

medartis

PRECISION IN FIXATION

PRODUCT INFORMATION

Hand System 1.2 – 2.3



APTUS Hand



Contents

4	APTUS Hand. The Next Level of Versatility.
6	Fixation Plates
7	1.2/1.5 and 2.0/2.3 Fixation Plates
8	TriLock Plates
9	1.2/1.5 and 2.0/2.3 TriLock Plates
10	Compression Plates
11	2.0/2.3 MC Compression and TriLock ^{PLUS} Plates
12	Hook Plates
13	1.2/1.5 Fixation and TriLock Hook Plates
14	Scaphoid Plates
15	1.2/1.5 TriLock Scaphoid Plates
16	MC Head/Neck Plate
17	1.2–2.3 TriLock MC Head/Neck Plate
18	Rotation Correction Plates
19	1.2/1.5 and 2.0/2.3 TriLock Rotation Plates
20	Screws
20	Washers
21	Instruments
	General System Features
	Clamps for Lag Screw Technique
	Temporary Locking Stopper
	Olive K-wires
22	Technology
25	Storage
26	Ordering Information
50	Bibliography

For further information regarding the APTUS product line visit www.medartis.com.

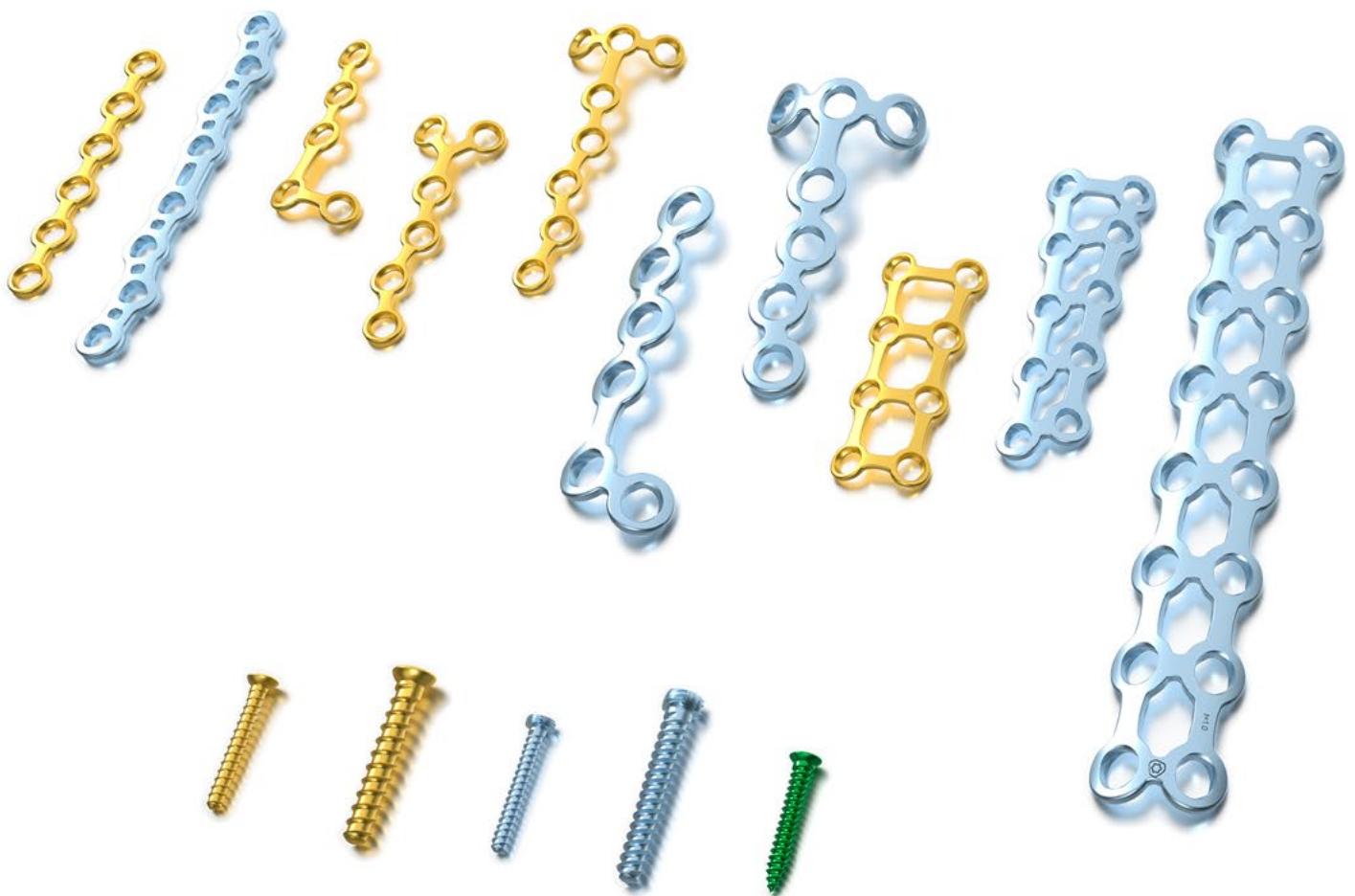
APTUS Hand. The Next Level of Versatility.

The hand is one of the most complex and most frequently utilized parts of the human musculoskeletal system.¹ It is composed of several closely balanced structures, e.g. bones, muscles, ligaments, tendons, joints and nerves. The goal of hand surgery is to minimize the impact of hand diseases and injuries on daily activities and to restore and obtain as much functionality as possible.

In collaboration with leading specialists, Medartis has developed the unique APTUS Hand System for treatment of frac-

tures, osteotomies and arthrodesis of the hand.² In order to meet the requirements of the delicate structures of the hand, the various plate designs are adapted to the bone's shape. The implants portfolio offers different technologies, designs, and sizes to support early mobilization and active therapy.

With the introduction of TriLock, Medartis was the first company to offer a fully modular multidirectional and angular stable hand fixation system.



The APTUS Hand System offers a comprehensive selection of both basic and specialized plates for treatment of fractures, osteotomies and arthrodesis of the hand.

With 65 unique titanium plates the system stands out with a 1.2 multidirectional and angular stable locking system along with 1.5 self-drilling screws for hand osteosynthesis.

It also includes indication specific plates, a broad selection

of hook plates for bony avulsions, and plates combining locking and compression in one step.

Color-coded instrumentation, a secure connection between screw and screwdriver, new forceps and clamps to support the surgical procedure and a modular storage solution complete the performance you expect.



Fixation Plates

General plate shapes – straight, L-/T-/Y-shape, and grid structure – are designed to match most bony anatomies and to support fracture reduction.³

Low plate profile – with plate thicknesses of 0.6, 1.0 and 1.3 mm.

Two screw sizes are available within each plate system for adequate fragment fixation:

- 1.2 or 1.5 screws in 1.2/1.5 plates
- 2.0 or 2.3 screws in 2.0/2.3 plates

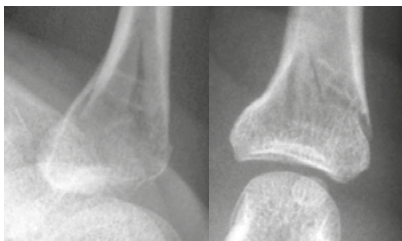


1.2/1.5 and 2.0/2.3 Fixation Plates

Rounded edges and
smooth surface



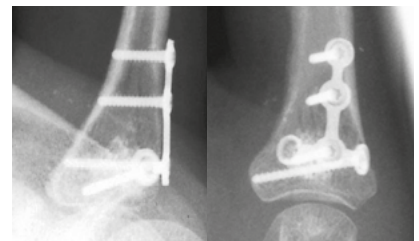
Extraarticular basis fracture of a proximal phalanx



Preoperative X-rays.



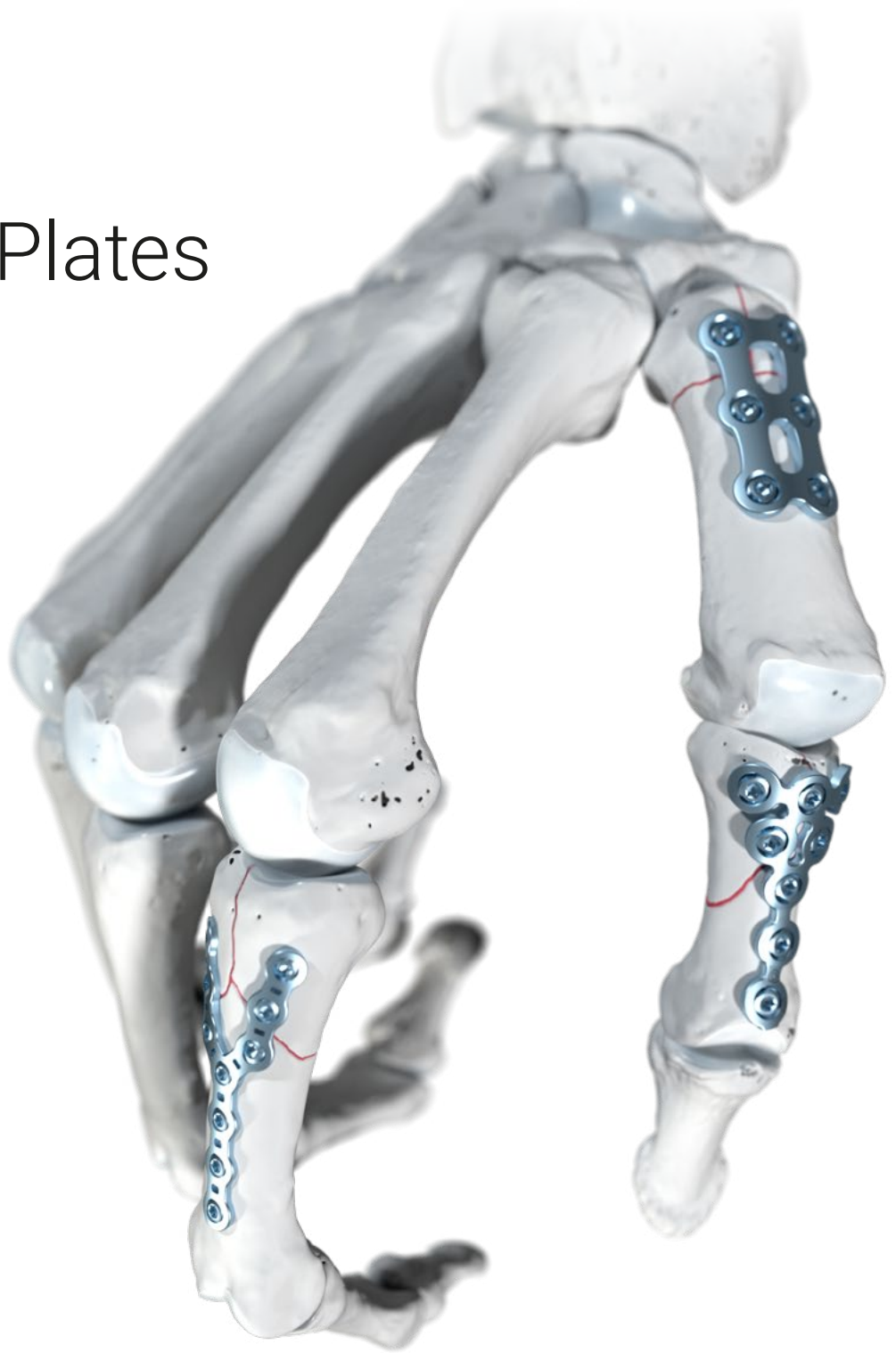
Intraoperative image.



Postoperative X-rays.

Clinical case published with the kind permission of: C. Ranft, Kiel, Germany

TriLock Plates



Internal fixator principle (locking system) allows initiation of mobilization in the early postoperative period.⁴

General plate shapes – straight, L-/T-/Y-shape, and grid structure – are designed to match most bony anatomies and to support fracture reduction.

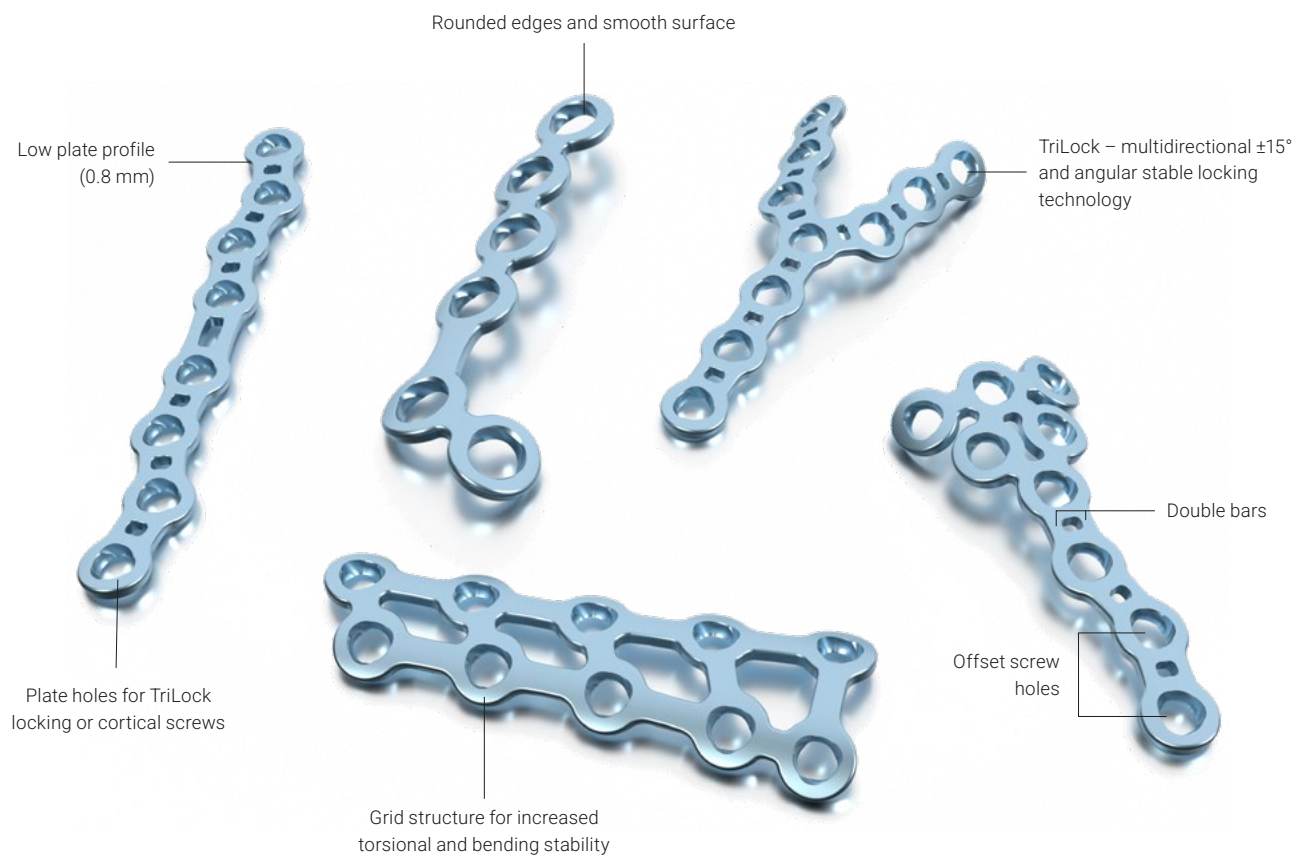
Fracture specific plate geometries – e.g. double-row T-plates – offer more screw options in the subchondral area, allowing for more reduction options of articular fracture fragments and fractures close to the joint.

