medartis®

PRECISION IN FIXATION

PRODUCT INFORMATION

Distal Radius System 2.5

APTUS® Wrist

Contents

For further information regarding the APTUS product line visit:
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A New Generation of Radius Plates

Why is a new generation of radius plates needed?

Distal radius fractures are the most common fractures of the upper extremities. The knowledge of these fractures has grown enormously over the last years. Treatment concepts have likewise been refined. It is now generally accepted that the best possible anatomical reconstruction of the radiocarpal joint (RCJ) and distal radioulnar joint (DRUJ) to produce a functional outcome is a requirement. Multidirectional and angular stable plate systems have enabled open reduction and internal fixation to become an established treatment method for intra- and extra-articular distal radius fractures. These systems have enabled even severe extension fractures with dorsal defect zones to be precisely repositioned and treated with osteosynthesis via volar access without the need for additional cortico-cancellous bone graft.

Can an established system be further improved?

The literature shows that differentiating treatment strategies, taking into consideration different fracture types and modern implants, are able to lower the rate of complications and significantly improve functional outcomes[1–8]. Complications such as irritations and ruptures of the flexor tendons and extensor tendons are still described in the literature, however[10–20]. These complications are caused by a prominent distal plate design or a plate position that is too distal, for example. Healing of a distal radius fracture in an incorrect position is another common complication. This has a longterm negative effect on the joint geometry with a resultant restriction in wrist mobility, reduction in the grip force, and development of pain and possible early osteoarthritis.

In collaboration with internationally renowned specialists, Medartis has refined its established APTUS radius portfolio to lower the rates of these complications.

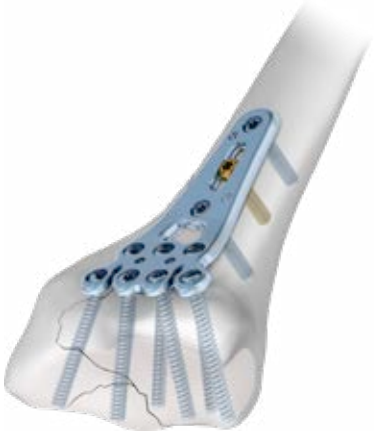
One System for Primary and Secondary Reconstruction

Complete system for fracture-specific treatment

ADAPTIVE volar radius plates for very distal placement and for support of the lunate facet and the DRUJ. A selection of different widths and lengths to meet different anatomical requirements.

Hook plates for the treatment of very small distal rim fragments and bony ligament avulsions.

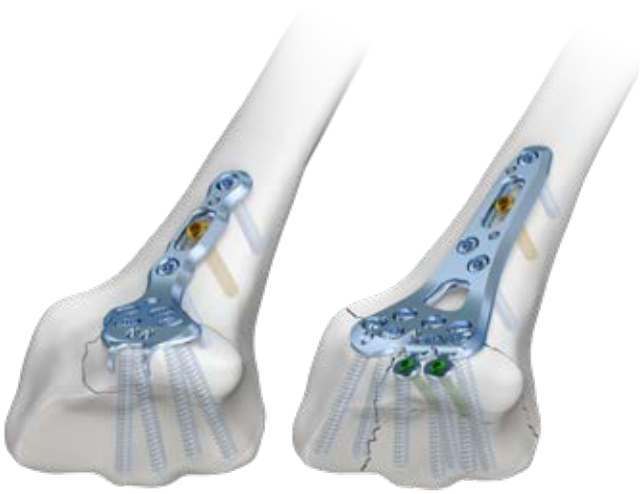
FPL plates for stabilization of the sigmoid notch, the lunate facet and improved radial support. The unique plate design enables a very distal plate position considering the flexor pollicis longus tendon.



Classic styloid-oriented volar plates for the treatment of extension fractures that extend towards the radial styloid.

Volar correction plates indicated for correction osteotomies and extension fractures with radial defect.

Specific small fragment plates for dorsal, volar and radial fixation.



Lunate facet and rim plates for support of volar rim fractures.

Dorsal plates for fractures that cannot be addressed with a volar plate.

XL plates for fixation of combined diaphyseal-metaphyseal radius fractures.

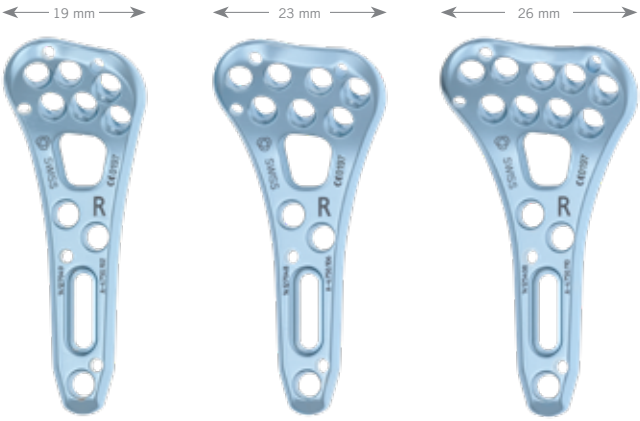
ADAPTIVE II Distal Radius Plates

Support of the lunate facet and the DRUJ

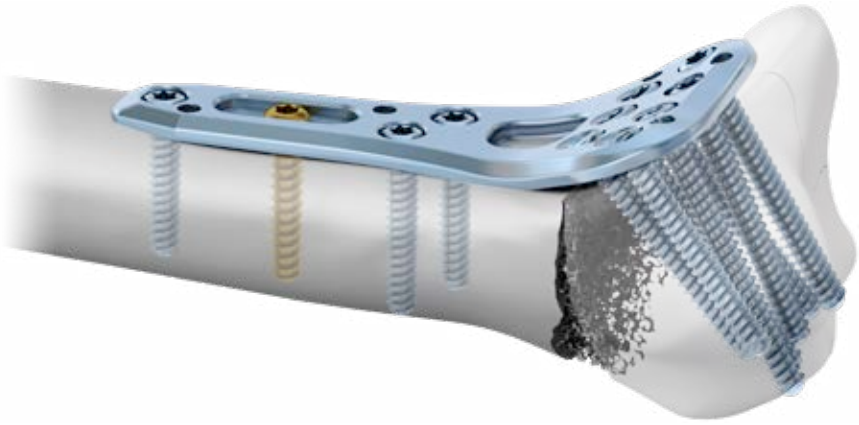
Clinical Benefits

- Improved anatomical fit *
- Stabilization of the sigmoid notch and lunate facet
- Treatment of fractures with ulnar fragments
- Three different widths to meet individual anatomical requirements
- Window enables viewing of the fracture position

ADAPTIVE II
Watershed line design



Narrow Standard Wide



Subchondral buttressing of the RCJ and DRUJ due to the possibility of converging screw placement

Female. 77 years. Simple intra-articular fracture **

* Evaluated on 250 cadaver bones
** Clinical case published with the kind permission of: Bernard Schick, Sydney, Australia

Specific Plate Features

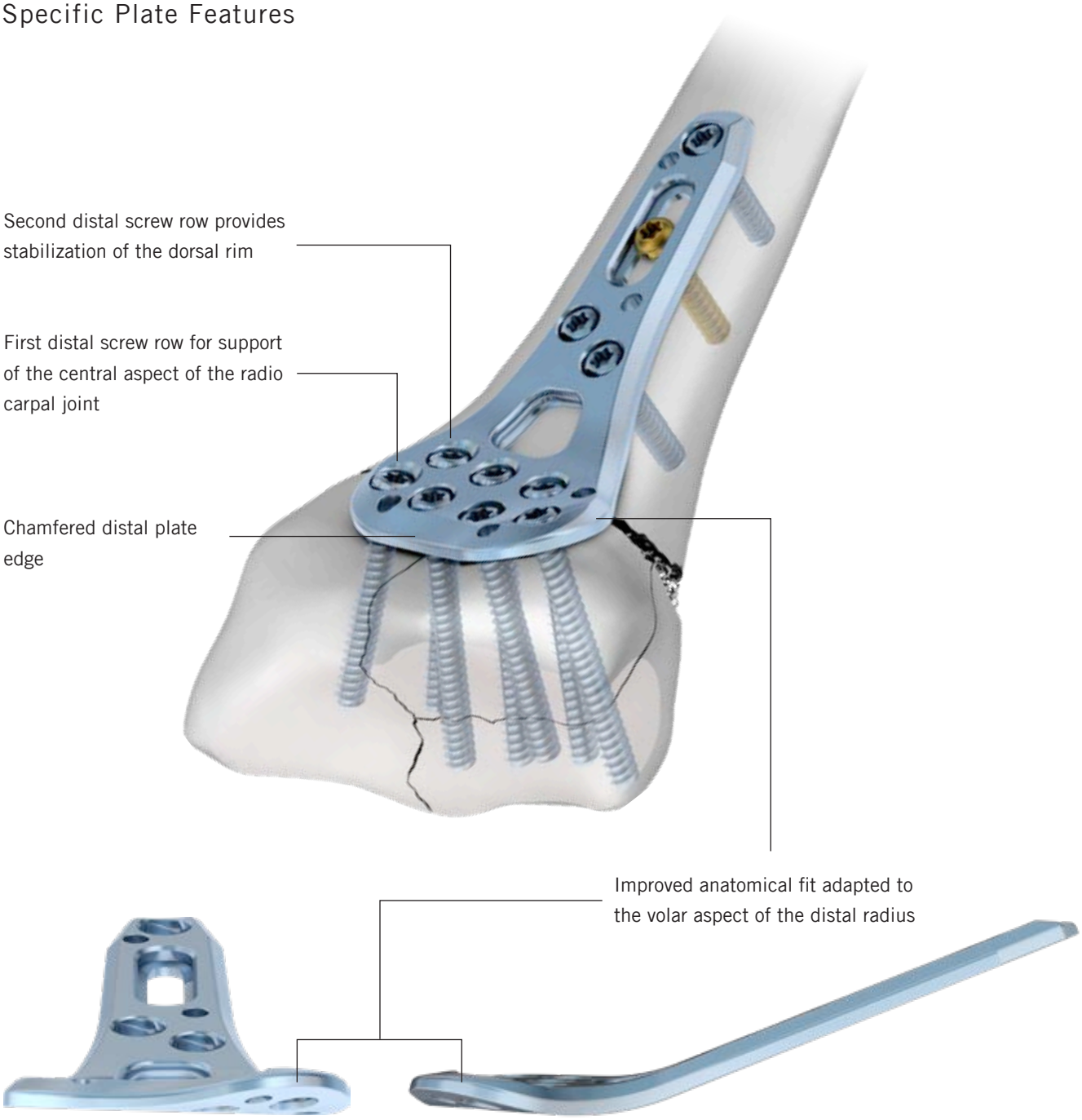


Plate Features

- TriLock – variable angle of ± 15° in all directions in each screw hole *
- Pre-angled TriLock holes for oriented screw placement specially for the radial styloid
- Rounded edges and a smooth surface for soft tissue protection
- Oblong hole for variable positioning of the plate
- Radiolucent drill guide block available for rapid and easy angulation of screws
- K-wire holes to assist with temporary plate fixation

