 4.0,  
screwable, red marking, 65 mm



1001010

Screwdriver blade TX 10 non-  
cannulated, interchangeable, AO-shaft



1201064

Twist drill 2.7 x 125 mm,  
AO 50 mm thread, black marker



1201101

Twist drill 3.2 x 145 mm,  
AO-shaft 50 mm thread, red marker



1002527

Plate- /screwholding forceps  
angled, 15cm/6"



## MORE OF OUR PRODUCTS

2010033

AgoFix 4.0  
system



2010002

Foot & Ankle  
system



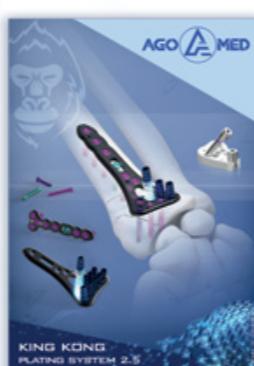
2010015

Cannulated  
Screws



2010007

King Kong Multidirectional  
Radius system 2.5



2010030

Pediatric  
Screw system 6.2



2010017

AGO-Pediatric  
system 3.5 / 4.0



2010003

Titanium plating system  
for craniomaxillofacial osteosynthesis



2010008

AgoFix Neuro  
Plating system 1.5



2010016

Titanium Mesh systems for  
craniomaxillofacial osteosynthesis / Neuro





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MADE IN GERMANY

Ref.num. 2010053

Revision 01 / 06.2020

CE  
0297