Double bars between screw holes increase torsional stability.

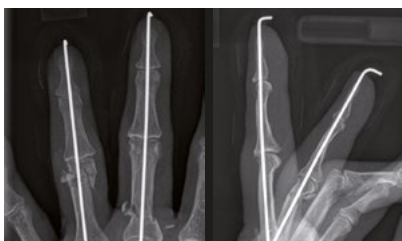
Offset screw holes prevent crack formation during drilling and screw insertion.

Low plate profile – with plate thicknesses of 0.8, 1.0 and 1.3 mm.

1.2/1.5 and 2.0/2.3 TriLock Plates



Fracture of the proximal phalanges III and IV



Preoperative X-rays.



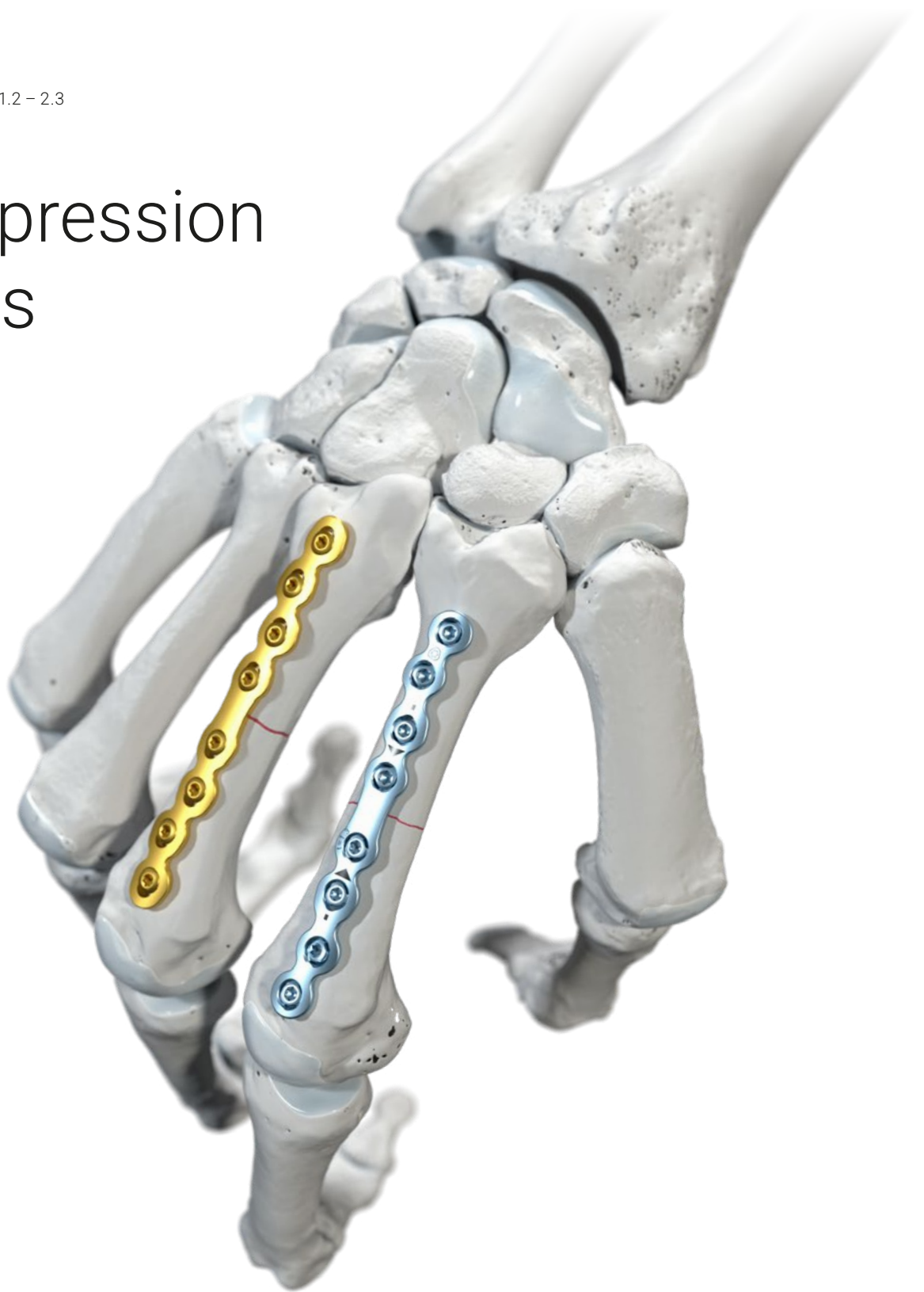
Intraoperative image.



Postoperative X-rays.

Clinical case published with the kind permission of: D. Schäfer, Basel, Switzerland

Compression Plates

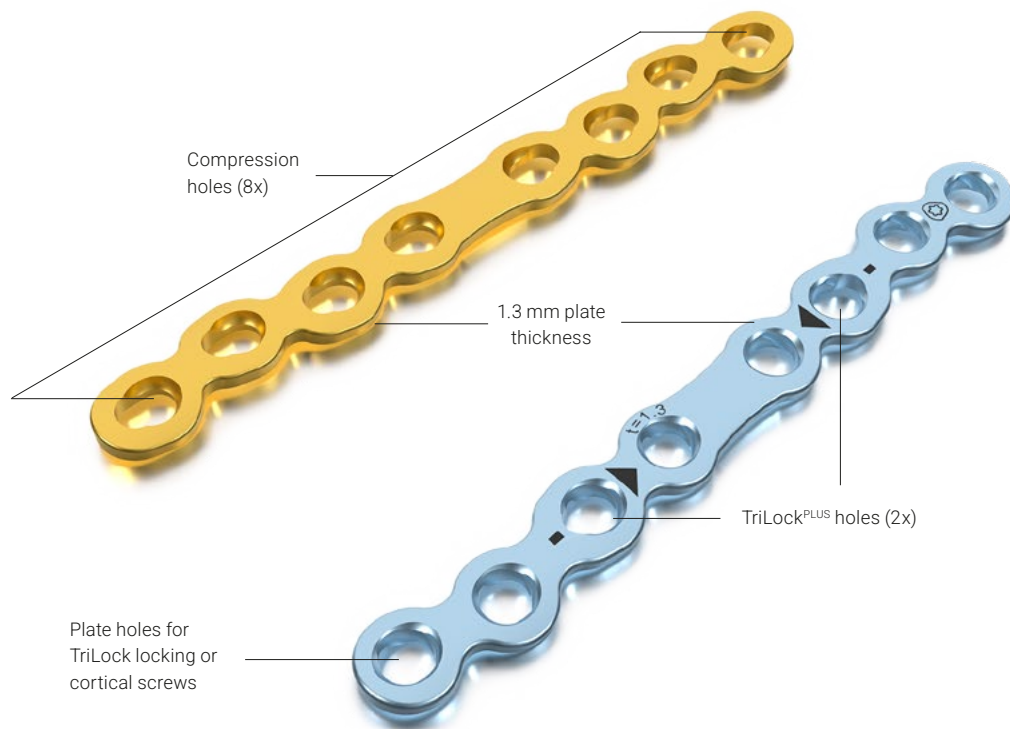


TriLock^{PLUS} combines compression and locking in one step.

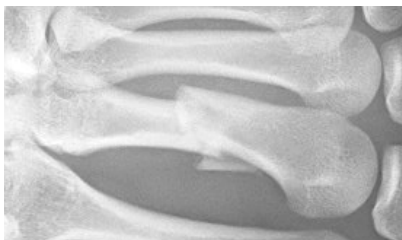
TriLock^{PLUS} holes allow up to 1 mm compression. With two opposing TriLock^{PLUS} holes on the plate up to 2 mm compression can be achieved.

For adequate fixation the general plate geometries – straight, L-/Y-shape – may be additionally adapted (i.e. cut, bent) to different bone shapes and fracture location.

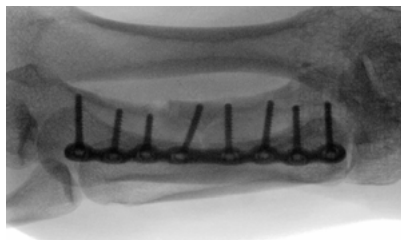
2.0/2.3 MC Compression and TriLock^{PLUS} Plates



Metacarpal shaft fracture



Preoperative X-ray.



Postoperative lateral X-ray.



Postoperative AP X-ray.

Clinical case published with the kind permission of: F. Unglaub, Bad Rappenau, Germany.

Hook Plates



Hooks are pressed into the avulsed fragment to capture and reduce it to its original anatomical shape.⁵

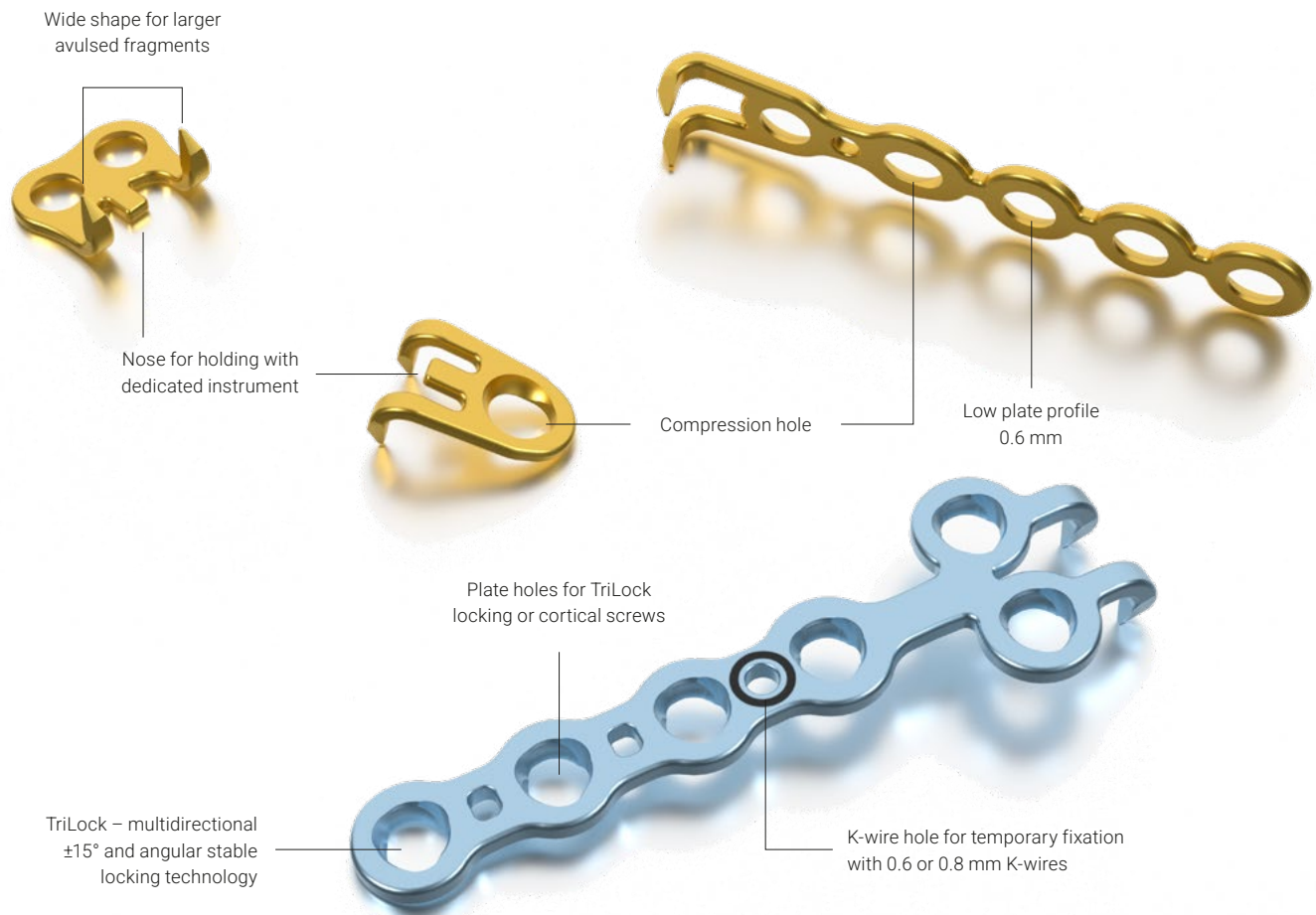
Dedicated holding instrument and K-wire holes support reduction of bony avulsion and plate positioning.

Long hook plates with several holes offer more fixation options.

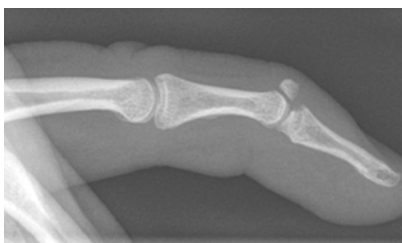
The combination of hooks and TriLock holes increases stability in case of bony avulsion and intraarticular fragments.

For adequate fixation the long hook plates may be additionally adapted (i.e. cut, bent) to different bone shapes and fracture location.

1.2/1.5 Fixation and TriLock Hook Plates



Fixation of Mallet fracture



Preoperative X-ray.



Intraoperative image.



Postoperative X-rays.

Clinical case published with the kind permission of: H. Abel, Munich, Germany

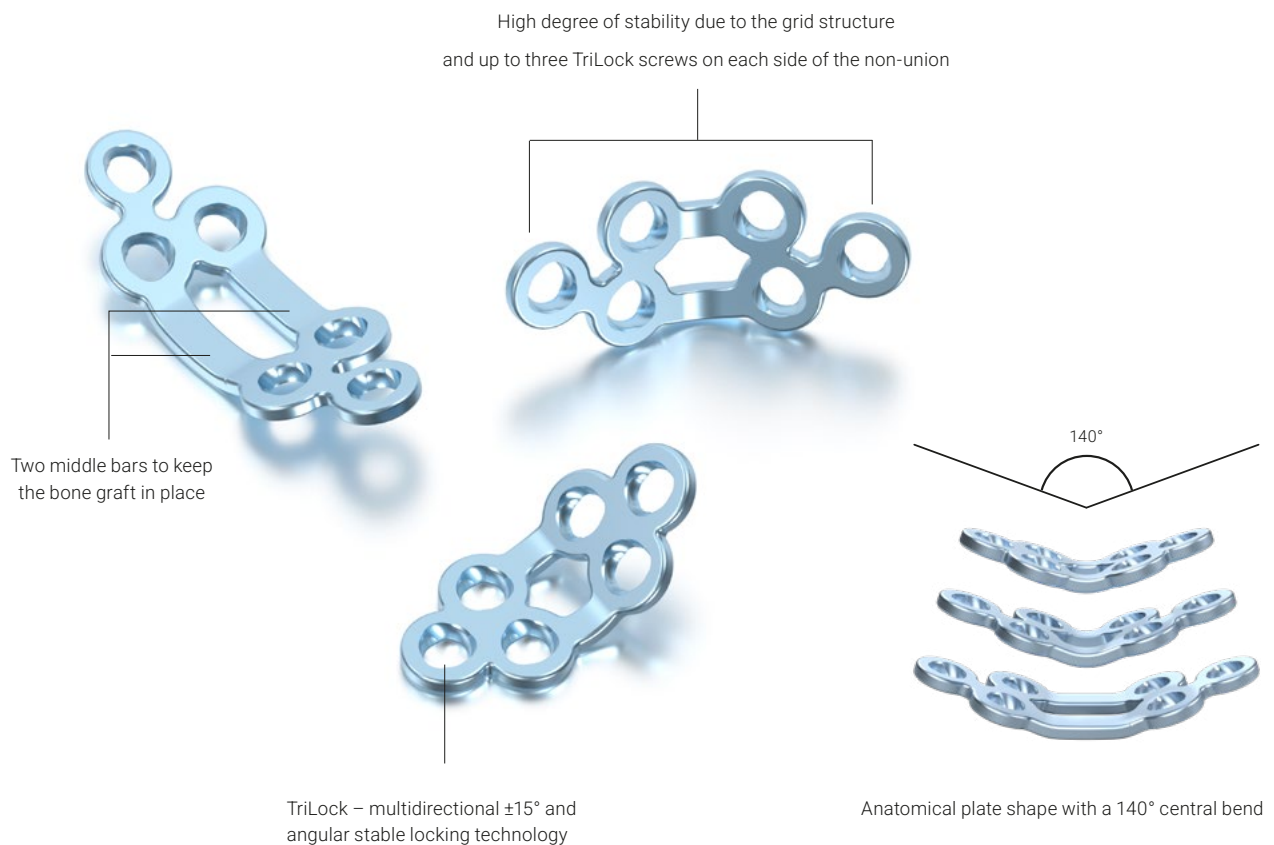
Scaphoid Plates

Scaphoid plates are designed to treat primarily non-unions,^{6,7,8} In addition, they allow the treatment of multifragmentary, complex or very distal fractures of the scaphoid.