* Exception: oblong hole

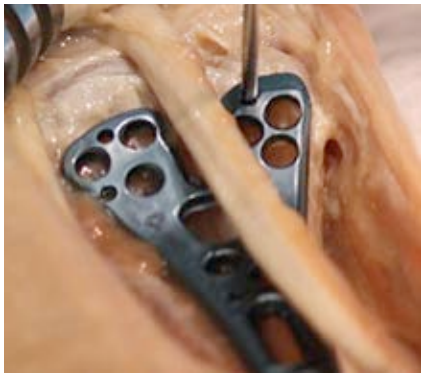
FPL Plates

Support of the lunate facet, the DRUJ and the radial styloid

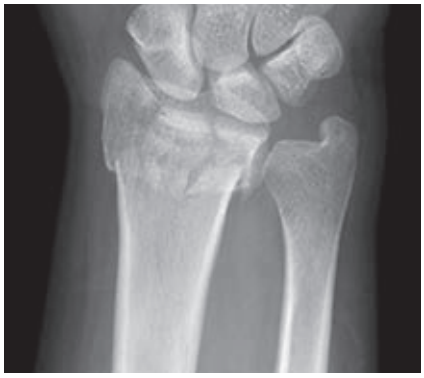
Flexor tendon injury is a recognized complication after open reduction and internal fixation with volar locking plates of distal radius fractures [10–20]. A major contributing factor to these tendon problems is reported to be plate prominence in the region of the watershed line where the flexor tendons are in direct contact with the bone, hence metal protruding this aspect would inflict immediate irritation of these structures. The flexor pollicis longus (FPL) tendon travels in the distal radial metaphysis over the watershed line between the scaphoid and lunate facets. The placement of a volar plate distal to the watershed line especially in this aspect is therefore a potential cause of FPL tendon injury, as the transverse distal edge of the plate, when placed too distally, would be in direct contact with the FPL tendon.

Clinical Benefits

- Improved anatomical fit *
- Stabilization of the sigmoid notch, the lunate facet and improved radial support
- Very distal plate positioning possible
- Y-shape with a central recess may minimize the contact pressure on the flexor pollicis longus tendon
- Window enables viewing of the fracture position

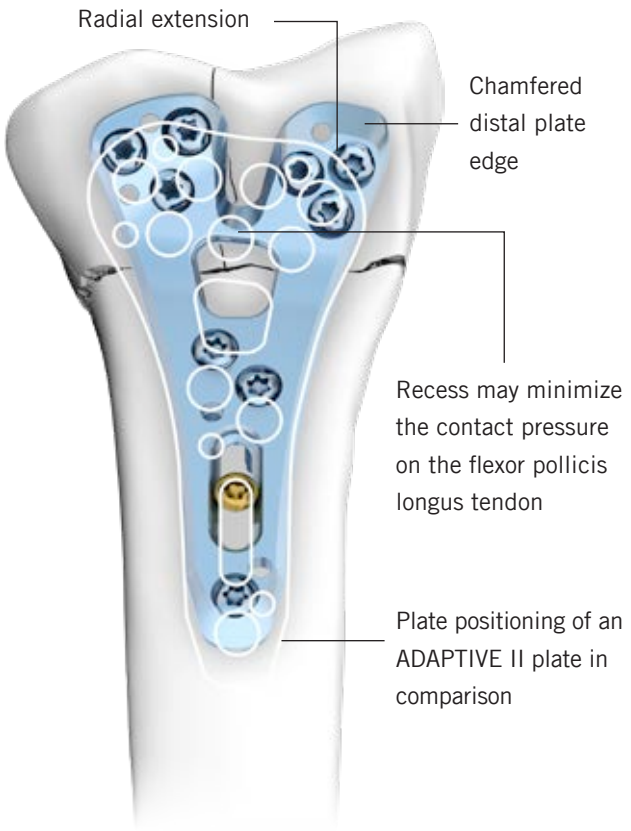


Position of the FPL tendon

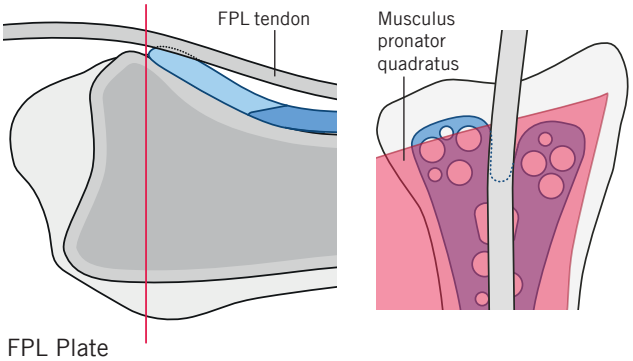


* Evaluated on 250 cadaver bones

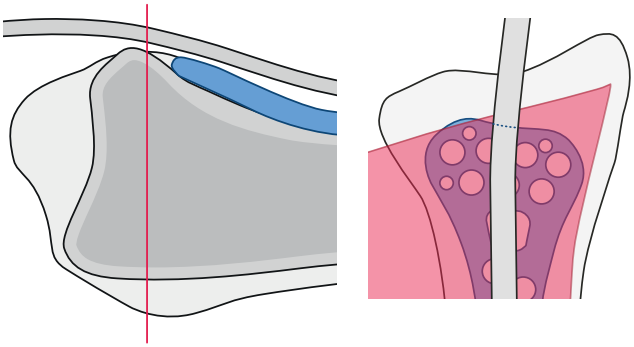
Specific Plate Features



Longitudinal section along the axis of the FPL tendon



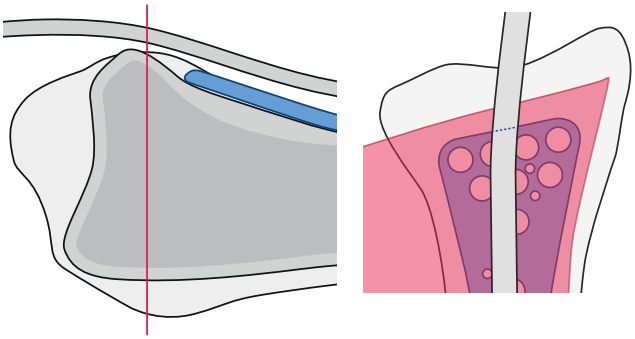
FPL Plate



ADAPTIVE II Plate

Improved anatomical fit adapted to the volar aspect of the distal radius *

Radial Ulnar



Correction Plate

Plate Features

- TriLock – variable angle of ± 15° in all directions in each screw hole **
- Pre-angled TriLock holes for oriented screw placement specially for the radial styloid
- Rounded edges and a smooth surface for soft tissue protection
- Oblong hole for variable plate positioning
- Radiolucent drill guide block available for rapid and easy angulation of screws
- First distal screw row for support of the central aspect of the radio carpal joint
- Second distal screw row provides stabilization of the dorsal rim
- K-wire holes to assist with temporary plate fixation

** Exception: oblong hole

Hook Plates

For treatment of small, very distal fracture fragments or bony ligament avulsions respectively

Small fracture fragments that are distal to the watershed line represent a clinical challenge. A conventional volar distal radius plate which is placed distally of the watershed line to fixate these avulsed fragments would lead to flexor tendon irritations and screws for capturing these fragments would be too large.

Clinical Benefits

- Hook plate design to fixate rim fragments and bony ligament avulsions
- Hook plates can be used as stand-alone implant or underneath a volar plate depending on the fracture pattern
- Two different widths and lengths to meet individual anatomical requirements

Plate Features

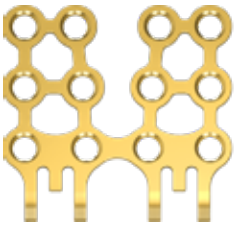
- Low plate profile (0.6 mm) and non-protruding screw heads for soft tissue protection
- Self drilling 1.5 SpeedTip screws for fast and easy insertion

1.5 SpeedTip

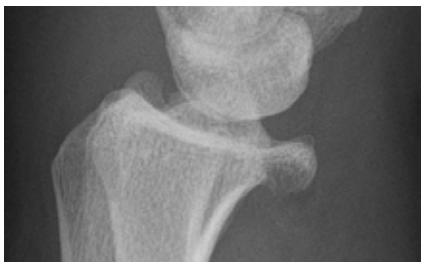
Hook plate, 2 holes

Hook plate, 4 holes

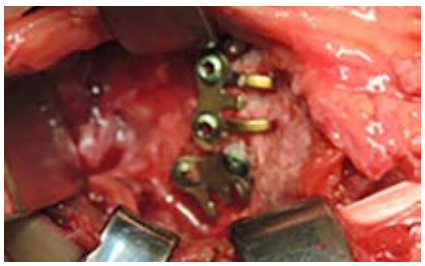
Hook plate, 6 holes



Hook plate, 12 holes



Preoperative X-ray



Intraoperative view after fixation of screws

Postoperative X-ray control

Lunate Facet Plates

Treatment of isolated, volar rim fragments or bony ligament avulsions respectively

Clinical Benefits

- Combination of hook and TriLock plate for fixation of isolated, ulnar-sided rim fragments
- Stabilization of the sigmoid notch and the lunate facet
- Distal suture holes for additional soft tissue fixation
- Chamfered distal plate edge for minimal implant protrusion
- Low plate profile of 1.6 mm

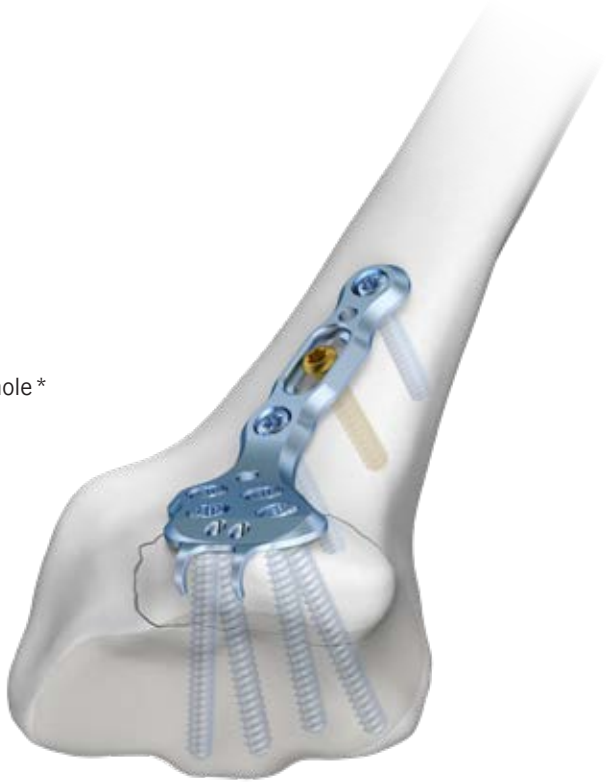
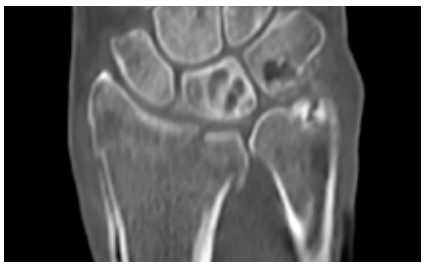


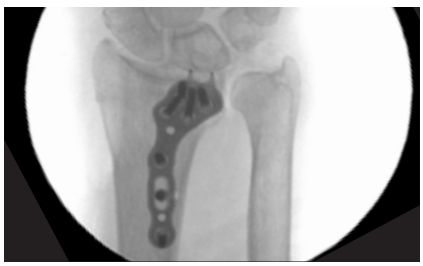
Plate Features

- Hook thickness of 0.6 mm
- TriLock – variable angle of ± 15° in all directions in each screw hole *
- Rounded edges and a smooth surface for soft tissue protection
- Oblong hole for variable positioning of the plate
- K-wire holes to assist with temporary plate fixation



Preoperative X-ray

Intraoperative view of plate position



Postoperative X-ray control with anatomical reconstruction

Clinical case published with the kind permission of: J. Grünert, St. Gallen, Switzerland

* Exception: oblong hole

Rim Plates

Treatment of complex, intra-articular fractures with volar rim fragments

Clinical Benefits

- Bendable distal flaps
  - For support and fixation of volar rim fragments or bony ligament avulsions respectively
  - Can be used for the insertion of 1.5 SpeedTip screws or as suture holes for additional soft tissue fixation
- Anatomically pre-contoured plate design
- Improved anatomical fit*
- Low plate profile of 1.8 mm
- First distal screw row for support of the central aspect of the radiocarpal joint
- Second distal screw row provides stabilization of the dorsal rim

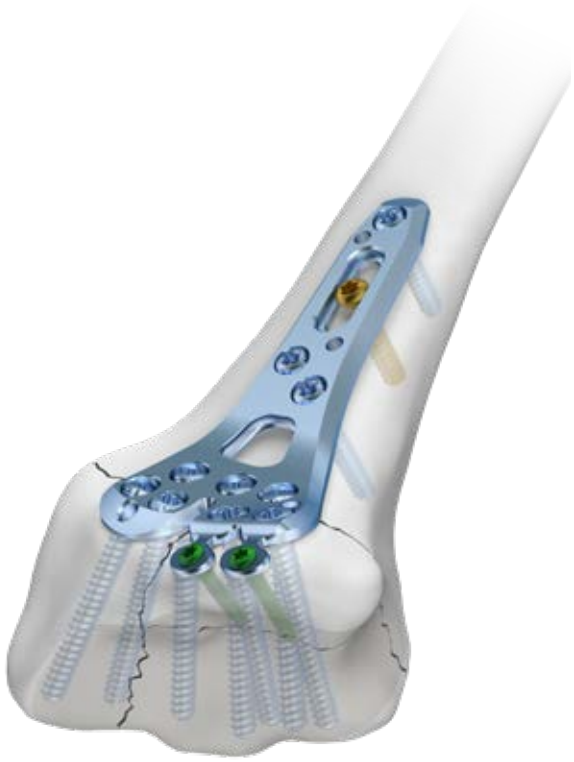


Plate Features

- Flap thickness of 0.6 mm, flaps can be bent up to 35°
- TriLock – multidirectional angular stability of ± 15° in all directions in each screw hole**
- Rounded edges and a smooth surface for soft tissue protection
- Oblong hole for variable positioning of the plate
- Radiolucent drill guide block available for rapid and easy angulation of screws
- K-wire holes to assist with temporary plate fixation

Preoperative CT scan

Intraoperative view of the fracture fixation

* Evaluated on 250 cadaver bones
* * Exception: oblong hole and flaps

Fracture Plates

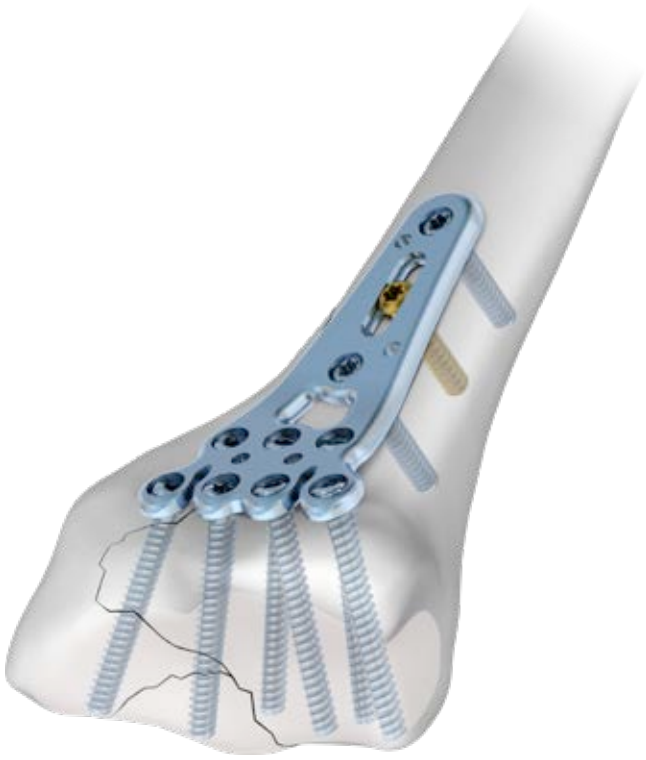
Support of extension fractures with involvement of the radial styloid

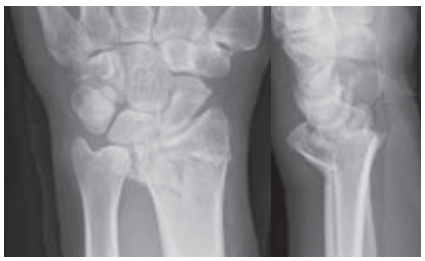
Clinical Benefits

- Low plate profile of 1.6 mm
- First distal row can be bent individually to match the anatomy
- Window enables viewing of the fracture position

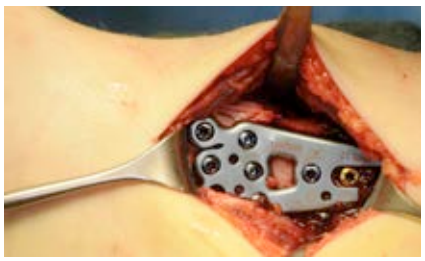
Plate Features

- TriLock – variable angle of ± 15° in all directions in each screw hole *
- Buttressing of the RCJ and DRUJ due to the possibility of converging screw placement
- Rounded edges and a smooth surface for soft tissue protection
- Oblong hole for variable plate positioning
- K-wire holes to assist with temporary plate fixation

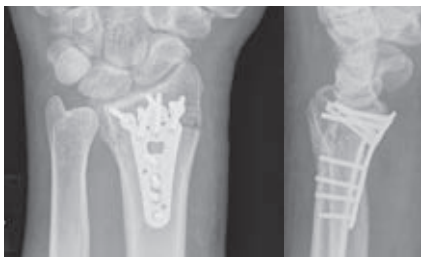




Trauma case of a C3 fracture in a 47-year old male patient



Intraoperative view of the plate position



Postoperative X-ray control with anatomical reconstruction and subchondral screw position

Clinical case published with the kind permission of: Prof. H. Krimmer, Ravensburg, Germany

* Exception: oblong hole

Correction Plates

Correction of incongruencies both in length and angle

Clinical Benefits

- Low plate profile of 1.6 mm
- Applicable also for complex radius reconstructions
- Fixation of transplant possible
- Distal plate edge for simplified finding and adjusting the ulnar inclination angle
- Support of extension fractures with involvement of the radial styloid

Plate Features

- TriLock – variable angle of ± 15° in all directions in each screw hole *
- Buttressing of the RCJ and DRUJ due to the possibility of converging screw placement
- Rounded edges and a smooth surface for soft tissue protection
- Oblong hole for correction of the length or variable plate positioning
- K-wire holes to assist with temporary plate fixation

Preoperative X-ray (lateral) with moderate malpositioning

Intraoperative view after fixation of distal screws

Postoperative X-ray (lateral) after healing of correction osteotomy

Clinical case published with the kind permission of: H. Krimmer, Ravensburg, Germany

* Exception: oblong hole

Volar Frame Plates

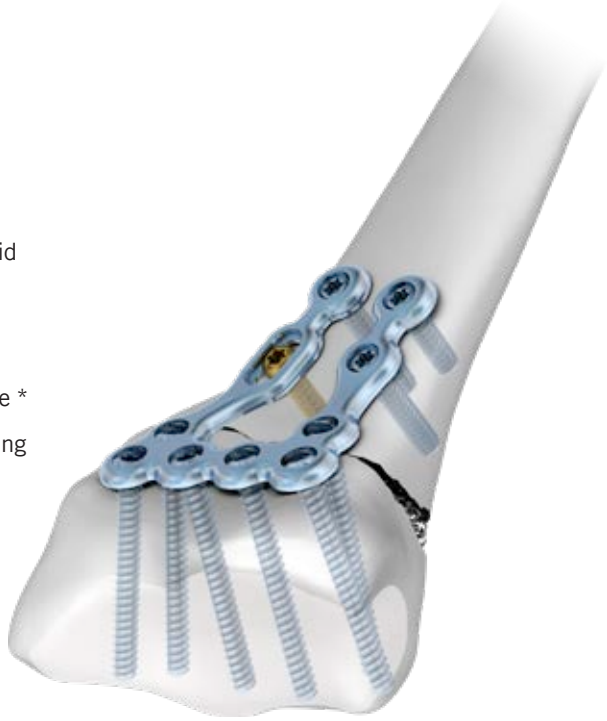
Compact plate design for short incisions

Clinical Benefits

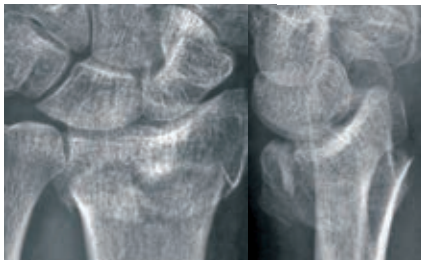
- Low plate profile of 1.6 mm
- Frame design allows for individual adaptation to anatomy
- Double shaft design provides high rotational stability
- Support of extension fractures with involvement of the radial styloid

Plate Features

- TriLock – variable angle of ± 15° in all directions in each screw hole *
- Buttressing of the RCJ and DRUJ due to the possibility of converging screw placement
- Rounded edges and a smooth surface for soft tissue protection
- Oblong hole for variable plate positioning
- Frame design enables screw placement in the radial as well as the ulnar margin for an even better purchase