Three plate options provide an improved anatomical fit to accommodate the large variability in size and shape of the scaphoid bone.

1.2/1.5 TriLock Scaphoid Plates



Non-union treated with the scaphoid plate



Preoperative X-rays.



Postoperative X-rays.

Clinical case published with the kind permission of: P. Hannemann, Maastricht, Netherlands.

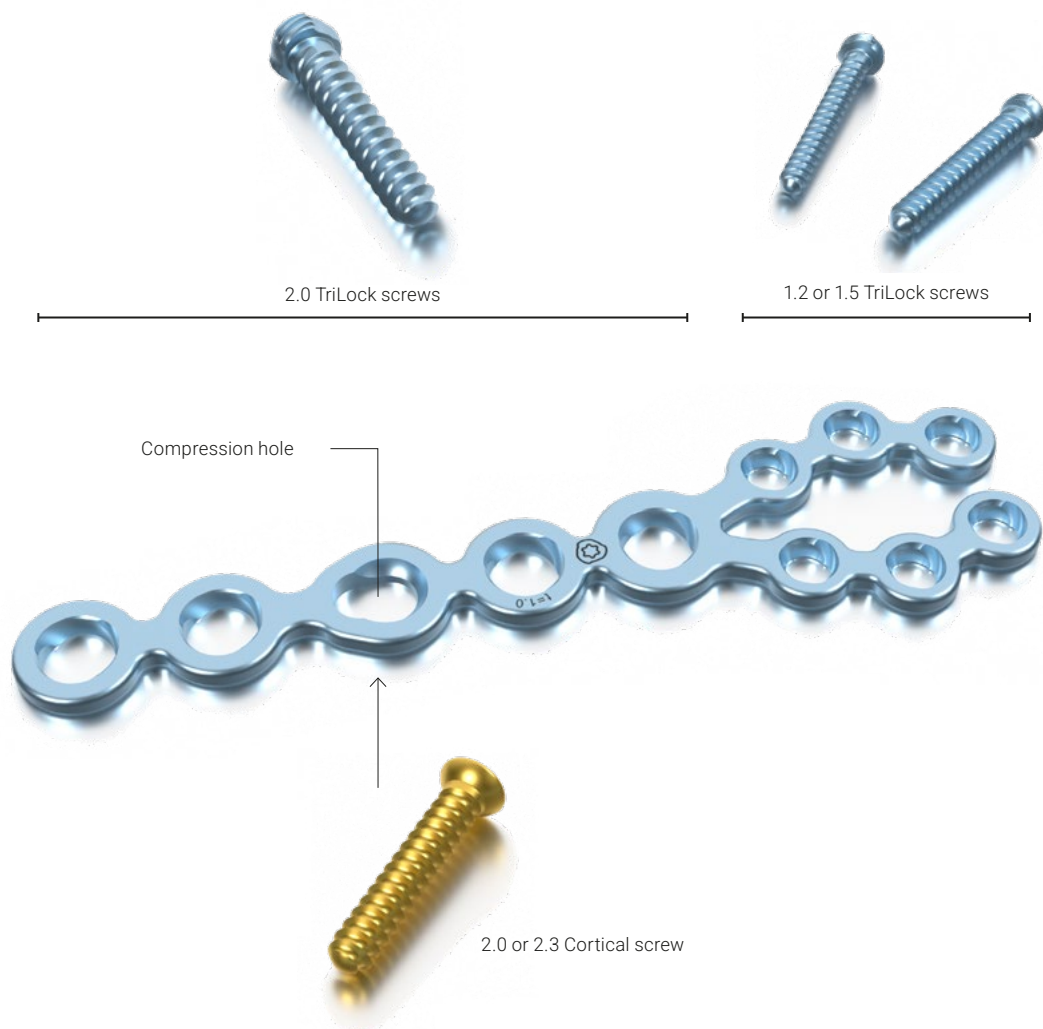
MC Head/Neck Plate

A combination of 1.5 and 2.0 TriLock screws enables fixation of comminuted fragments in the head/neck (1.2/1.5 screws) while maintaining necessary strength in the shaft (2.0/2.3 screws).

For an optimal fit in the head/neck region and shaft region the plate can be additionally adapted (i.e. cut, bent).



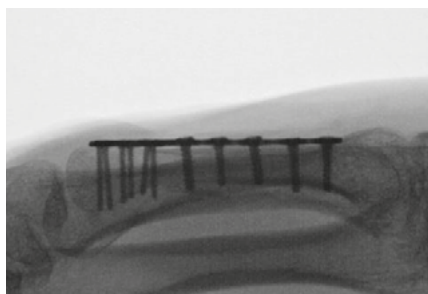
1.2–2.3 TriLock MC Head/Neck Plate



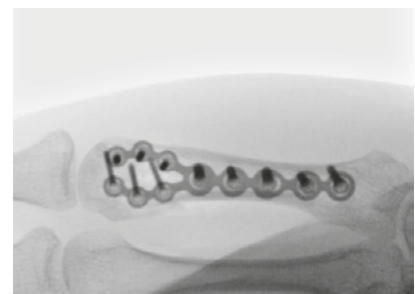
Metacarpal V head fracture



Preoperative X-ray.



Postoperative lateral X-ray.

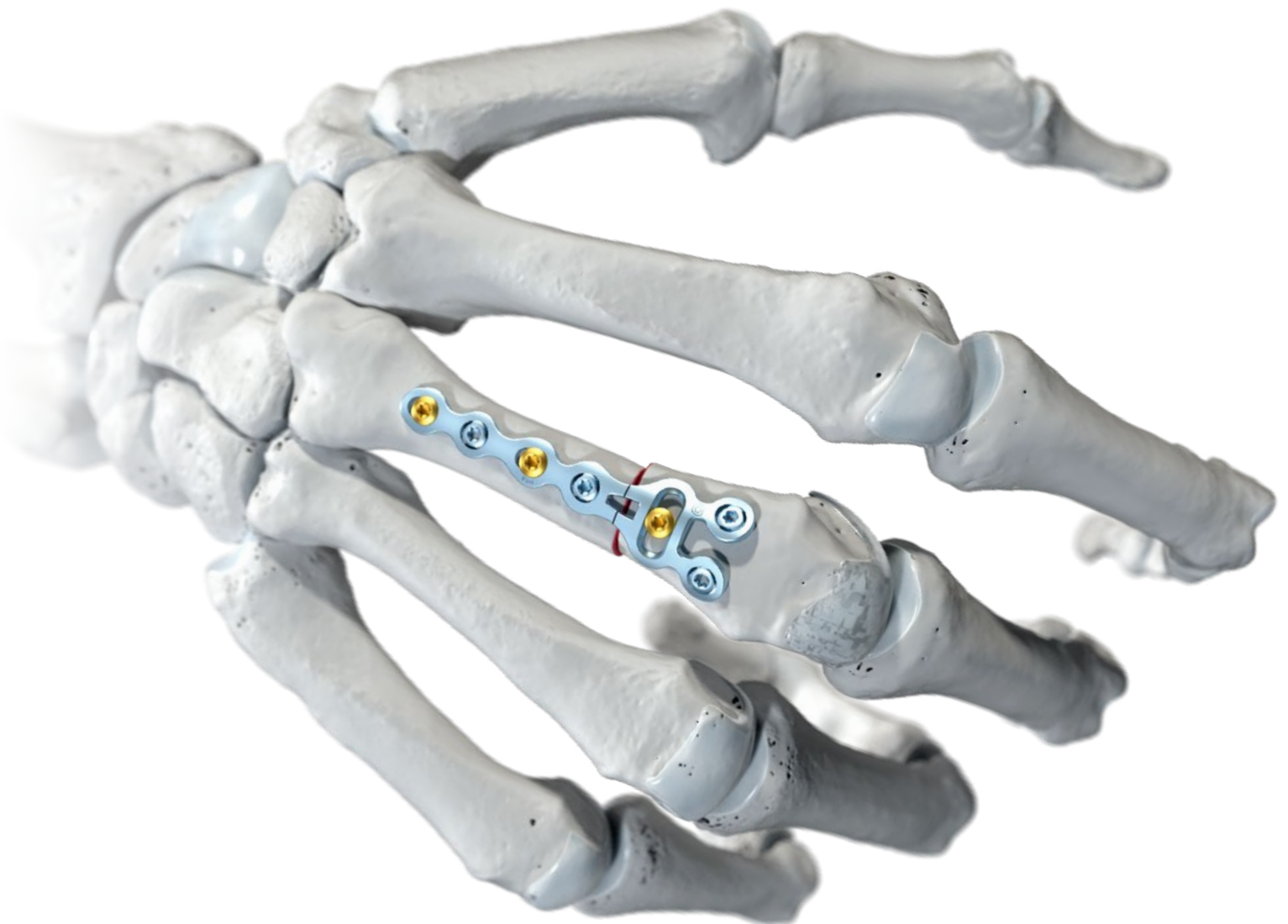


Postoperative AP X-ray.

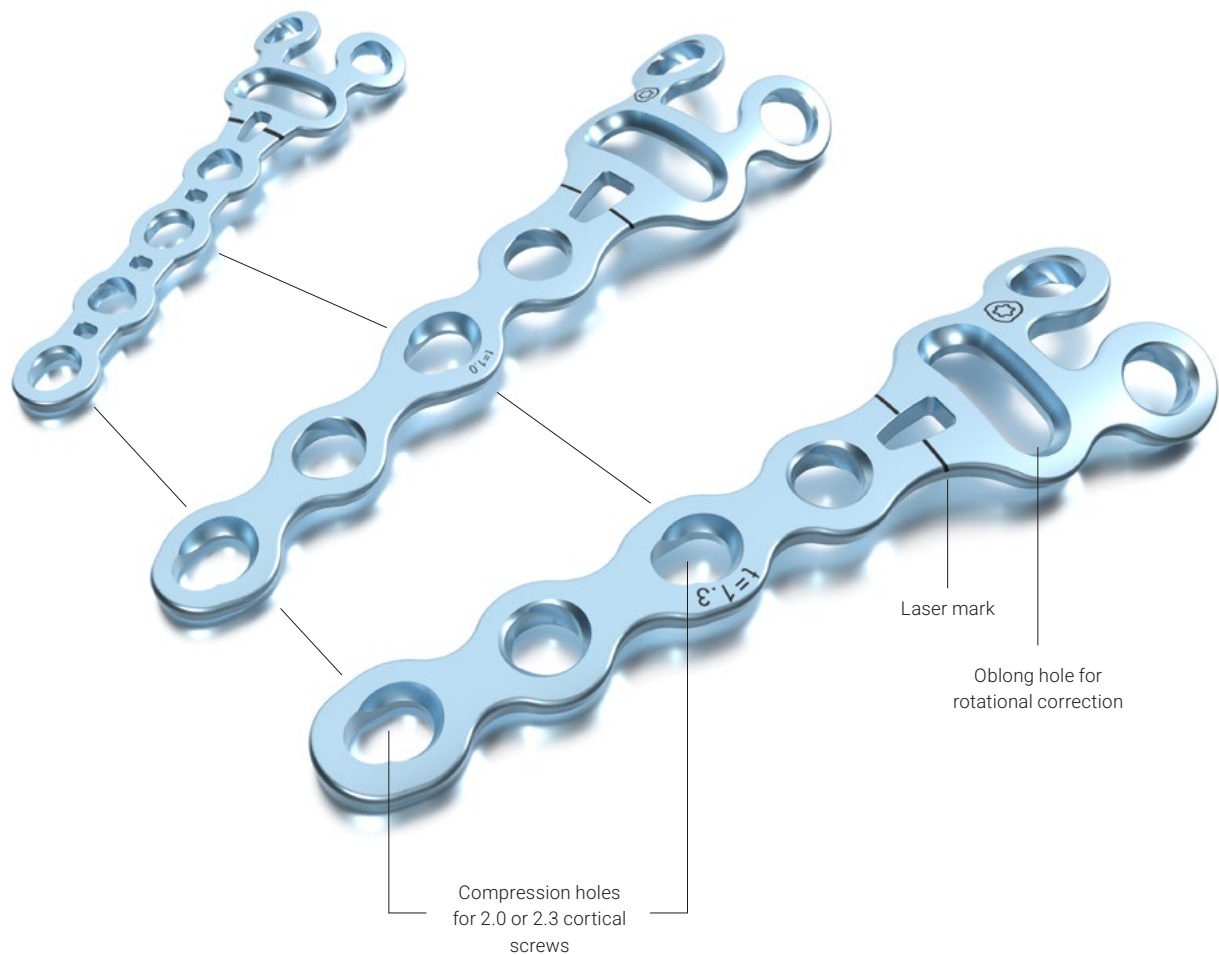
Clinical case published with the kind permission of: F. Unglaub, Bad Rappenau, Germany.

Rotation Correction Plates

- Laser mark supports positioning of the plate over the planned osteotomy site.
- Two compression holes allow for closing the osteotomy gap after rotational correction.
- Transversal oblong hole allows up to $\pm 25^\circ$ of rotational correction and is close to the joint to perform the osteotomy near the metaphyseal area.
- Separate screw holes ("frog design") simplify contouring in the periarticular area.



1.2/1.5 and 2.0/2.3 TriLock Rotation Plates



Rotational correction after malunion



Torsional deviation after carpometacarpal V arthrodesis following comminuted base fracture.



Intraoperative image.



Postoperative X-ray.

Clinical case published with the kind permission of: F. Unglaub, Bad Rappenau, Germany.