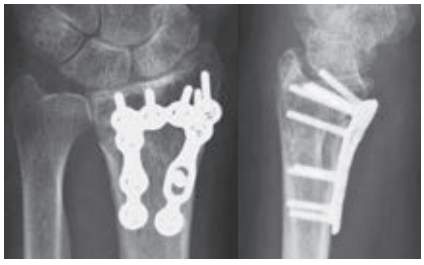


Frame design



Trauma case of a C3 fracture in a 68-year old female patient

Intraoperative view of positioning the plate as far distal as possible



X-ray control 4 weeks postoperatively

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

* Exception: oblong hole

Extra-Articular Plates

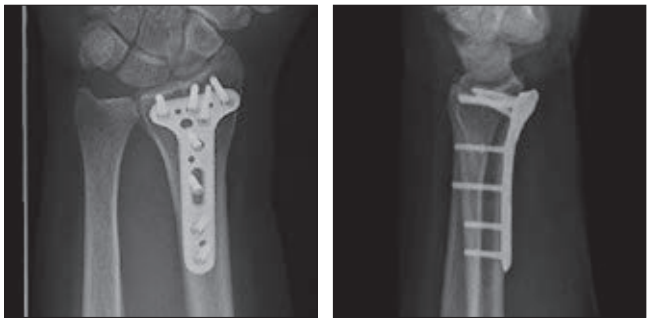
Fixation of extra-articular distal radius fractures

Clinical Benefits

- Plate profile of 2.0 mm
- Support of extension fractures with involvement of the radial styloid

Plate Features

- TriLock – variable angle of ± 15° in all directions in each screw hole *
- Buttressing of the RCJ and DRUJ due to the possibility of converging screw placement
- Rounded edges and a smooth surface for soft tissue protection
- Oblong hole for variable plate positioning
- K-wire holes to assist with temporary plate fixation



Postoperative X-rays

* Exception: oblong hole

Small Fragment Plates

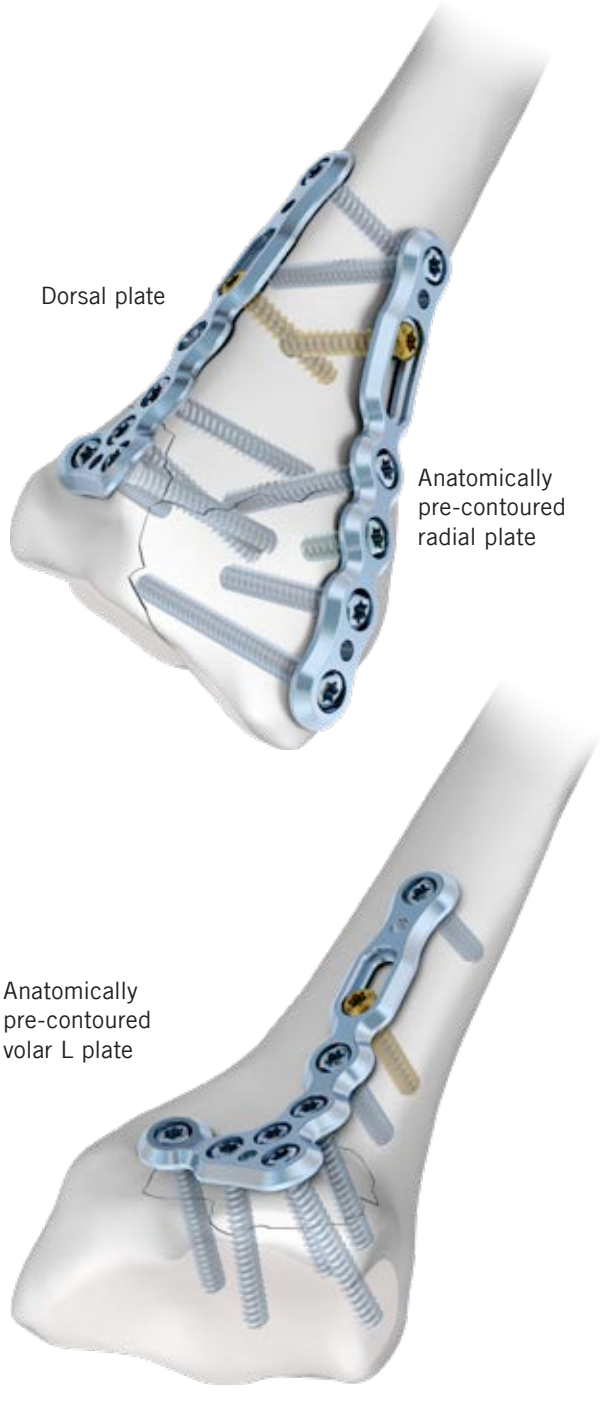
For fracture-specific fixation of isolated simple to complex intra-articular distal radius fractures

Clinical Benefits

- Low plate profile of 1.6 mm
- Anatomical plate design, easily contourable to provide the desired fit
- Small fragment plates in L, T and straight design to address individual fracture patterns and anatomies
- Internal fixation of the intermediate and radial column according to the 3 column concept

Plate Features

- TriLock – variable angle of ± 15° in all directions in each screw hole *
- Rounded edges and a smooth surface for soft tissue protection
- Oblong hole for variable plate positioning
- K-wire holes to assist with temporary plate fixation



* Exception: oblong hole

Dorsal Frame Plates

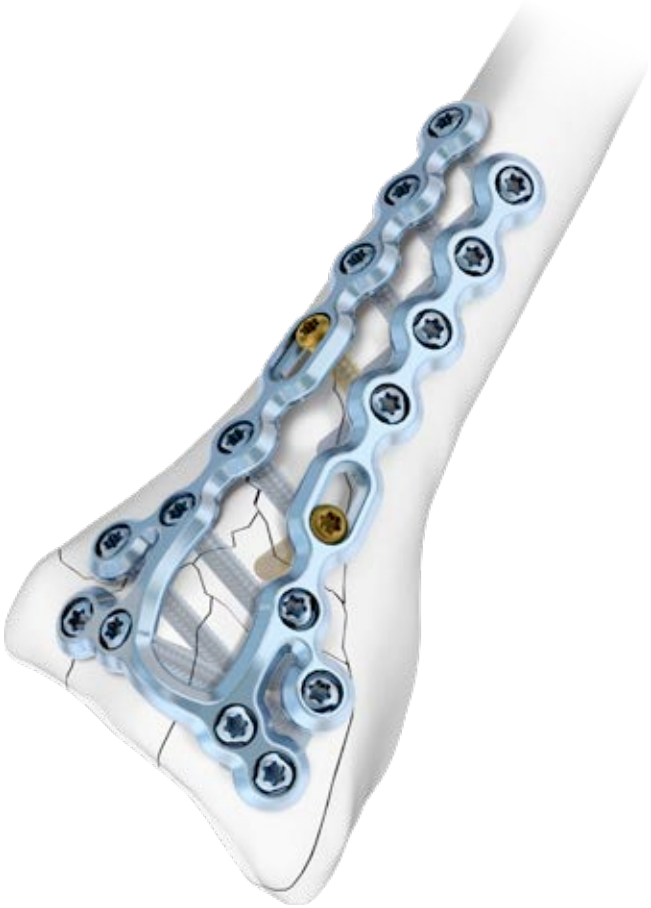
Fixation of complex fractures of the distal radius

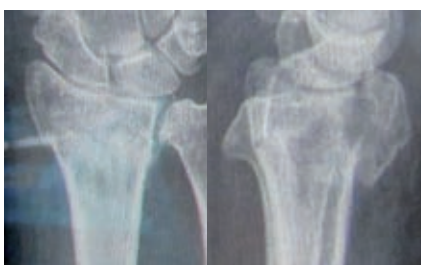
Clinical Benefits

- Low plate profile of 1.6 mm
- Multiple screw holes offer a high degree of intra-operative flexibility
- Anatomical plate design, easily contourable to provide the desired fit

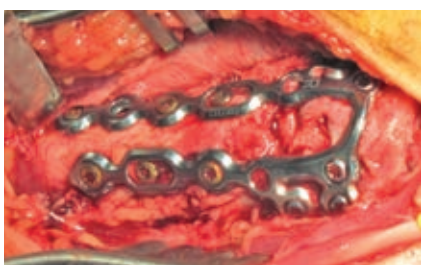
Plate Features

- TriLock – variable angle of ± 15° in all directions in each screw hole *
- Oblong holes for variable plate positioning
- Buttressing of the RCJ and DRUJ due to the possibility of converging screw placement
- Rounded edges and a smooth surface for soft tissue protection
- Offset screw holes in the shafts avoid screw collisions





Clinical picture (lateral X-ray of fracture) of a 73-year old female patient



Intraoperative view after insertion of 12 screws (6 fixation, 6 TriLock); bone defect filled with bone substitute

Postoperative X-ray control

Clinical case published with the kind permission of: R. Steiger, Liestal, Switzerland

* Exception: oblong holes

→ www.medartis.com

XL Plates

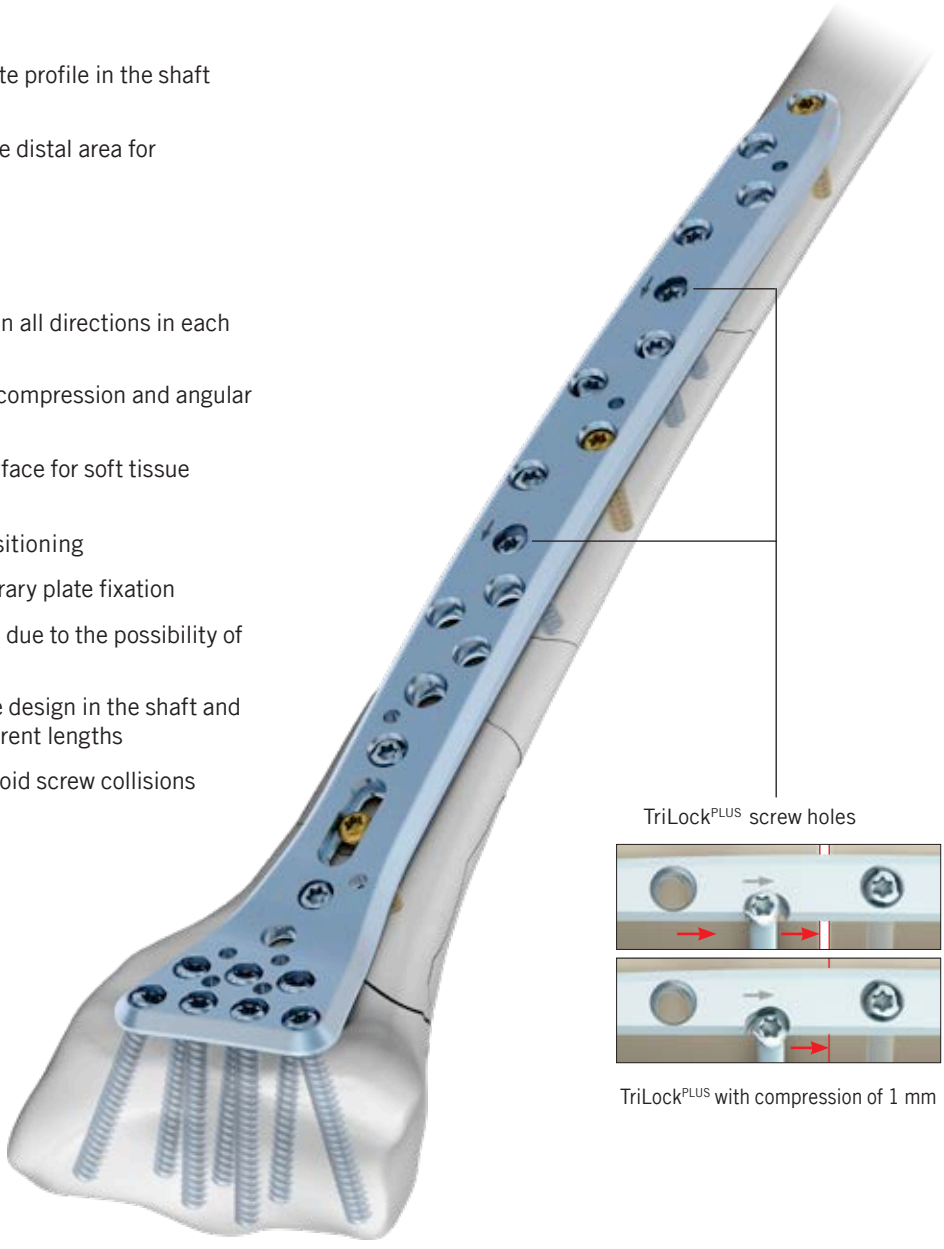
Fixation of combined diaphyseal-metaphyseal radius fractures as well as correction osteotomies