Screws

Different screw diameters are available for each plate type:

	Cortical Screws				TriLock Screws			SpeedTip Screws
Diameter (mm)	1.2	1.5	2.0	2.3	1.2	1.5	2.0	1.5
Plate types	1.2/1.5 Fixation Plates		2.0/2.3 Fixation Plates		1.2/1.5 TriLock Plates		2.0/2.3 TriLock Plates	1.2/1.5 Fixation Plates
	1.2/1.5 TriLock Plates		2.0/2.3 TriLock Plates				2.0/2.3 TriLock ^{PLUS} Plates	1.2/1.5 TriLock Plates
			2.0/2.3 MC Compression Plates					

Cortical screw may be used for “screw-only” fracture fixation. The pitch and core diameter vary depending on screw length resulting in more stability, easier insertion and stable anchorage.



Emergency (cortical) screws also available:

- 1.8 cortical screw for 1.2/1.5 system
- 2.5 cortical screw for 2.0/2.3 system



Washers

Biconcave design distributes the forces over a larger bone surface around the screw head.



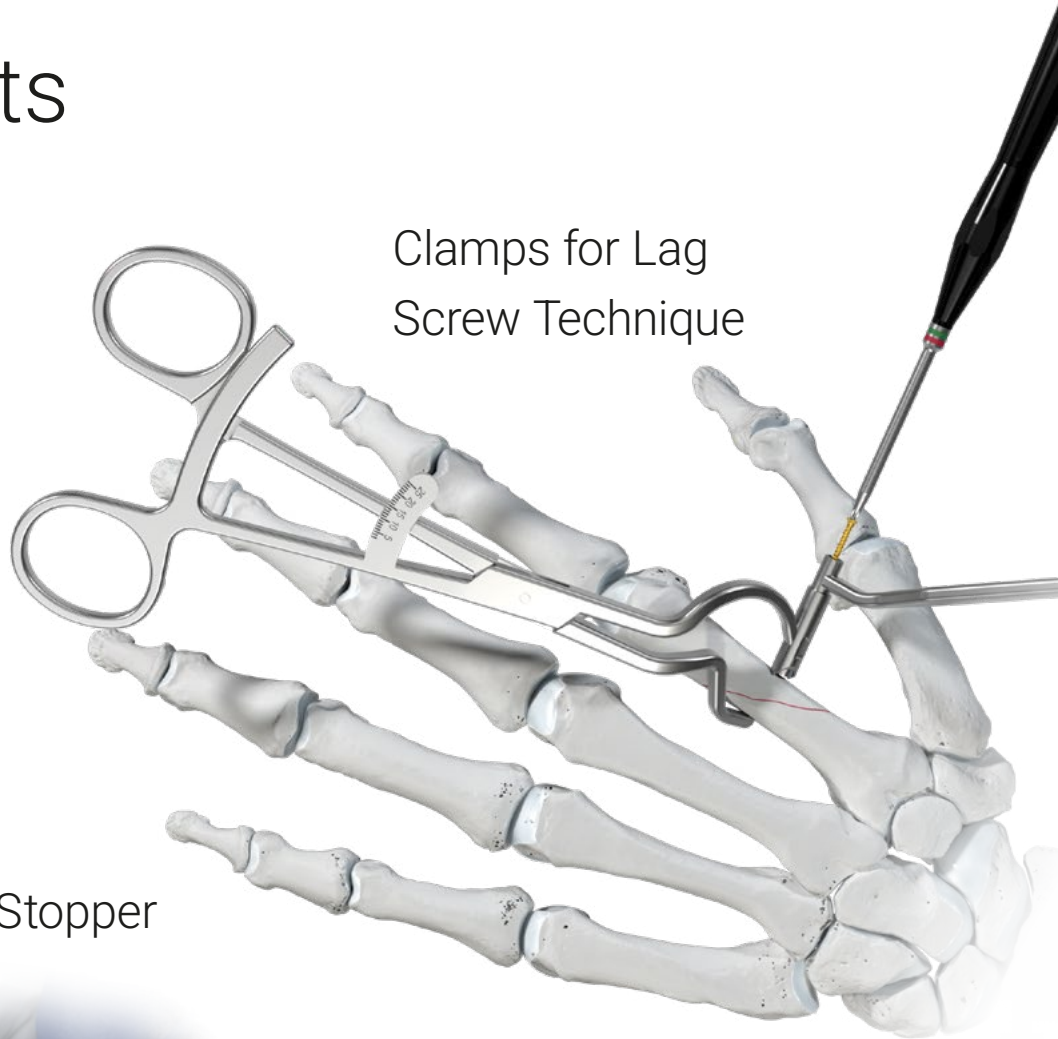
Washers



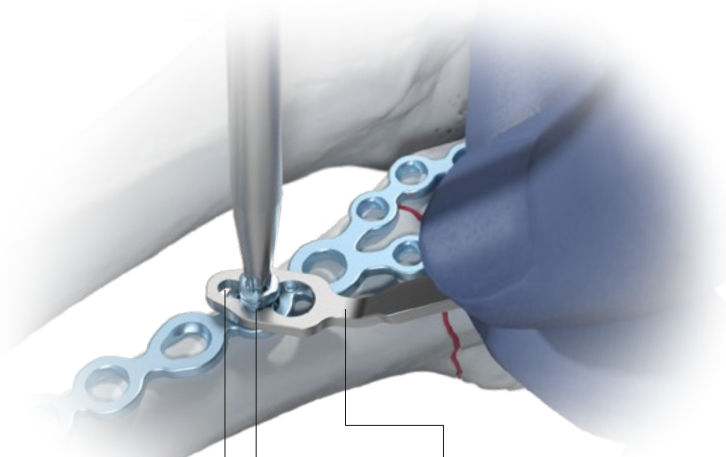
Instruments

General System Features

- Simple and easy-to-use instruments
- Color-coded instruments for easy identification in the operating room
- Finely adjusted ratcheting on reduction instruments



Temporary Locking Stopper



For 1.2, 1.5 and 2.0 TriLock screws

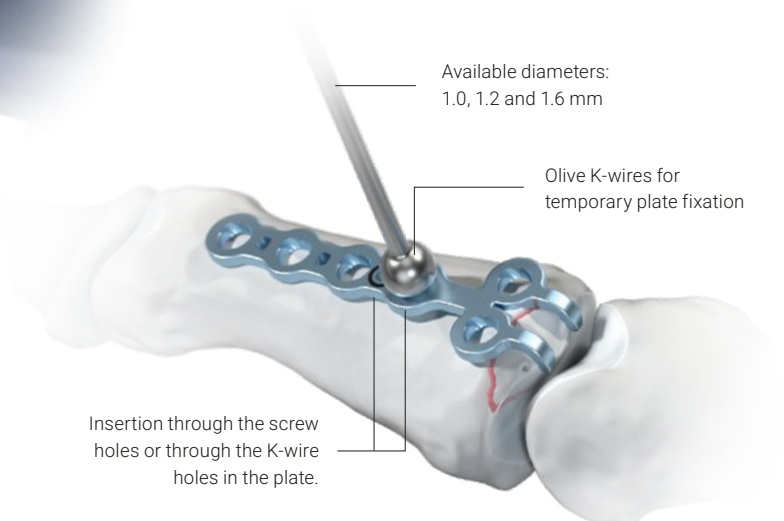
Temporary Locking Stopper for pulling the plate onto the bone with TriLock screws

Olive K-wires

Available diameters:
1.0, 1.2 and 1.6 mm

Olive K-wires for temporary plate fixation

Insertion through the screw holes or through the K-wire holes in the plate.



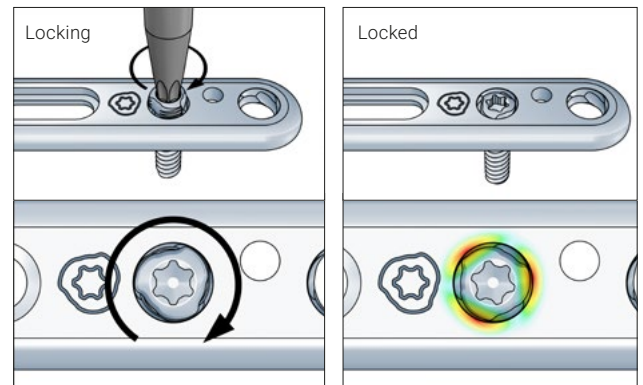
Technology

TriLock Locking Technology

TriLock is a multidirectional and angular stable locking technology.

Locking is achieved through:

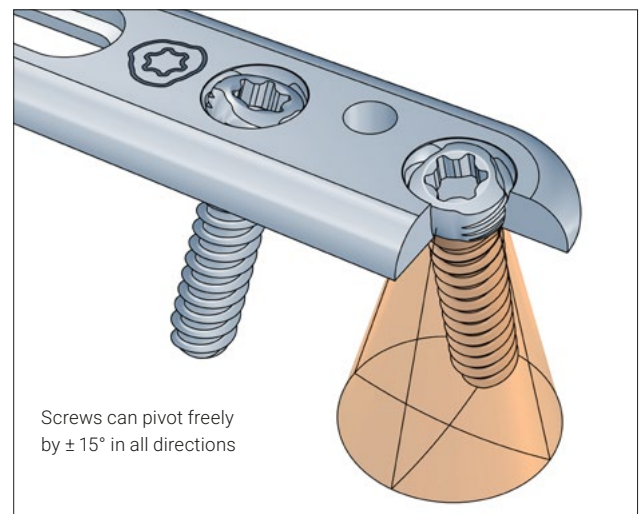
- Spherical three-point wedge locking, through radial bracing of the screw head in the plate without additional components



Spherical three-point wedge locking

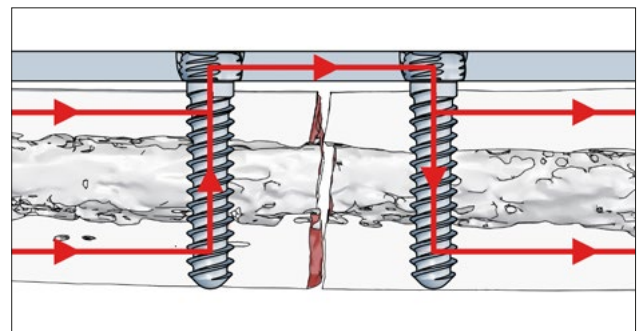
This locking technology enables:

- $\pm 15^\circ$ multidirectional screw angulation to position screws based on the fracture pattern
- Re-locking a screw in the same plate hole at individual angles up to three times
- Fine tuning of fragments positioning due to the threadless locking technology
- No cold welding between plate and screws
- Flexibility in screw type selection based on indication and fracture — the same hole can be used for either locking or non-locking screws

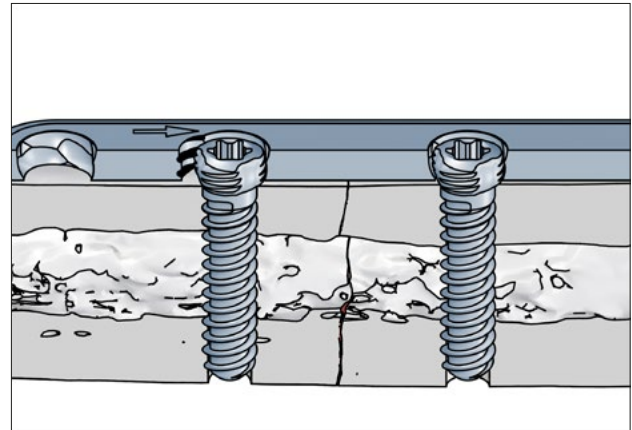
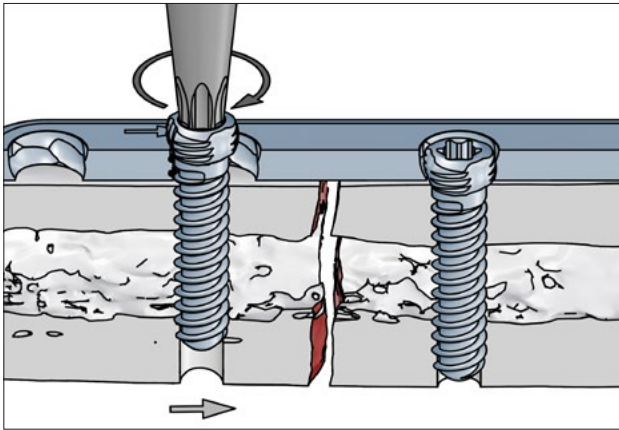


Internal fixator principle

Stable plate-screw construct allows for the bridging of unstable zones



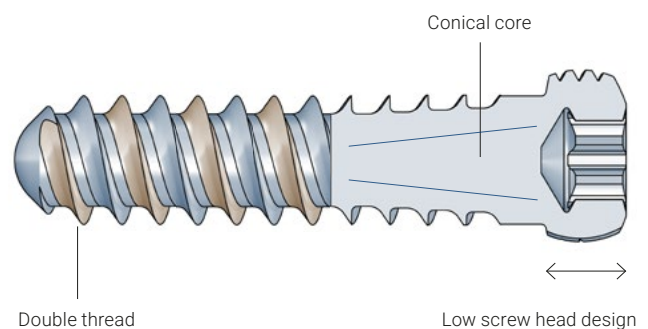
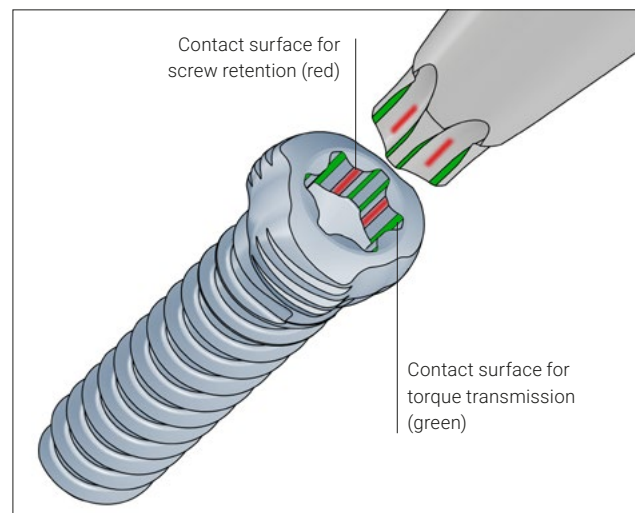
TriLock^{PLUS}



TriLock^{PLUS} screw holes offer the advantage of locking and compression in one step

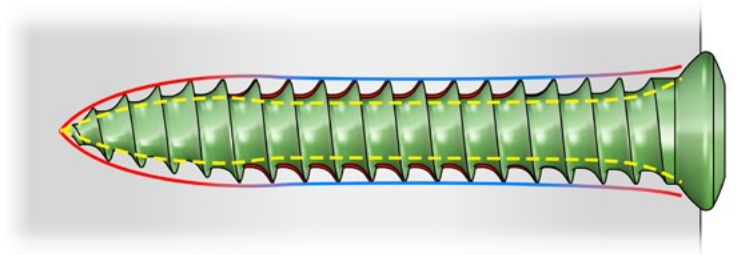
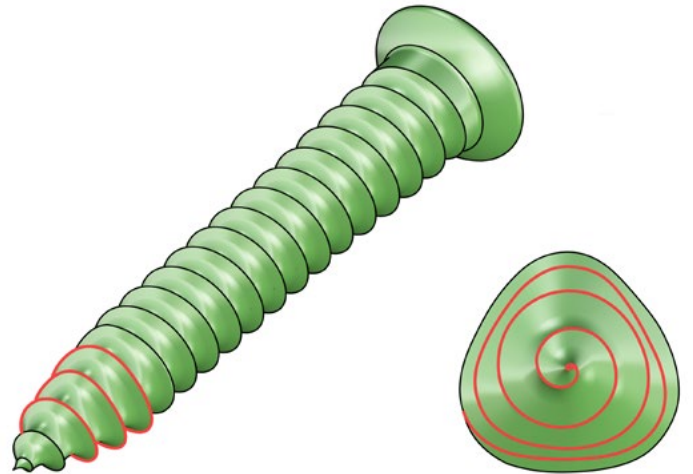
Screw Features