Clinical Benefits

- Stable fixation with a variable plate profile in the shaft of 3.2 mm to 1.8 mm distally
- Two-row screw arrangement in the distal area for subchondral support

Plate Features

- TriLock – variable angle of ± 15° in all directions in each screw hole *
- TriLock^{PLUS} screw holes combine compression and angular stability in one step
- Rounded edges and a smooth surface for soft tissue protection
- Oblong hole for variable plate positioning
- K-wire holes to assist with temporary plate fixation
- Buttressing of the RCJ and DRUJ due to the possibility of converging screw placement
- Anatomically pre-contoured plate design in the shaft and distal area available in three different lengths
- Offset screw holes in the shaft avoid screw collisions



TriLock^{PLUS} with compression of 1 mm

* Exception: oblong hole

Distal Ulna Plates

Fixation of intra- and extra-articular fractures of the neck and head of the distal ulna

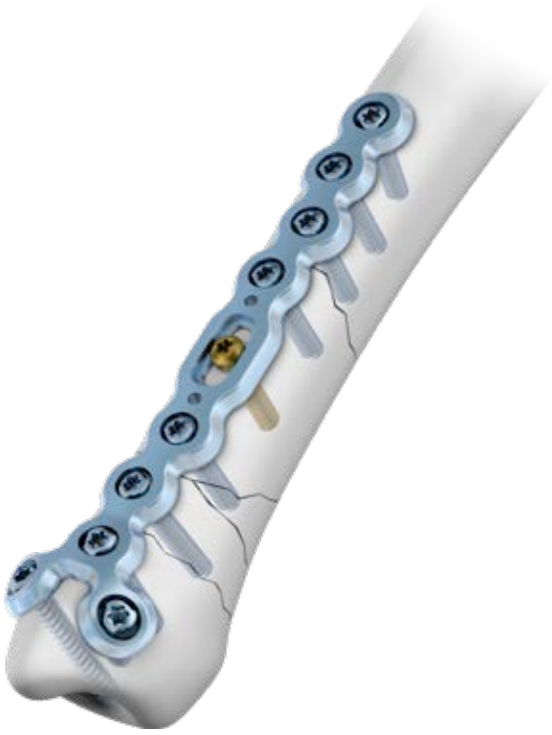
The ulnar head is the center of rotation for the distal radioulnar joint during pronation and supination and must withstand considerable forces. Its distal ulnar surface also stabilizes the carpus and the hand. Stable fixation of distal ulna fractures ensures the congruence of the joints and allows early mobilization of the wrist.

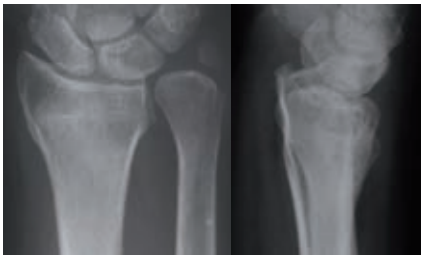
Clinical Benefits

- Low plate profile of 1.6 mm
- Up to three screws capture and stabilize even distal fragments
- Plate position can be either lateral (ulnar), volar or dorsal
- Anatomical plate design, easily contourable to provide the desired fit
- Two plate lengths to address fractures of the ulnar head, neck and the distal shaft

Plate Features

- TriLock – variable angle of ± 15° in all directions in each screw hole *
- Rounded edges and a smooth surface for soft tissue protection
- Oblong hole for variable plate positioning
- K-wire holes to assist with temporary plate fixation
- Anatomically pre-contoured plate design





Preoperative X-rays

Intraoperative view

Postoperative X-ray control with long distal ulna plate

Clinical cases published with the kind permission of: A. Leti Acciaro, Modena, Italy

* Exception: oblong hole

Treatment Concept

The table below lists typical clinical findings which can be treated with the implants of the APTUS Distal Radius System 2.5.

Fracture Type \ Plate Type	 *	 *	 *	 *		 *				 *			
A1													
A2													
A3													
B1.1													
B1.2													
B1.3													
B2													
B3													
C1													
C2													
C3													
Volar lunate facet fragment													
Bony ligament avulsions													
Diaphyseal-metaphyseal fracture													
Correction osteotomy													

Primary recommendation

Recommendation

Possible

The above-mentioned information is a recommendation only. The operating surgeon is solely responsible for the choice of the suitable implant for the specific case.

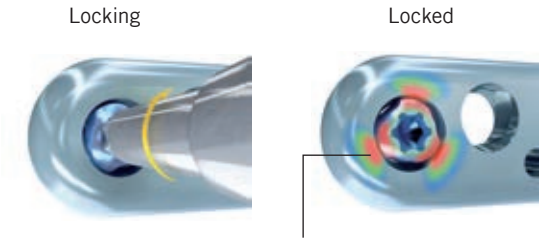
* Soft tissue protecting plate position along the watershed line to be respected, according to Soong et al.[17]

Technology, Biomechanics, Screw Features

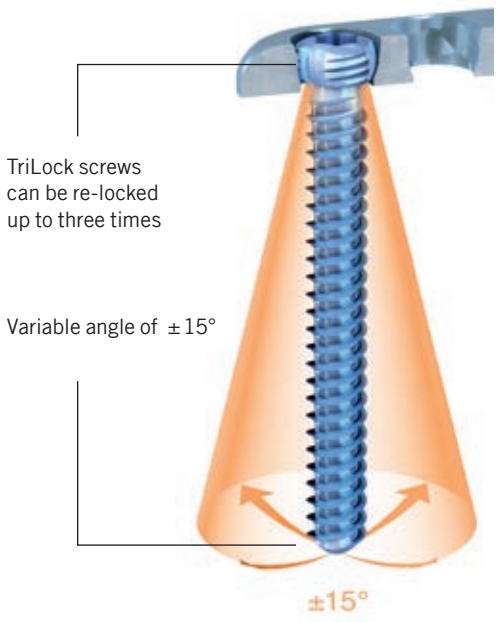
Multidirectional and angular stable TriLock® locking technology

TriLock Technology

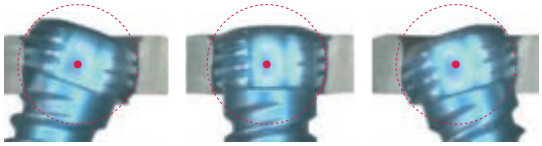
- Patented TriLock locking technology – multidirectional locking of the screw in the plate
  - Spherical three-point wedge-locking
  - Friction locking through radial bracing of the screw head in the plate – without additional tensioning components
- Screws can pivot freely by ± 15° in all directions for optimal positioning
- Fine tuning capabilities of fracture fragments
- TriLock screws can be re-locked in the same screw hole at individual angles up to three times
- Minimal screw head protrusion thanks to internal locking contour
- No cold welding between plate and screws



Patented TriLock locking technology – multidirectional locking of the screw in the plate

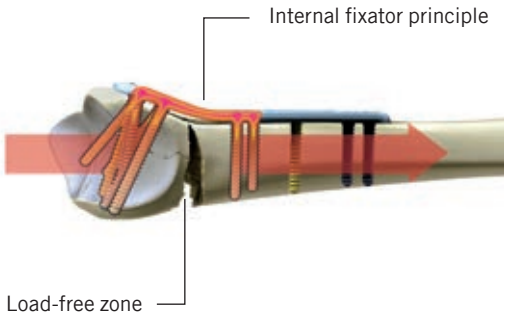


Minimal screw head protrusion



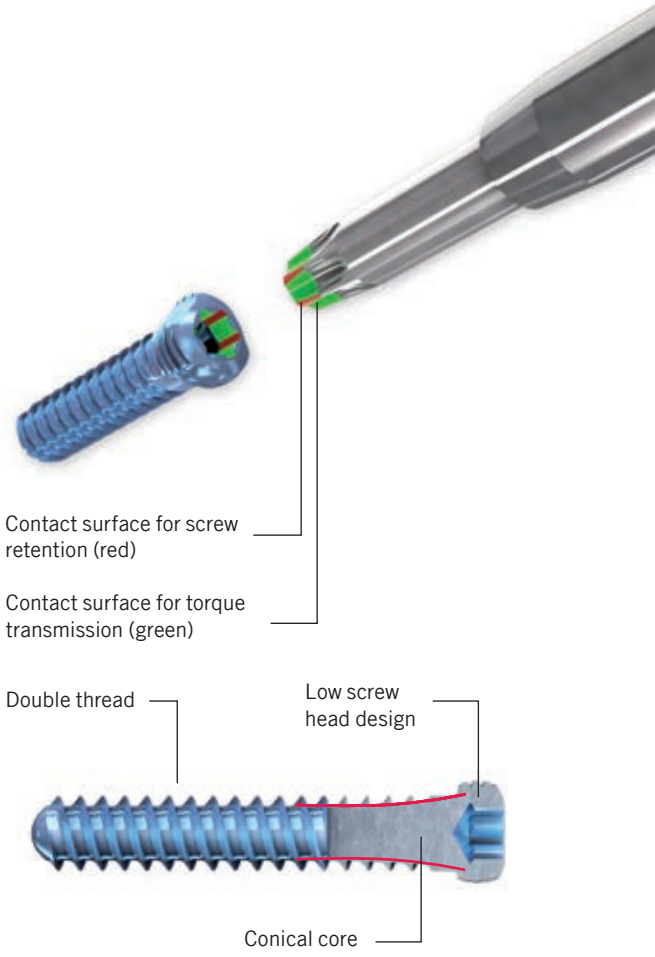
Biomechanics

- Internal fixator principle
  - Forces around the distal radius bypass the unstable fracture site
  - Low contact for ideal blood supply
  - Functionally dynamic construct to avoid possible screw stripping and cut-outs in the bone