- HexaDrive screw head design:
 - HexaDrive interface with self-holding properties between screw and screwdriver
 - Increased torque transmission
 - Simplified screw pick-up due to the self-holding technology
- Atraumatic screw tip provides soft tissue protection when inserting screws bicortically
- Soft tissue protection due to smooth screw head design
- Double-threaded screws reduce screw insertion time
- Increased torsional, bending and shear stability due to conical core
- Precision cut thread profile for sharpness and self-tapping properties



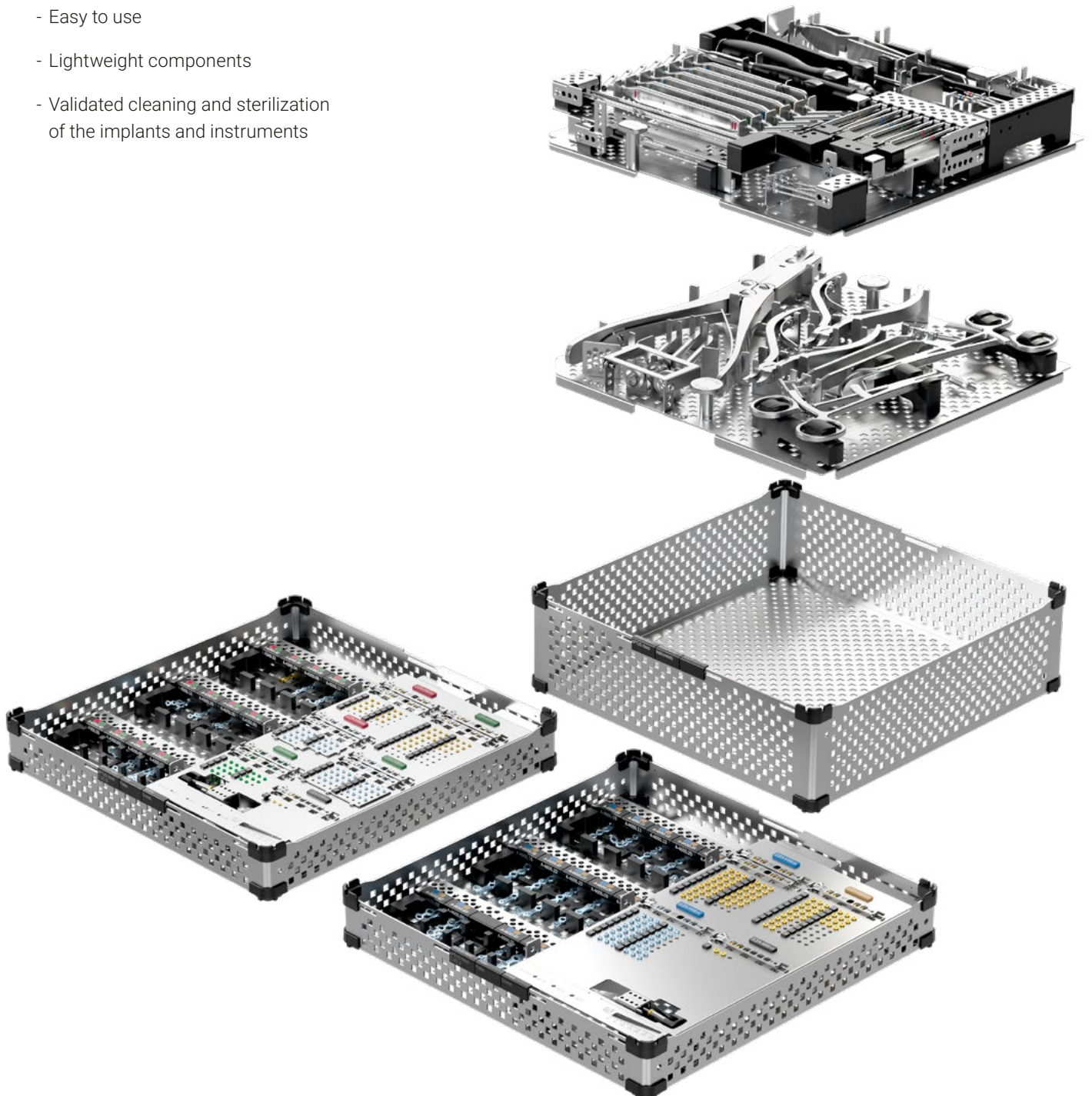
SpeedTip Thread Design

- Functionally unique cutting with immediate bite
- Immediate cutting of the bone with only slight axial pressure
- The triangular tip design permits simultaneous drilling, tapping, and compression of the bone tissue⁹
- The triangular tip design results in increased pull-stability⁹
- Reduced insertion torque thanks to the polygonal tip and tapered shaft



Storage

- Compact system
- Several options for add-on, upgrade or full configurations
- Easy to use
- Lightweight components
- Validated cleaning and sterilization of the implants and instruments



Ordering Information

1.2 Cortical Screws, HexaDrive 4

Material: Ti6Al4V (ASTM F136)



Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
4 mm	A-5100.04/1	A-5100.04/1S	1	A-5100.04	5
5 mm	A-5100.05/1	A-5100.05/1S	1	A-5100.05	5
6 mm	A-5100.06/1	A-5100.06/1S	1	A-5100.06	5
7 mm	A-5100.07/1	A-5100.07/1S	1	A-5100.07	5
8 mm	A-5100.08/1	A-5100.08/1S	1	A-5100.08	5
9 mm	A-5100.09/1	A-5100.09/1S	1	A-5100.09	5
10 mm	A-5100.10/1	A-5100.10/1S	1	A-5100.10	5
11 mm	A-5100.11/1	A-5100.11/1S	1	A-5100.11	5
12 mm	A-5100.12/1	A-5100.12/1S	1	A-5100.12	5
13 mm	A-5100.13/1	A-5100.13/1S	1	A-5100.13	5
14 mm	A-5100.14/1	A-5100.14/1S	1	A-5100.14	5
16 mm	A-5100.16/1	A-5100.16/1S	1	A-5100.16	5
18 mm	A-5100.18/1	A-5100.18/1S	1	A-5100.18	5
20 mm	A-5100.20/1	A-5100.20/1S	1	A-5100.20	5

1.2 TriLock Screws, HexaDrive 4

Material: Ti6Al4V (ASTM F136)



Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
4 mm	A-5150.04/1	A-5150.04/1S	1	A-5150.04	5
5 mm	A-5150.05/1	A-5150.05/1S	1	A-5150.05	5
6 mm	A-5150.06/1	A-5150.06/1S	1	A-5150.06	5
7 mm	A-5150.07/1	A-5150.07/1S	1	A-5150.07	5
8 mm	A-5150.08/1	A-5150.08/1S	1	A-5150.08	5
9 mm	A-5150.09/1	A-5150.09/1S	1	A-5150.09	5
10 mm	A-5150.10/1	A-5150.10/1S	1	A-5150.10	5
11 mm	A-5150.11/1	A-5150.11/1S	1	A-5150.11	5
12 mm	A-5150.12/1	A-5150.12/1S	1	A-5150.12	5
13 mm	A-5150.13/1	A-5150.13/1S	1	A-5150.13	5
14 mm	A-5150.14/1	A-5150.14/1S	1	A-5150.14	5

1.5 Cortical Screws, HexaDrive 4

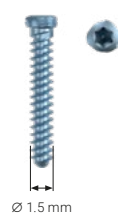
Ti6Al4V (ASTM F136)



Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
4 mm	A-5200.04/1	A-5200.04/1S	1	A-5200.04	5
5 mm	A-5200.05/1	A-5200.05/1S	1	A-5200.05	5
6 mm	A-5200.06/1	A-5200.06/1S	1	A-5200.06	5
7 mm	A-5200.07/1	A-5200.07/1S	1	A-5200.07	5
8 mm	A-5200.08/1	A-5200.08/1S	1	A-5200.08	5
9 mm	A-5200.09/1	A-5200.09/1S	1	A-5200.09	5
10 mm	A-5200.10/1	A-5200.10/1S	1	A-5200.10	5
11 mm	A-5200.11/1	A-5200.11/1S	1	A-5200.11	5
12 mm	A-5200.12/1	A-5200.12/1S	1	A-5200.12	5
13 mm	A-5200.13/1	A-5200.13/1S	1	A-5200.13	5
14 mm	A-5200.14/1	A-5200.14/1S	1	A-5200.14	5
15 mm	A-5200.15/1	A-5200.15/1S	1	A-5200.15	5
16 mm	A-5200.16/1	A-5200.16/1S	1	A-5200.16	5
17 mm	A-5200.17/1	A-5200.17/1S	1	A-5200.17	5
18 mm	A-5200.18/1	A-5200.18/1S	1	A-5200.18	5
19 mm	A-5200.19/1	A-5200.19/1S	1	A-5200.19	5
20 mm	A-5200.20/1	A-5200.20/1S	1	A-5200.20	5
21 mm	A-5200.21/1	A-5200.21/1S	1	A-5200.21	5
22 mm	A-5200.22/1	A-5200.22/1S	1	A-5200.22	5
23 mm	A-5200.23/1	A-5200.23/1S	1	A-5200.23	5
24 mm	A-5200.24/1	A-5200.24/1S	1	A-5200.24	5

1.5 TriLock Screws, HexaDrive 4

Material: Ti6Al4V (ASTM F136)



Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
4 mm	A-5250.04/1	A-5250.04/1S	1	A-5250.04	5
5 mm	A-5250.05/1	A-5250.05/1S	1	A-5250.05	5
6 mm	A-5250.06/1	A-5250.06/1S	1	A-5250.06	5
7 mm	A-5250.07/1	A-5250.07/1S	1	A-5250.07	5
8 mm	A-5250.08/1	A-5250.08/1S	1	A-5250.08	5
9 mm	A-5250.09/1	A-5250.09/1S	1	A-5250.09	5
10 mm	A-5250.10/1	A-5250.10/1S	1	A-5250.10	5
11 mm	A-5250.11/1	A-5250.11/1S	1	A-5250.11	5
12 mm	A-5250.12/1	A-5250.12/1S	1	A-5250.12	5
13 mm	A-5250.13/1	A-5250.13/1S	1	A-5250.13	5
14 mm	A-5250.14/1	A-5250.14/1S	1	A-5250.14	5
16 mm	A-5250.16/1	A-5250.16/1S	1	A-5250.16	5
18 mm	A-5250.18/1	A-5250.18/1S	1	A-5250.18	5
20 mm	A-5250.20/1	A-5250.20/1S	1	A-5250.20	5

1.5 SpeedTip Screws, Self-Drilling, HexaDrive 4

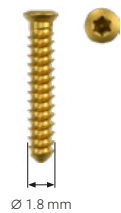
Material: Ti6Al4V (ASTM F136)



Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
4 mm	A-5210.04/1	A-5210.04/1S	1	A-5210.04	5
5 mm	A-5210.05/1	A-5210.05/1S	1	A-5210.05	5
6 mm	A-5210.06/1	A-5210.06/1S	1	A-5210.06	5
7 mm	A-5210.07/1	A-5210.07/1S	1	A-5210.07	5
8 mm	A-5210.08/1	A-5210.08/1S	1	A-5210.08	5
9 mm	A-5210.09/1	A-5210.09/1S	1	A-5210.09	5
10 mm	A-5210.10/1	A-5210.10/1S	1	A-5210.10	5
11 mm	A-5210.11/1	A-5210.11/1S	1	A-5210.11	5
12 mm	A-5210.12/1	A-5210.12/1S	1	A-5210.12	5
13 mm	A-5210.13/1	A-5210.13/1S	1	A-5210.13	5
14 mm	A-5210.14/1	A-5210.14/1S	1	A-5210.14	5

1.8 Emergency Screws, HexaDrive 4

Material: Ti6Al4V (ASTM F136)



Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
6 mm	A-5300.06/1	A-5300.06/1S	1	A-5300.06	5
10 mm	A-5300.10/1		1	A-5300.10	5

1.2/1.5 Biconcave Washer

Material: cpTi (ASTM F67)



Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
A-4300.70/1	A-4300.70/1S	1	A-4300.70	5

2.0 Cortical Screws, HexaDrive 6

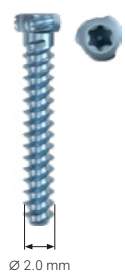
Material: Ti6Al4V (ASTM F136)



Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
4 mm	A-5400.04/1	A-5400.04/1S	1	A-5400.04	5
5 mm	A-5400.05/1	A-5400.05/1S	1	A-5400.05	5
6 mm	A-5400.06/1	A-5400.06/1S	1	A-5400.06	5
7 mm	A-5400.07/1	A-5400.07/1S	1	A-5400.07	5
8 mm	A-5400.08/1	A-5400.08/1S	1	A-5400.08	5
9 mm	A-5400.09/1	A-5400.09/1S	1	A-5400.09	5
10 mm	A-5400.10/1	A-5400.10/1S	1	A-5400.10	5
11 mm	A-5400.11/1	A-5400.11/1S	1	A-5400.11	5
12 mm	A-5400.12/1	A-5400.12/1S	1	A-5400.12	5
13 mm	A-5400.13/1	A-5400.13/1S	1	A-5400.13	5
14 mm	A-5400.14/1	A-5400.14/1S	1	A-5400.14	5
15 mm	A-5400.15/1	A-5400.15/1S	1	A-5400.15	5
16 mm	A-5400.16/1	A-5400.16/1S	1	A-5400.16	5
17 mm	A-5400.17/1	A-5400.17/1S	1	A-5400.17	5
18 mm	A-5400.18/1	A-5400.18/1S	1	A-5400.18	5
19 mm	A-5400.19/1	A-5400.19/1S	1	A-5400.19	5
20 mm	A-5400.20/1	A-5400.20/1S	1	A-5400.20	5
21 mm	A-5400.21/1	A-5400.21/1S	1	A-5400.21	5
22 mm	A-5400.22/1	A-5400.22/1S	1	A-5400.22	5
23 mm	A-5400.23/1	A-5400.23/1S	1	A-5400.23	5
24 mm	A-5400.24/1	A-5400.24/1S	1	A-5400.24	5

2.0 TriLock Screws, HexaDrive 6

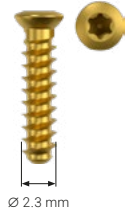
Material: Ti6Al4V (ASTM F136)



Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
6 mm	A-5450.06/1	A-5450.06/1S	1	A-5450.06	5
7 mm	A-5450.07/1	A-5450.07/1S	1	A-5450.07	5
8 mm	A-5450.08/1	A-5450.08/1S	1	A-5450.08	5
9 mm	A-5450.09/1	A-5450.09/1S	1	A-5450.09	5
10 mm	A-5450.10/1	A-5450.10/1S	1	A-5450.10	5
11 mm	A-5450.11/1	A-5450.11/1S	1	A-5450.11	5
12 mm	A-5450.12/1	A-5450.12/1S	1	A-5450.12	5
13 mm	A-5450.13/1	A-5450.13/1S	1	A-5450.13	5
14 mm	A-5450.14/1	A-5450.14/1S	1	A-5450.14	5
16 mm	A-5450.16/1	A-5450.16/1S	1	A-5450.16	5
18 mm	A-5450.18/1	A-5450.18/1S	1	A-5450.18	5
20 mm	A-5450.20/1	A-5450.20/1S	1	A-5450.20	5

2.3 Cortical Screws, HexaDrive 6

Material: Ti6Al4V (ASTM F136)



Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
5 mm	A-5500.05/1	A-5500.05/1S	1	A-5500.05	5
6 mm	A-5500.06/1	A-5500.06/1S	1	A-5500.06	5
7 mm	A-5500.07/1	A-5500.07/1S	1	A-5500.07	5
8 mm	A-5500.08/1	A-5500.08/1S	1	A-5500.08	5
9 mm	A-5500.09/1	A-5500.09/1S	1	A-5500.09	5
10 mm	A-5500.10/1	A-5500.10/1S	1	A-5500.10	5
11 mm	A-5500.11/1	A-5500.11/1S	1	A-5500.11	5
12 mm	A-5500.12/1	A-5500.12/1S	1	A-5500.12	5
13 mm	A-5500.13/1	A-5500.13/1S	1	A-5500.13	5
14 mm	A-5500.14/1	A-5500.14/1S	1	A-5500.14	5
15 mm	A-5500.15/1	A-5500.15/1S	1	A-5500.15	5
16 mm	A-5500.16/1	A-5500.16/1S	1	A-5500.16	5
17 mm	A-5500.17/1	A-5500.17/1S	1	A-5500.17	5
18 mm	A-5500.18/1	A-5500.18/1S	1	A-5500.18	5
19 mm	A-5500.19/1	A-5500.19/1S	1	A-5500.19	5
20 mm	A-5500.20/1	A-5500.20/1S	1	A-5500.20	5
21 mm	A-5500.21/1	A-5500.21/1S	1	A-5500.21	5
22 mm	A-5500.22/1	A-5500.22/1S	1	A-5500.22	5
23 mm	A-5500.23/1	A-5500.23/1S	1	A-5500.23	5
24 mm	A-5500.24/1	A-5500.24/1S	1	A-5500.24	5
26 mm	A-5500.26/1	A-5500.26/1S	1	A-5500.26	5

2.5 Emergency Screws, HexaDrive 6

Material: Ti6Al4V (ASTM F136)



Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
6 mm	A-5600.06/1		1	A-5600.06	5
10 mm	A-5600.10/1	A-5600.10/1S	1	A-5600.10	5

2.0/2.3 Biconcave Washer

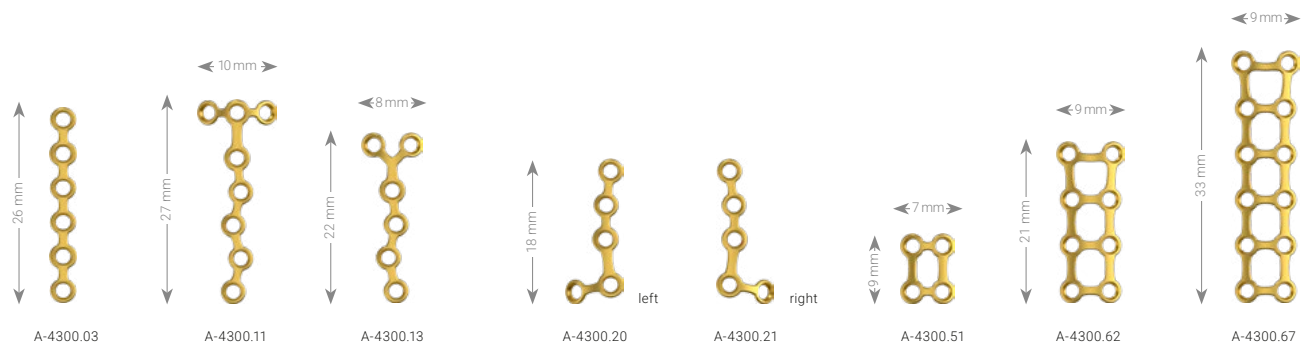
Material: cpTi (ASTM F67)



Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
A-4600.70/1	A-4600.70/1S	1	A-4600.70	5

1.2/1.5 Fixation Plates

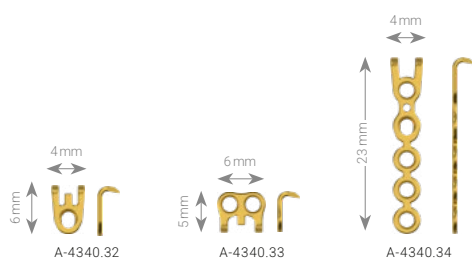
Material: cpTi (ASTM F67)
Plate thickness: 0.6 mm



Art. No.	STERILE	Template	Description	Holes	Pieces/Pkg
A-4300.03	A-4300.03S	A-4300.03TP	straight	6	1
A-4300.11	A-4300.11S	A-4300.11TP	T	8 (3/5)	1
A-4300.13	A-4300.13S	A-4300.13TP	Y	6 (2/4)	1
A-4300.20	A-4300.20S	A-4300.20TP	L left	5 (2/3)	1
A-4300.21	A-4300.21S	A-4300.21TP	L right	5 (2/3)	1
A-4300.51	A-4300.51S	A-4300.51TP	Grid, rectangular narrow	4 (2×2)	1
A-4300.62	A-4300.62S	A-4300.62TP	Grid, trapezoid	8 (4×2)	1
A-4300.67	A-4300.67S	A-4300.67TP	Grid, trapezoid	12 (6×2)	1

1.2/1.5 Fixation Plates, Hook Plates

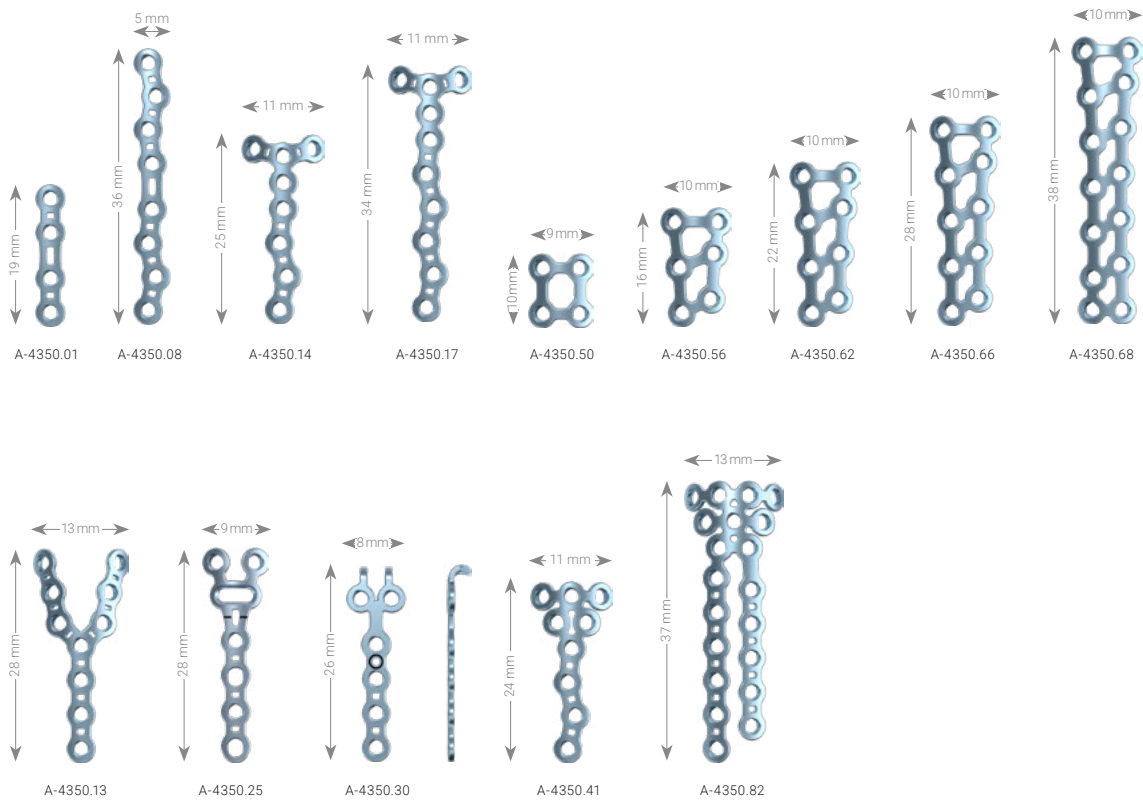
Material: cpTi (ASTM F67)
Plate thickness: 0.6 mm



Art. No.	STERILE	Template	Description	Holes	Pieces/Pkg
A-4340.32	A-4340.32S	A-4340.32TP	compression, 2 hooks	1	1
A-4340.33	A-4340.33S	A-4340.33TP	2 hooks, wide	2	1
A-4340.34	A-4340.34S	A-4340.34TP	compression, 2 hooks, long	5	1

1.2/1.5 TriLock Plates

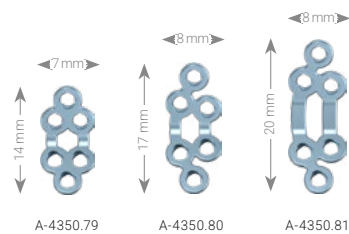
Material: cpTi (ASTM F67)
Plate thickness: 0.8 mm



Art. No.	STERILE	Template	Description	Holes	Pieces/Pkg
A-4350.01	A-4350.01S	A-4350.01TP	straight	4	1
A-4350.08	A-4350.08S	A-4350.08TP	straight	8	1
A-4350.13	A-4350.13S	A-4350.13TP	Y	10 (4/6)	1
A-4350.14	A-4350.14S	A-4350.14TP	T	8 (3/5)	1
A-4350.17	A-4350.17S	A-4350.17TP	T	10 (3/7)	1
A-4350.25	A-4350.25S	A-4350.25TP	rotation	7 (3/4)	1
A-4350.30	A-4350.30S	A-4350.30TP	2 hooks, long	6 (2/4)	1
A-4350.41	A-4350.41S	A-4350.41TP	double-row, T	9 (5/4)	1
A-4350.50	A-4350.50S	A-4350.50TP	Grid, rectangular	4 (2x2)	1
A-4350.56	A-4350.56S	A-4350.56TP	Grid, trapezoid	6 (3x2)	1
A-4350.62	A-4350.62S	A-4350.62TP	Grid, trapezoid	8 (4x2)	1
A-4350.66	A-4350.66S	A-4350.66TP	Grid, trapezoid	10 (5x2)	1
A-4350.68	A-4350.68S	A-4350.68TP	Grid, trapezoid	14 (7x2)	1
A-4350.82	A-4350.82S	A-4350.82TP	frame	20	1

1.2/1.5 TriLock Scaphoid Plates

Material: cpTi (ASTM F67)
Plate thickness: 0.8 mm



Art. No.	STERILE	Template	Description	Holes	Pieces/Pkg
A-4350.79	A-4350.79S	A-4350.79TP	small	6 (3 x 2)	1
A-4350.80	A-4350.80S	A-4350.80TP		6 (3 x 2)	1
A-4350.81	A-4350.81S	A-4350.81TP	large	6 (3 x 2)	1

1.2–2.3 TriLock MC Head/Neck Plate

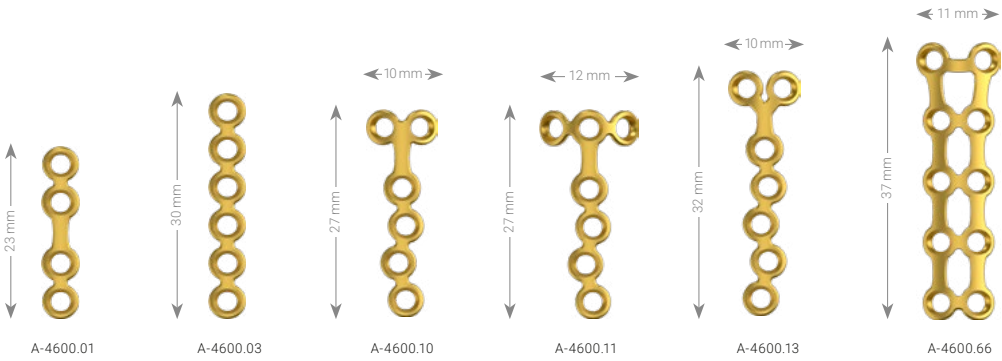
Material: cpTi (ASTM F67)
Plate thickness: 1.0 mm



Art. No.	STERILE	Template	Description	Holes	Pieces/Pkg
A-4650.91	A-4650.91S	A-4650.91TP	TriLock 1.5, 2.0	11 (5/6) - 5 for 2.0/2.3 screws - 6 for 1.2/1.5 screws	1

2.0/2.3 Fixation Plates

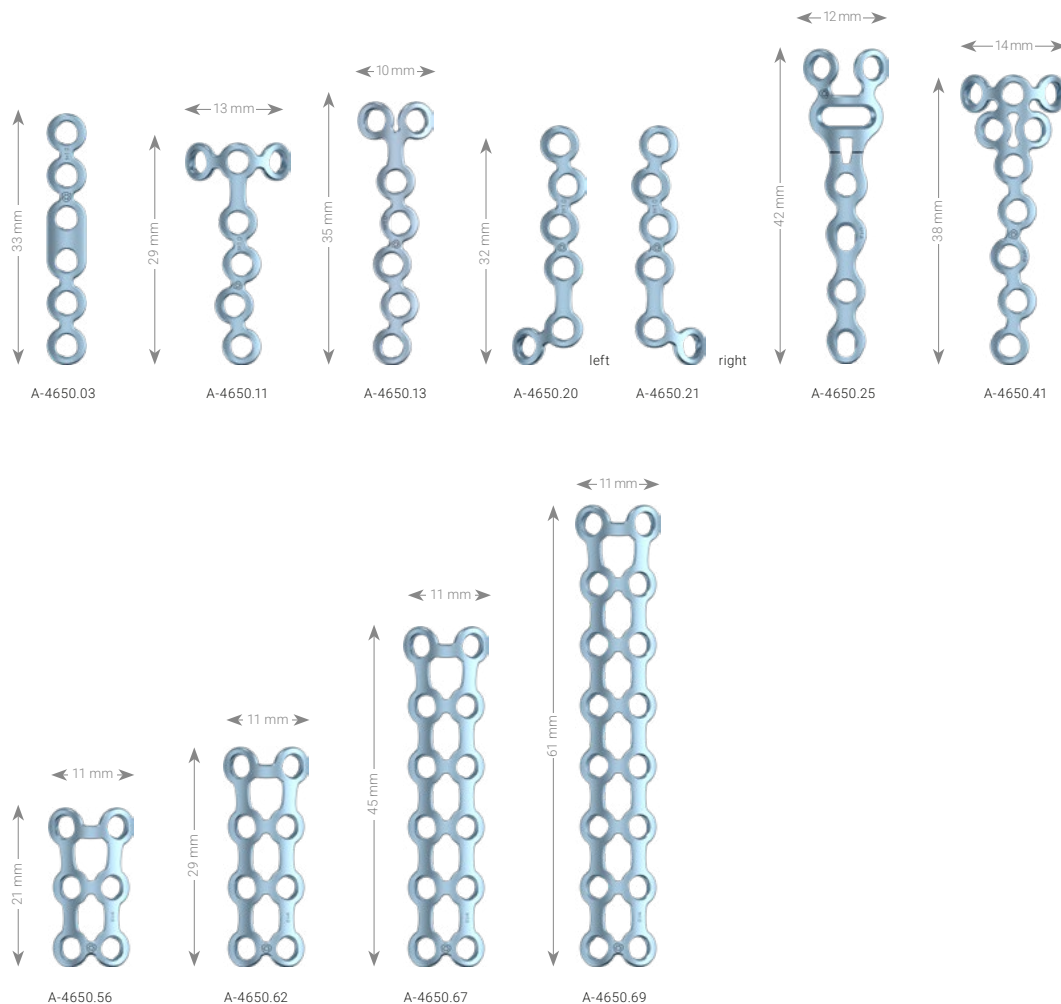
Material: cpTi (ASTM F67)
Plate thickness: 1.0 mm