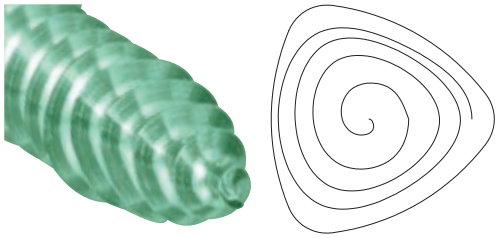
Screw Features

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



Patented SpeedTip Thread Design

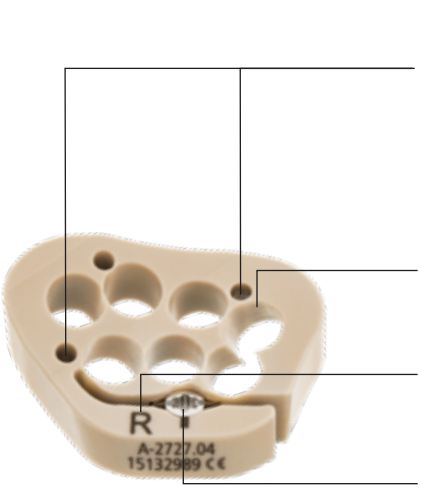
- Functionally unique cutting with immediate bite
- Immediate cutting of the bone with only slight axial pressure
- The triangular tip design permits simultaneous drilling, tapping and compression of the bone tissue during insertion for increased pull-out stability[25–26]
- Reduced insertion torque thanks to the polygonal tip and tapered shaft



Precisely Guided Screw Placement

Drill Guide Block Features

- Drill, assign the screw length and insert screws with fixed drill guide block
- Rapid screw insertion and easy to use
- Radiolucent
- Specific left and right drill guide blocks to fit all ADAPTIVE II, FPL and rim plates



K-wire holes to assist with temporary plate fixation and for verification of the correct plate and screw positions

Fixed angles to avoid joint penetration

Clear markings for easy identification

Fast fixing and detaching of the drill guide block

Self-Holding Drill Sleeve

- Can be locked in the TriLock contour of the plate in the selected angle
- Multidirectional ± 15°
- Enables single-handed drilling

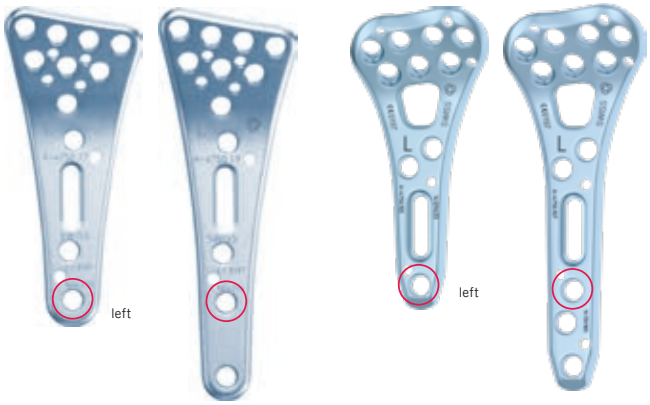
Holding and Positioning Instrument

The plate holding and positioning instrument can be locked in any TriLock contour of the plate. It facilitates pick-up, positioning and holding the implant on the bone.

Instrument for Restoration of the Volar Tilt

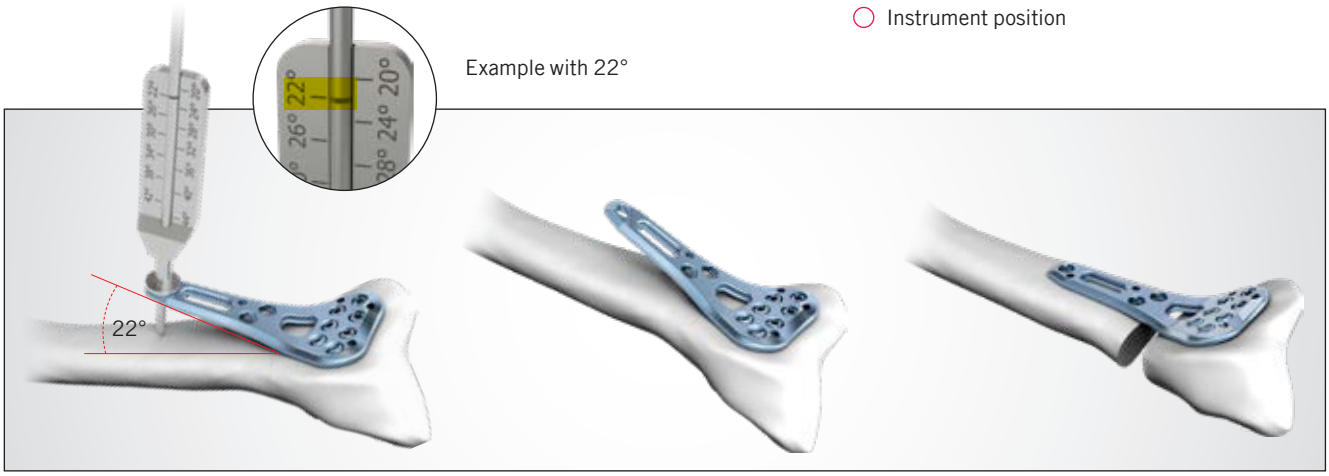
This instrument enables controlled restoration of the volar tilt. After the instrument has been set to the desired angle and locked in the appropriate shaft hole, the plate is premounted to the distal aspect of the radius. After performing an osteotomy, the plate can be reduced to the radius and the desired volar tilt is restored.

- Continuously adjustable restoration angle
- Is locked in the appropriate screw hole
- Precise and comprehensive application



Correction plates ADAPTIVE II plates

○ Instrument position



Example with 22°

Easy pick-up, positioning and holding of the hook plate.

Storage

- Customized system arrangement and modular concept
- Compact system
- Easy to use
- Lightweight components
- Validated cleaning and sterilization of the implants

Examples of equipped implant cases

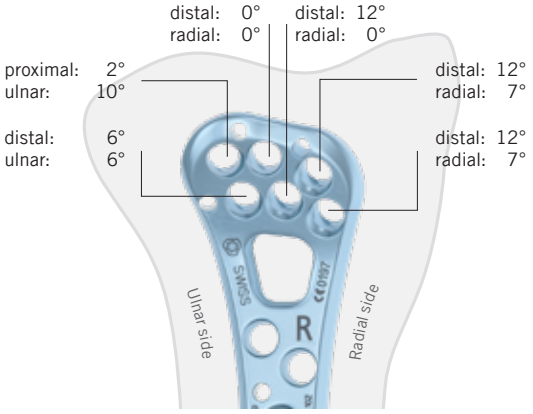
Example of an equipped instrument case

Example of an equipped all-in-one-set

Overview Screw Trajectories

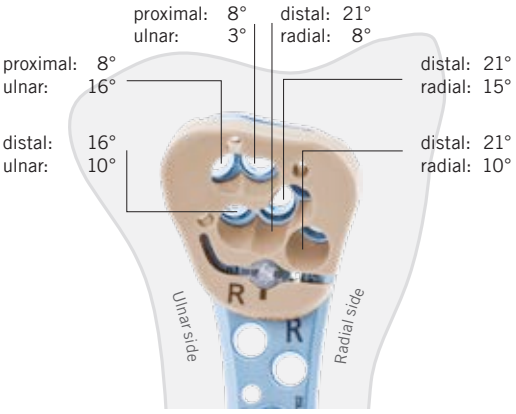
Screw trajectories for the ADAPTIVE II plates, the FPL and rim plates, without and with drill guide block.

ADAPTIVE II plates (variable angle) *

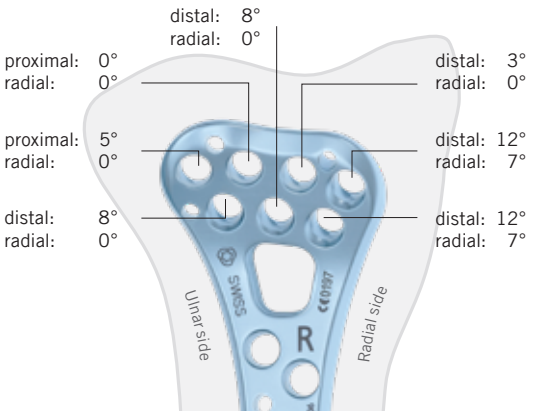


A-4750.102*

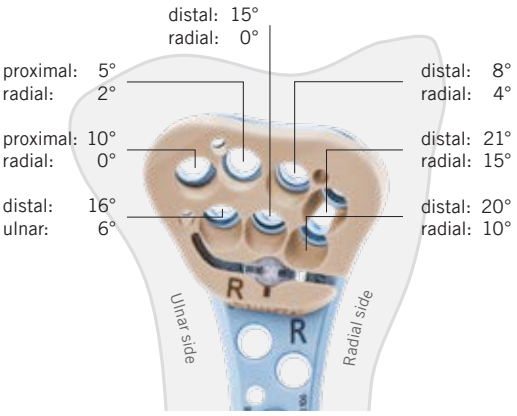
ADAPTIVE II plates with drill guide block (fixed angle)



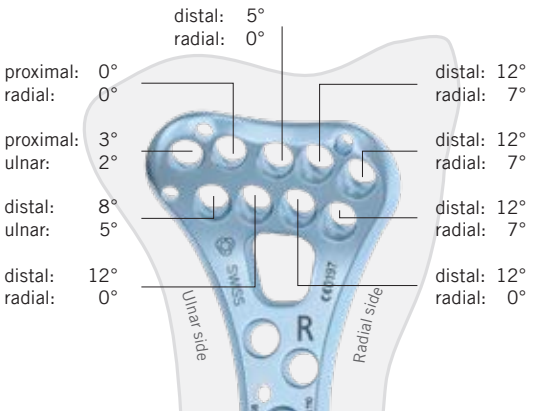
A-4750.102



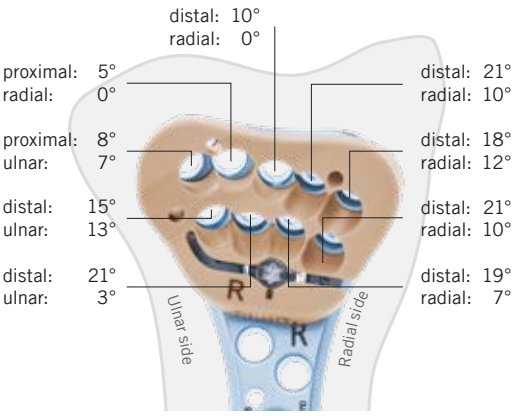
A-4750.106*



A-4750.106



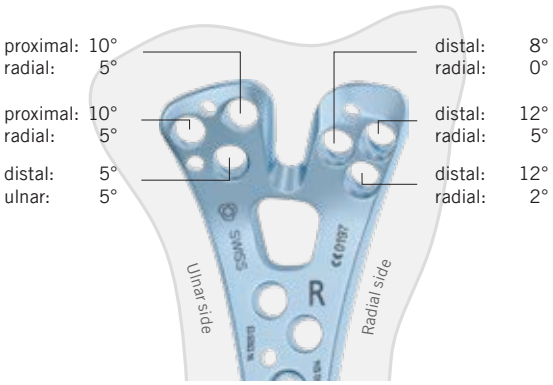
A-4750.110*



A-4750.110

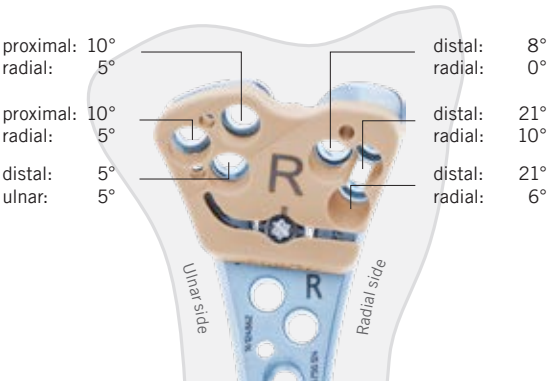
* All screw holes of the ADAPTIVE II plates allow for additional angulation of ± 15° of the pre-angled value.