Art. No.	STERILE	Template	Description	Holes	Pieces/Pkg
A-4600.01	A-4600.01S	A-4600.01TP	straight	4	1
A-4600.03	A-4600.03S	A-4600.03TP	straight	6	1
A-4600.10	A-4600.10S	A-4600.10TP	T	6 (2/4)	1
A-4600.11	A-4600.11S	A-4600.11TP	T	7 (3/4)	1
A-4600.13	A-4600.13S	A-4600.13TP	Y	7 (2/5)	1
A-4600.66	A-4600.66S	A-4600.66TP	Grid, trapezoid	10 (5x2)	1

2.0/2.3 TriLock Plates

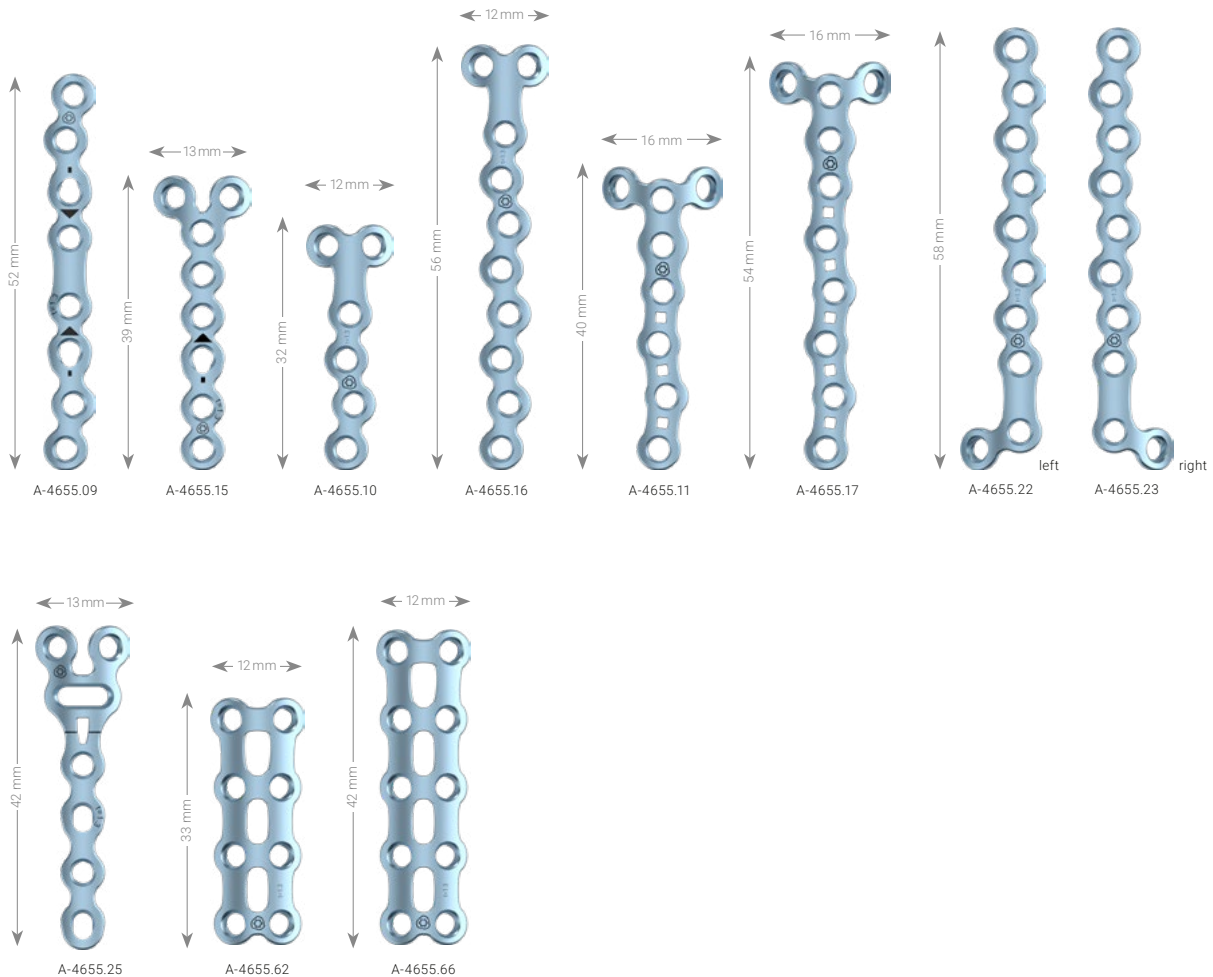
Material: cpTi (ASTM F67)
Plate thickness: 1.0 mm



Art. No.	STERILE	Template	Description	Holes	Pieces/Pkg
A-4650.03	A-4650.03S	A-4650.03TP	straight	6	1
A-4650.11	A-4650.11S	A-4650.11TP	T	7 (3/4)	1
A-4650.13	A-4650.13S	A-4650.13TP	Y	7 (2/5)	1
A-4650.20	A-4650.20S	A-4650.20TP	L, left	6 (2/4)	1
A-4650.21	A-4650.21S	A-4650.21TP	L, right	6 (2/4)	1
A-4650.25	A-4650.25S	A-4650.25TP	rotation	7 (3/4)	1
A-4650.41	A-4650.41S	A-4650.41TP	double-row, T	10 (5/5)	1
A-4650.56	A-4650.56S	A-4650.56TP	Grid, trapezoid	6 (3×2)	1
A-4650.62	A-4650.62S	A-4650.62TP	Grid, trapezoid	8 (4×2)	1
A-4650.67	A-4650.67S	A-4650.67TP	Grid, trapezoid	12 (6×2)	1
A-4650.69	A-4650.69S	A-4650.69TP	Grid, trapezoid	16 (8×2)	1

2.0/2.3 TriLock Plates

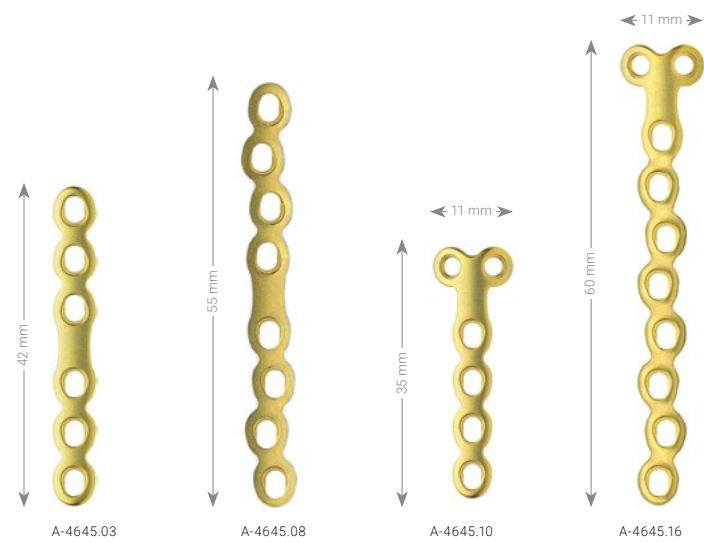
Material: cpTi (ASTM F67)
Plate thickness: 1.3 mm



Art. No.	STERILE	Template	Description	Holes	Pieces/Pkg
A-4655.09	A-4655.09S	A-4655.09TP	straight, TriLock ^{PLUS}	8	1
A-4655.10	A-4655.10S	A-4655.10TP	T	6 (2/4)	1
A-4655.11	A-4655.11S	A-4655.11TP	T	8 (3/5)	1
A-4655.15	A-4655.15S	A-4655.15TP	Y, TriLock ^{PLUS}	8 (2/6)	1
A-4655.16	A-4655.16S	A-4655.16TP	T	10 (2/8)	1
A-4655.17	A-4655.17S	A-4655.17TP	T	10 (3/7)	1
A-4655.22	A-4655.22S	A-4655.22TP	L left	10 (2/8)	1
A-4655.23	A-4655.23S	A-4655.23TP	L right	10 (2/8)	1
A-4655.25	A-4655.25S	A-4655.25TP	rotation	7 (3/4)	1
A-4655.62	A-4655.62S	A-4655.62TP	Grid, trapezoid	8 (4x2)	1
A-4655.66	A-4655.66S	A-4655.66TP	Grid, trapezoid	10 (5x2)	1

2.0/2.3 MC (Metacarpal) Compression Plates

Material: cpTi (ASTM F67)
Plate thickness: 1.3 mm



Art. No.	STERILE	Template	Description	Holes	Pieces/Pkg
A-4645.03	A-4645.03S	A-4645.03TP	straight	6	1
A-4645.08	A-4645.08S	A-4645.08TP	straight	8	1
A-4645.10	A-4645.10S	A-4645.10TP	T	6 (2/4)	1
A-4645.16	A-4645.16S	A-4645.16TP	T	10 (2/8)	1

Twist Drills Ø 1.0 mm



Art. No.	STERILE	System Size	Stop	Length	Shaft End	Pieces/Pkg
A-3110	A-3110S	1.2	20 mm	82 mm	Dental	1
A-3120	A-3120S	1.2	20 mm	82 mm	Stryker J-Latch	1
A-3130	A-3130S	1.2	20 mm	76 mm	AO Quick Coupling	1

Twist Drills Ø 1.2 mm (for Gliding Hole)



A-3111



A-3121



A-3131

Art. No.	STERILE	System Size	Stop	Length	Shaft End	Pieces/Pkg
A-3111	A-3111S	1.2	10 mm	72 mm	Dental	1
A-3121	A-3121S	1.2	10 mm	72 mm	Stryker J-Latch	1
A-3131	A-3131S	1.2	10 mm	66 mm	AO Quick Coupling	1

Twist Drills Ø 1.2 mm



A-3210



A-3220



A-3230

Art. No.	STERILE	System Size	Stop	Length	Shaft End	Pieces/Pkg
A-3210	A-3210S	1.5	25 mm	87 mm	Dental	1
A-3220	A-3220S	1.5	25 mm	87 mm	Stryker J-Latch	1
A-3230	A-3230S	1.5	25 mm	81 mm	AO Quick Coupling	1

Twist Drills Ø 1.6 mm (for Gliding Hole)



A-3211



A-3221



A-3231

Art. No.	STERILE	System Size	Stop	Length	Shaft End	Pieces/Pkg
A-3211	A-3211S	1.5	10 mm	72 mm	Dental	1
A-3221	A-3221S	1.5	10 mm	72 mm	Stryker J-Latch	1
A-3231	A-3231S	1.5	10 mm	66 mm	AO Quick Coupling	1

Twist Drills Ø 1.6 mm



Art. No.	STERILE	System Size	Stop	Length	Shaft End	Pieces/Pkg
A-3410	A-3410S	2.0	25 mm	87 mm	Dental	1
A-3414	A-3414S	2.0	30 mm	92 mm	Dental	1
A-3420	A-3420S	2.0	25 mm	87 mm	Stryker J-Latch	1
A-3424	A-3424S	2.0	30 mm	92 mm	Stryker J-Latch	1
A-3430	A-3430S	2.0	25 mm	81 mm	AO Quick Coupling	1
A-3434	A-3434S	2.0	30 mm	86 mm	AO Quick Coupling	1

Twist Drills Ø 2.1 mm (for Gliding Hole)



Art. No.	STERILE	System Size	Stop	Length	Shaft End	Pieces/Pkg
A-3411	A-3411S	2.0	10 mm	72 mm	Dental	1
A-3421	A-3421S	2.0	10 mm	72 mm	Stryker J-Latch	1
A-3431	A-3431S	2.0	10 mm	66 mm	AO Quick Coupling	1

Twist Drills Ø 1.9 mm



A-3510



A-3520



A-3530

Art. No.	STERILE	System Size	Stop	Length	Shaft End	Pieces/Pkg
A-3510	A-3510S	2.3	35 mm	97 mm	Dental	1
A-3520	A-3520S	2.3	35 mm	97 mm	Stryker J-Latch	1
A-3530	A-3530S	2.3	35 mm	91 mm	AO Quick Coupling	1

Twist Drills Ø 2.35 mm (for Gliding Hole)



A-3511



A-3521



A-3531

Art. No.	STERILE	System Size	Stop	Length	Shaft End	Pieces/Pkg
A-3511	A-3511S	2.3	10 mm	72 mm	Dental	1
A-3521	A-3521S	2.3	10 mm	72 mm	Stryker J-Latch	1
A-3531	A-3531S	2.3	10 mm	66 mm	AO Quick Coupling	1

Countersinks (for Cortical Screws)



A-3332



A-3632

Art. No.	STERILE	System Size	Ø	Length	Shaft End	Pieces/Pkg
A-3332	A-3332S	1.2/1.5	2.7 mm	45 mm	AO Quick Coupling	1
A-3632	A-3632S	2.0/2.3	3.5 mm	45 mm	AO Quick Coupling	1

K-Wires, Stainless Steel



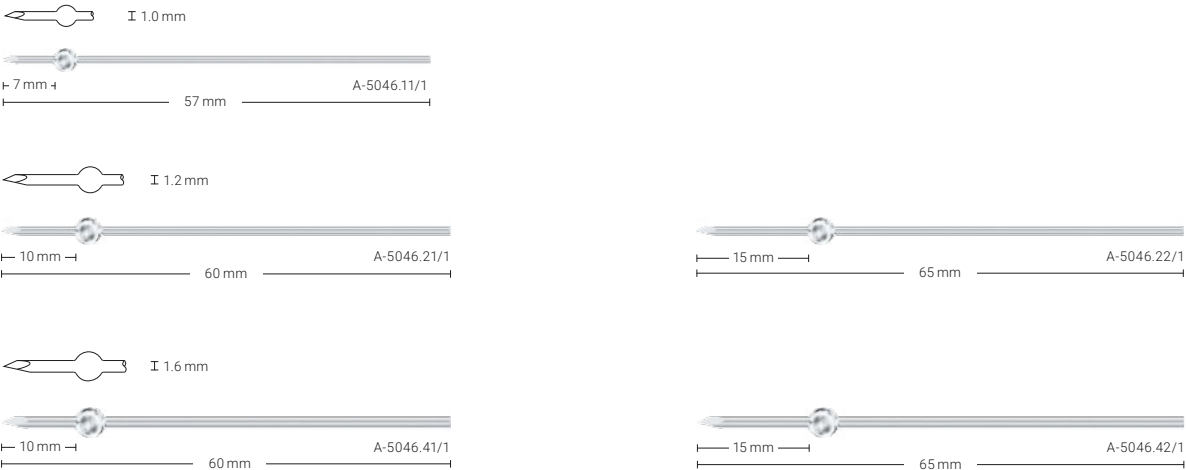
Art. No.	STERILE	Ø	Description	Length	Pieces/Pkg
A-5040.21		1.2 mm	trocar	150 mm	10
A-5040.21/1		1.2 mm	trocar	150 mm	1
	A-5040.21/2S	1.2 mm	trocar	150 mm	2
A-5040.41		1.6 mm	trocar	150 mm	10
A-5040.41/1		1.6 mm	trocar	150 mm	1
	A-5040.41/2S	1.6 mm	trocar	150 mm	2
A-5042.21		1.2 mm	lancet	150 mm	10
A-5042.21/1		1.2 mm	lancet	150 mm	1
	A-5042.21/2S	1.2 mm	lancet	150 mm	2
A-5042.41		1.6 mm	lancet	150 mm	10
A-5042.41/1		1.6 mm	lancet	150 mm	1
	A-5042.41/2S	1.6 mm	lancet	150 mm	2

K-Wire Guide



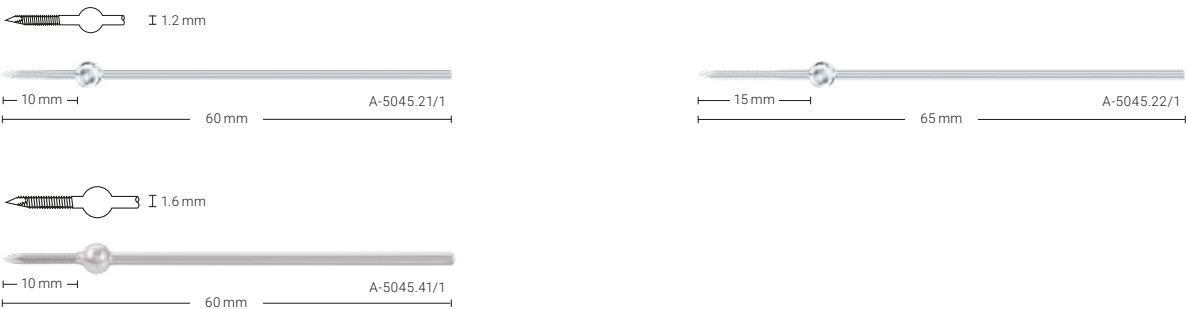
Art. No.	System Size	Length	Pieces/Pkg
A-2029	1.7, 2.2	146 mm	1

Olive K-Wires, No Thread, Stainless Steel



Art. No.	STERILE	Ø	Tip Length (no Thread)	Length	Pieces/Pkg
A-5046.11/1		1.0 mm	7 mm	57 mm	1
	A-5046.11/2S	1.0 mm	7 mm	57 mm	2
A-5046.21/1		1.2 mm	10 mm	60 mm	1
	A-5046.21/2S	1.2 mm	10 mm	60 mm	2
A-5046.22/1		1.2 mm	15 mm	65 mm	1
	A-5046.22/2S	1.2 mm	15 mm	65 mm	2
A-5046.41/1		1.6 mm	10 mm	60 mm	1
	A-5046.41/2S	1.6 mm	10 mm	60 mm	2
A-5046.42/1		1.6 mm	15 mm	65 mm	1
	A-5046.42/2s	1.6 mm	15 mm	65 mm	2

Olive K-Wires, With Thread, Stainless Steel



Art. No.	STERILE	Ø	Tip Length (with Thread)	Length	Pieces/Pkg
A-5045.21/1		1.2 mm	10 mm	60 mm	1
	A-5045.21/2S	1.2 mm	10 mm	60 mm	2
A-5045.22/1		1.2 mm	15 mm	65 mm	1
	A-5045.22/2S	1.2 mm	15 mm	65 mm	2
A-5045.41/1		1.6 mm	10 mm	60 mm	1
	A-5045.41/2S	1.6 mm	10 mm	60 mm	2

Drill Guides



A-2020



A-2120



A-2023



A-2220



A-2024



A-2420



A-2025



A-2421



A-2028



A-2520

Art. No.	System Size	Description	Length	Pieces/Pkg
A-2020	2.0/2.3	centric, excentric	149 mm	1
A-2023	1.5	for lag screws	139 mm	1
A-2024	2.0	for lag screws	139 mm	1
A-2025	1.2/1.5	centric, excentric	144 mm	1
A-2028	1.2-2.3	excentric	148 mm	1
A-2120	1.2		146 mm	1
A-2220	1.5		146 mm	1
A-2420	2.0		147 mm	1
A-2421	2.0	TriLock ^{PLUS}	114 mm	1
A-2520	2.3		148 mm	1

Depth Gauges



A-2030



A-2032

Art. No.	System Size	Length	Pieces/Pkg
A-2030	1.2-2.3	151 mm	1
A-2032	2.0/2.3	151 mm	1

Screwdrivers, Self-Holding



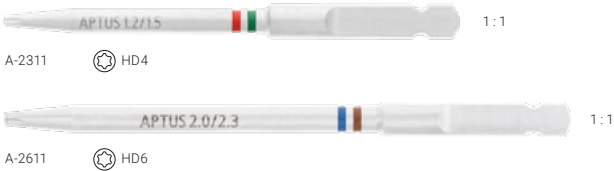
Art. No.	System Size	Interface	Length	Pieces/Pkg
A-2310	1.2/1.5	HD4	138 mm	1
A-2610	2.0/2.3	HD6	153 mm	1

Handle with Quick Connector



Art. No.	System Size	for Shaft End	Description	Length	Pieces/Pkg
A-2073	1.2–3.0	AO Quick Coupling	cannulated, with twist cap	124 mm	1

Screwdriver Blades, Self-Holding



Art. No.	System Size	Interface	Length	Shaft End	Pieces/Pkg
A-2311	1.2/1.5	HD4	60 mm	AO Quick Coupling	1
A-2611	2.0/2.3	HD6	75 mm	AO Quick Coupling	1

Screwdriver Guide



Art. No.	System Size	Length	Pieces/Pkg
A-2320	1.2/1.5	147 mm	1

Holding Forceps



A-2060



A-2052

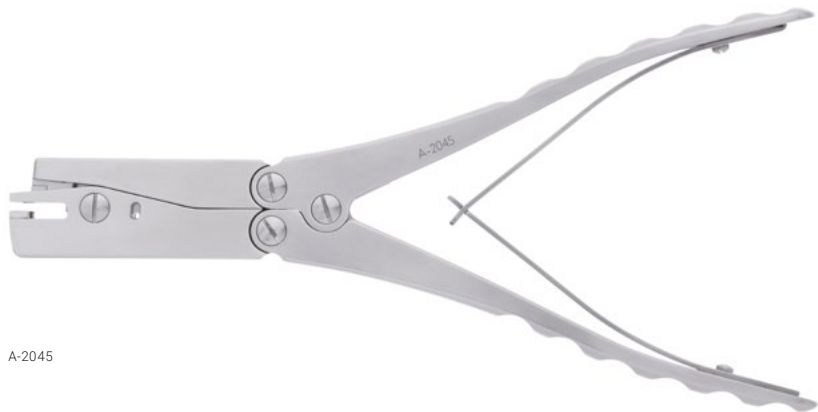
Art. No.	System Size	Description	Length	Pieces/Pkg
A-2060		angled	148 mm	1
A-2052	1.2–2.3		149 mm	1

Plate Holding and Positioning Instrument



Art. No.	System Size	Length	Pieces/Pkg
A-2350	1.2/1.5	190 mm	1

Plate Cutting Pliers



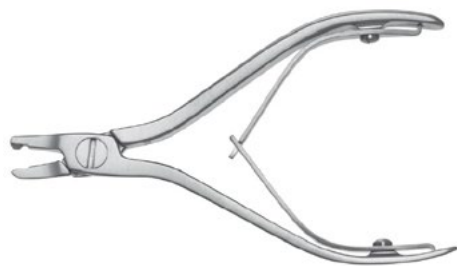
A-2045



A-2046

Art. No.	System Size	Length	Pieces/Pkg
A-2045	1.2–3.5	218 mm	1
A-2046	1.2–2.8	207 mm	1

Plate Bending Pliers

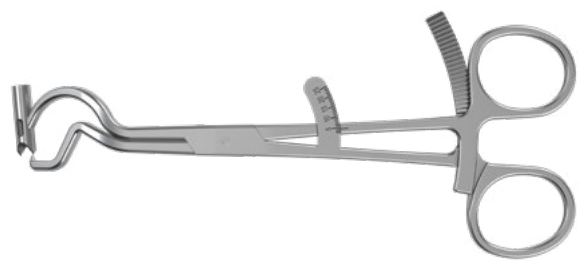


Art. No.	System Size	Description	Length	Pieces/Pkg
A-2040	1.2-2.3	with Vario pin	119 mm	1

Clamps for Lag Screw Technique



A-2066.01



A-2066.02

Art. No.	System Size	Description	Length	Pieces/Pkg
A-2066.01	1.2-2.3	left	152 mm	1
A-2066.02	1.2-2.3	right	152 mm	1

Temporary Locking Stopper for TriLock Screws

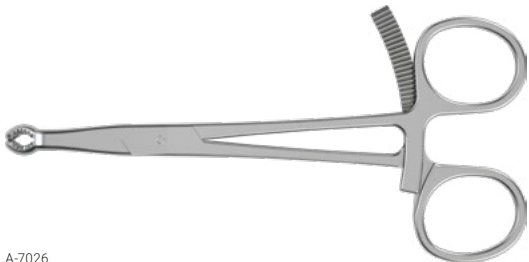


Art. No.	Description	Length	Pieces/Pkg
A-2080	for 1.2, 1.5 and 2.0 TriLock screws	40 mm	1

Plate and Bone Holding Forceps



A-7002



A-7026

Art. No.	Length	Pieces/Pkg
A-7002	130 mm	1
A-7026	138 mm	1

Bone Holding Forceps



Art. No.	Length	Pieces/Pkg
A-7012	140 mm	1

Reduction Forceps



Art. No.	Description	Length	Pieces/Pkg
A-7001	"Apart"	130 mm	1
A-7003	reduction forceps	130 mm	1
A-7010		90 mm	1

Bone Elevators Mini-Hohmann



A-7005



A-7006

Art. No.	Width	Length	Pieces/Pkg
A-7005	6 mm	160 mm	1
A-7006	8 mm	160 mm	1

Periosteal Elevator



Art. No.	Width	Length	Pieces/Pkg
A-7011	3 mm	185 mm	1

Hook



Art. No.	Description	Length	Pieces/Pkg
A-7009	"Tönnis"	150 mm	1

Wound Retractor Mini-Langenbeck



Art. No.	Description	Length	Pieces/Pkg
A-7013	20 x 6 mm	156 mm	1

Bibliography

- 1) Napier JR. The prehensile movements of the human hand. *J Bone Joint Surg Br.* 1956;38-B(4):902-913. doi:10.1302/0301-620X.38B4.902
- 2) Spies CK, Langer M, Hohendorff B, Müller LP, Oppermann J, Unglaub F. Offene Reposition und Schrauben/ Plattenosteosynthese von Mittelhandfrakturen [Open reduction and screw/plate osteosynthesis of metacarpal fractures]. *Oper Orthop Traumatol.* 2019;31(5):422-432. doi:10.1007/s00064-019-00625-y.
- 3) Doering TA, Greenberg AS, Tuckman DV. Dorsal Plating for Intra-articular Middle Phalangeal Base Fractures With Volar Instability. *Hand (N Y).* 2019;14(5):620-625. doi:10.1177/
- 4) Mudgal CS, Jupiter JB. Plate and screw design in fractures of the hand and wrist. *Clin Orthop Relat Res.* 2006;445:68-80. doi:10.1097/01.blo.0000205887.04200.21
- 5) Vester H, Schul L, von Matthey F, Beirer M, van Griensven M, Deiler S. Patient satisfaction after hook plate treatment of bony avulsion fracture of the distal phalanges. *Eur J Med Res.* 2018;23(1):35. Published 2018 Jul 20. doi:10.1186/s40001-018-0332-y.
- 6) Putnam JG, Mitchell SM, DiGiovanni RM, Stockwell EL, Edwards SG. Outcomes of Unstable Scaphoid Nonunion With Segmental Defect Treated With Plate Fixation and Autogenous Cancellous Graft. *J Hand Surg Am.* 2019;44(2):160.e1-160.e7. doi:10.1016/j.jhsa.2018.05.023
- 7) Schormans PMJ, Kooijman MA, Ten Bosch JA, Poeze M, Hannemann PFW. Mid-term outcome of volar plate fixation for scaphoid nonunion. *Bone Joint J.* 2020;102-B(12):1697-1702. doi:10.1302/0301-620X.102B12.BJJ-2019-1160.R3
- 8) Muirhead C, Talia A, Fraval A, Ross A, Thai D. Early mobilization vs delayed mobilisation following the use of a volar locking plate with non-vascularized bone graft in scaphoid non-union. A multicentred randomised controlled-trial. *J Orthop.* 2021;23:203-207. Published 2021 Jan 22. doi:10.1016/j.jor.2021.01.002
- 9) Heidemann W, Terheyden H, Gerlach KL. Analysis of the osseous/metal interface of drill free screws and self-tapping screws. *J Craniomaxillofac Surg.* 2001;29(2):69-74.

R_HAND-01000001_v0 / 2025-05, Medartis AG, Switzerland. All technical data subject to alteration.

MANUFACTURER & HEADQUARTERS

Medartis AG | Hochbergerstrasse 60E | 4057 Basel / Switzerland

P +41 61 633 34 34 | F +41 61 633 34 00 | www.medartis.com

SUBSIDIARIES

Australia | Austria | Brazil | France | Germany | Japan | Mexico | New Zealand | Poland | UK | USA

For detailed information regarding our subsidiaries and distributors, please visit www.medartis.com



Disclaimer: This information is intended to demonstrate the Medartis portfolio of medical devices. A surgeon must always rely on her or his own professional clinical judgement when deciding whether to use a particular product when treating a particular patient. Medartis is not giving any medical advice. The devices may not be available in all countries due to registration and/or medical practices. For further questions, please contact your Medartis representative (www.medartis.com). This information contains products with CE and/or UKCA marking. All pictures shown are for illustration purposes only and may not be an exact representation of the product. For US only: Federal law restricts this device to sale by or on the order of a physician.

© Medartis 2025. Everything herein is protected by copyright, trademarks and other intellectual property rights, as applicable, owned by or licensed to Medartis or its affiliates unless otherwise indicated. It is forbidden to redistribute, duplicate or disclose anything herein, in whole or in part, without the prior written consent of Medartis.