FPL plate (variable angle)*



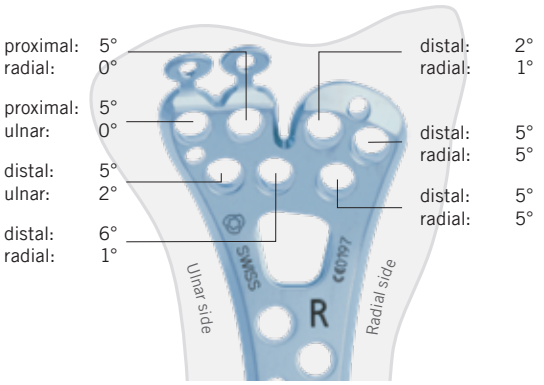
A-4750.124*

FPL plate with drill guide block (fixed angle)



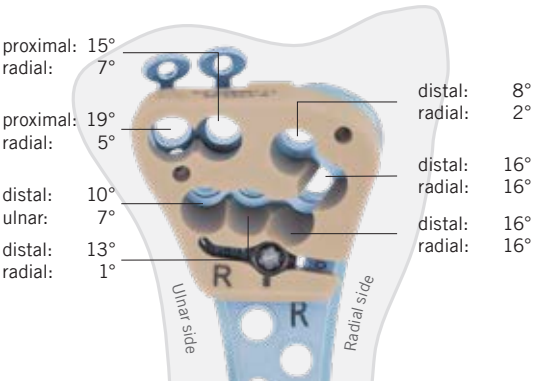
A-4750.124

Rim plate (variable angle)*



A-4750.146*

Rim plate with drill guide block (fixed angle)



A-4750.146

* All screw holes of the FPL and rim plates allow for additional angulation of ± 15° of the pre-angled value.

Ordering Information

2.5 Drill Guide Blocks, FPL

Material: PEEK

A-2727.13

A-2727.14

Art. No.	Description	for Plates	Holes	Pieces/Pkg
A-2727.13	left	A-4750.123/125	6	1
A-2727.14	right	A-4750.124/126	6	1

2.5 TriLock Distal Radius Plates FPL, Volar

Material: Titanium (ASTM F67)
Plate thickness: 2.0 mm

A-4750.123

A-4750.124

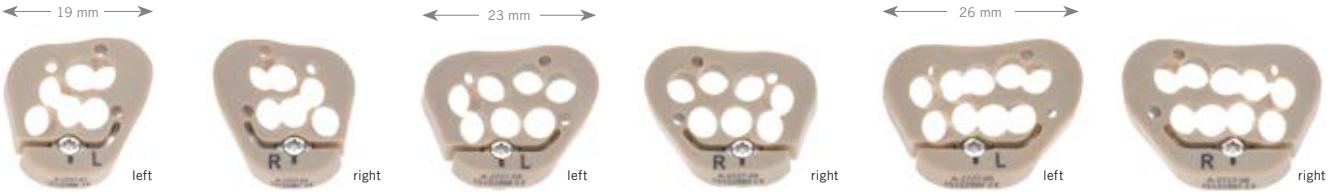
A-4750.125

A-4750.126

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.123	A-4750.123S	left	10	1
A-4750.124	A-4750.124S	right	10	1
A-4750.125	A-4750.125S	left, long	12	1
A-4750.126	A-4750.126S	right, long	12	1

2.5 Drill Guide Blocks, ADAPTIVE II

Material: PEEK

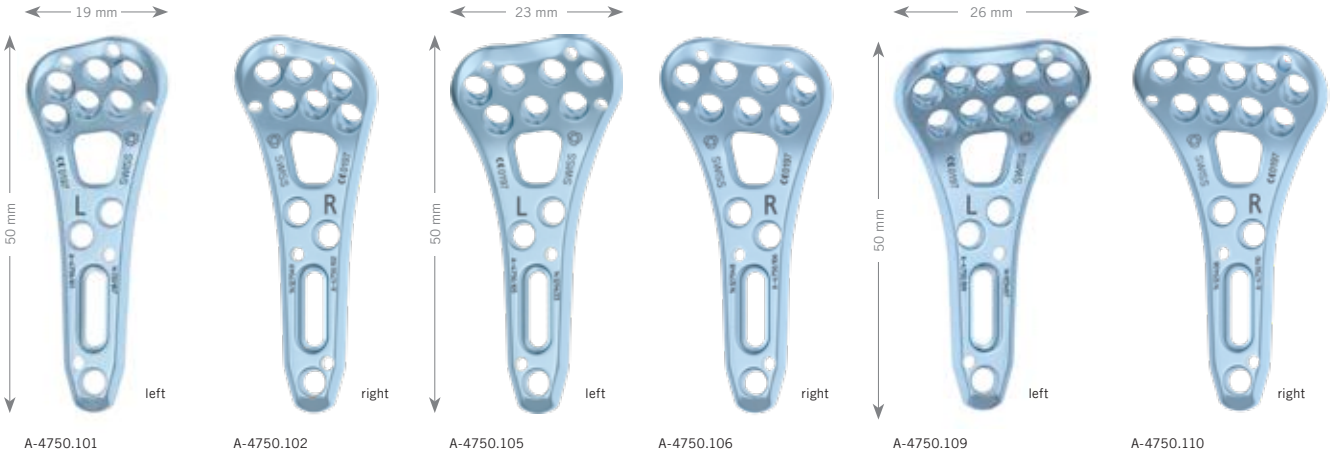


A-2727.01 A-2727.02 A-2727.03 A-2727.04 A-2727.05 A-2727.06

Art. No.	Description	for Plates	Holes	Pieces/Pkg
A-2727.01	left, narrow	A-4750.101/103	6	1
A-2727.02	right, narrow	A-4750.102/104	6	1
A-2727.03	left	A-4750.105/107	7	1
A-2727.04	right	A-4750.106/108	7	1
A-2727.05	left, wide	A-4750.109/111	9	1
A-2727.06	right, wide	A-4750.110/112	9	1

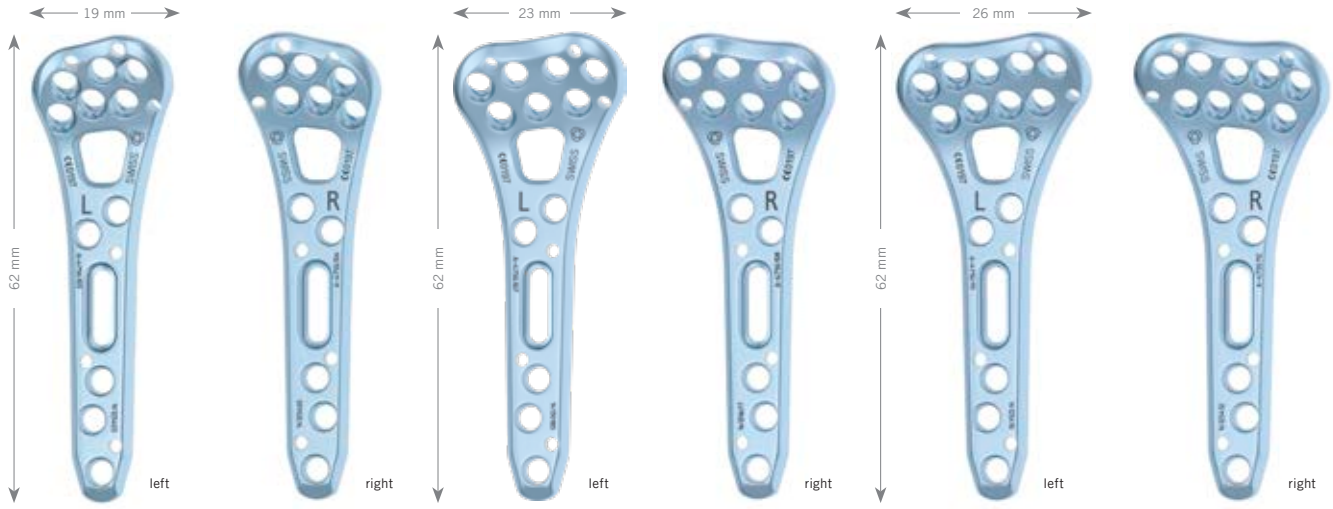
2.5 ADAPTIVE II TriLock Distal Radius Plates, Volar

Material: Titanium (ASTM F67)
Plate thickness: 2.0 mm



A-4750.101 A-4750.102 A-4750.105 A-4750.106 A-4750.109 A-4750.110

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.101	A-4750.101S	left, narrow	10	1
A-4750.102	A-4750.102S	right, narrow	10	1
A-4750.105	A-4750.105S	left	11	1
A-4750.106	A-4750.106S	right	11	1
A-4750.109	A-4750.109S	left, wide	13	1
A-4750.110	A-4750.110S	right, wide	13	1



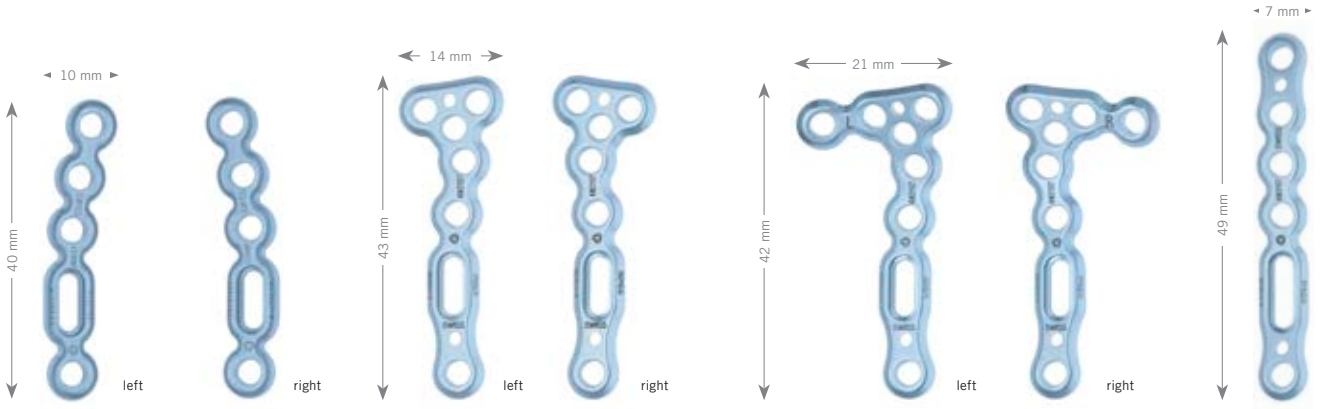
A-4750.103 A-4750.104 A-4750.107 A-4750.108 A-4750.111 A-4750.112

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.103	A-4750.103S	left, narrow, long	12	1
A-4750.104	A-4750.104S	right, narrow, long	12	1
A-4750.107	A-4750.107S	left, long	13	1
A-4750.108	A-4750.108S	right, long	13	1
A-4750.111	A-4750.111S	left, wide, long	15	1
A-4750.112	A-4750.112S	right, wide, long	15	1

Scale 1:1

2.5 TriLock Distal Radius Small Fragment Plates

Material: Titanium (ASTM F67)
Plate thickness: 1.6 mm

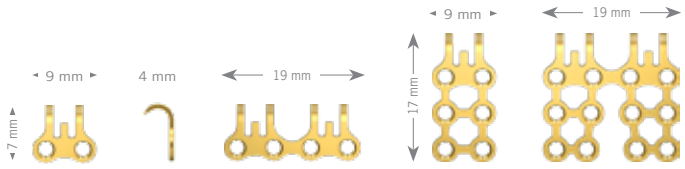


A-4750.57 A-4750.58 A-4750.131 A-4750.132 A-4750.133 A-4750.134 A-4750.135

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.57	A-4750.57S	left, curved	5	1
A-4750.58	A-4750.58S	right, curved	5	1
A-4750.131	A-4750.131S	T left	7 (3/4)	1
A-4750.132	A-4750.132S	T right	7 (3/4)	1
A-4750.133	A-4750.133S	L left	8 (4/4)	1
A-4750.134	A-4750.134S	L right	8 (4/4)	1
A-4750.135	A-4750.135S	lateral	6	1

1.5 Hook Plates

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

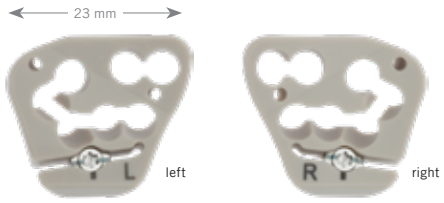


A-4200.40 A-4200.41 A-4200.42 A-4200.43

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4200.40	A-4200.40S	2 hooks	2	1
A-4200.41	A-4200.41S	4 hooks	4	1
A-4200.42	A-4200.42S	2 hooks	6	1
A-4200.43	A-4200.43S	4 hooks	12	1

2.5 Drill Guide Blocks, Rim Plates

Material: PEEK

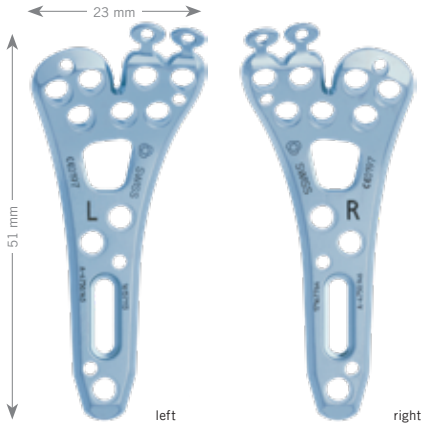


A-2727.23 A-2727.24

Art. No.	Description	for Plates	Holes	Pieces/Pkg
A-2727.23	left	A-4750.145	7	1
A-2727.24	right	A-4750.146	7	1

2.5 TriLock Distal Radius Rim Plates, Volar

Material: Titanium (ASTM F67)
Plate thickness: 1.8 mm

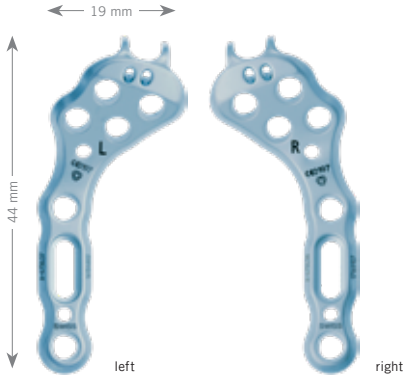


A-4750.145 A-4750.146

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.145	A-4750.145S	left	13	1
A-4750.146	A-4750.146S	right	13	1

2.5 TriLock Lunate Facet Plates, Volar

Material: Titanium (ASTM F67)
Plate thickness: 1.6 mm



A-4750.37 A-4750.38

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.37	A-4750.37S	left	7	1
A-4750.38	A-4750.38S	right	7	1

2.5 TriLock Distal Radius Correction Plates, Volar *

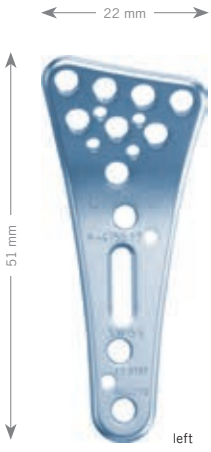
Material: Titanium (ASTM F67)
Plate thickness: 1.6 mm

A-4750.11

A-4750.12

A-4750.15

A-4750.16



A-4750.17

A-4750.18

A-4750.19

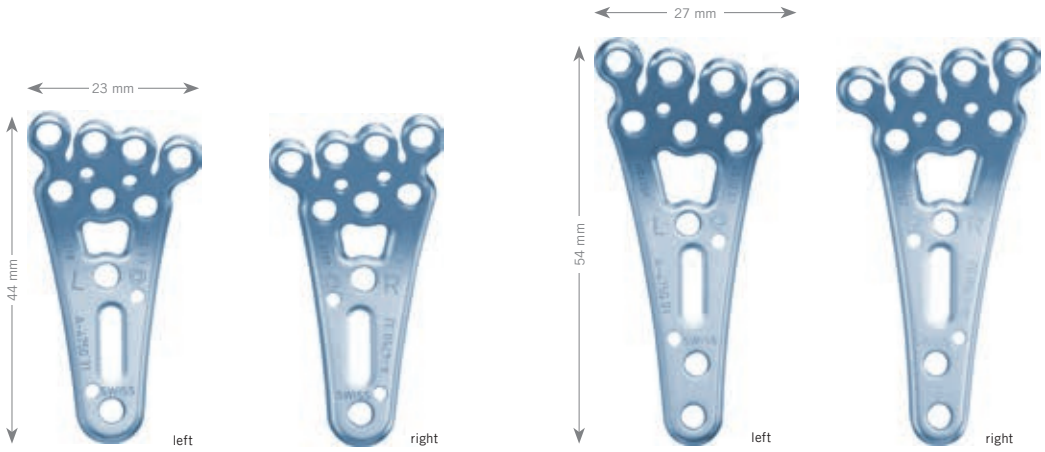
A-4750.20

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.11	A-4750.11S	left	14	1
A-4750.12	A-4750.12S	right	14	1
A-4750.15	A-4750.15S	left, long	15	1
A-4750.16	A-4750.16S	right, long	15	1
A-4750.17	A-4750.17S	left, narrow	12	1
A-4750.18	A-4750.18S	right, narrow	12	1
A-4750.19	A-4750.19S	left, narrow, long	13	1
A-4750.20	A-4750.20S	right, narrow, long	13	1

* Plates can also be used for treatment of fractures

2.5 TriLock Distal Radius Fracture Plates, Volar

Material: Titanium (ASTM F67)
Plate thickness: 1.6 mm

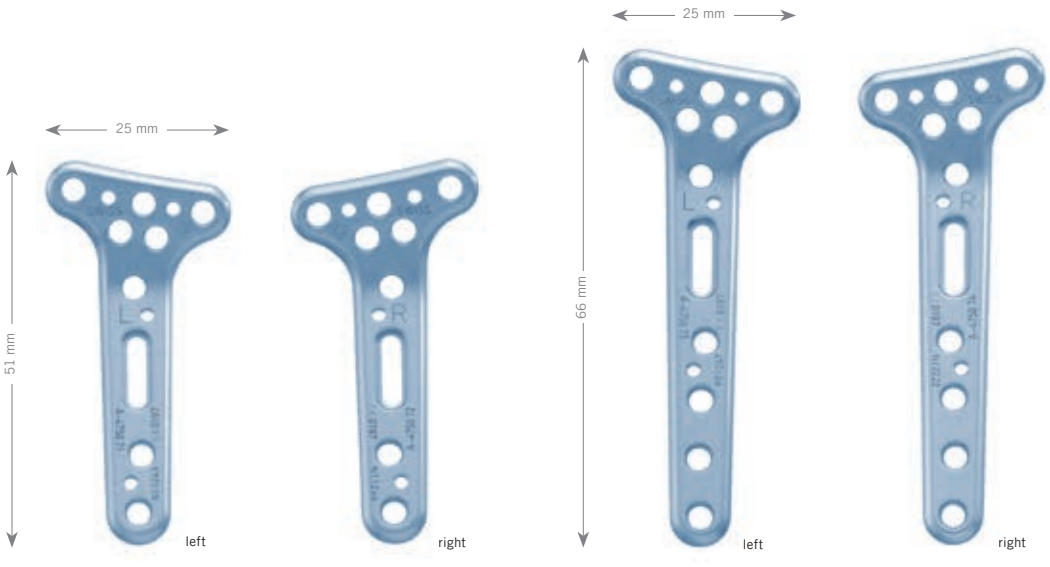


A-4750.31 A-4750.32 A-4750.01 A-4750.02

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.01	A-4750.01S	left	11	1
A-4750.02	A-4750.02S	right	11	1
A-4750.31	A-4750.31S	left, narrow, short	10	1
A-4750.32	A-4750.32S	right, narrow, short	10	1

2.5 TriLock Distal Radius Fracture Plates, Extra-Articular, Volar

Material: Titanium (ASTM F67)
Plate thickness: 2.0 mm



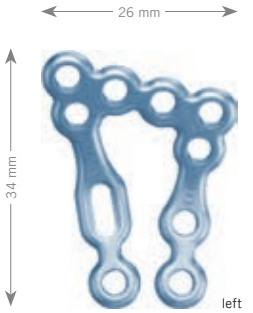
A-4750.71 A-4750.72 A-4750.73 A-4750.74

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.71	A-4750.71S	left	9	1
A-4750.72	A-4750.72S	right	9	1
A-4750.73	A-4750.73S	left, long	11	1
A-4750.74	A-4750.74S	right, long	11	1

Scale 1:1

2.5 TriLock Distal Radius Frame Plates, Volar

Material: Titanium (ASTM F67)
Plate thickness: 1.6 mm

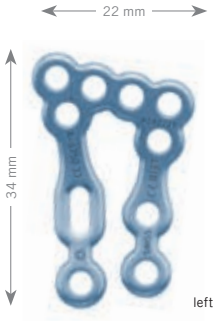


A-4750.03

A-4750.04

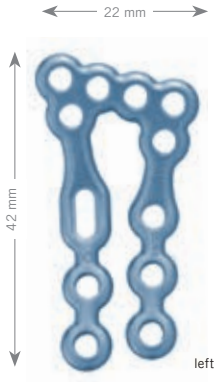
A-4750.05

A-4750.06



A-4750.33

A-4750.34



A-4750.35

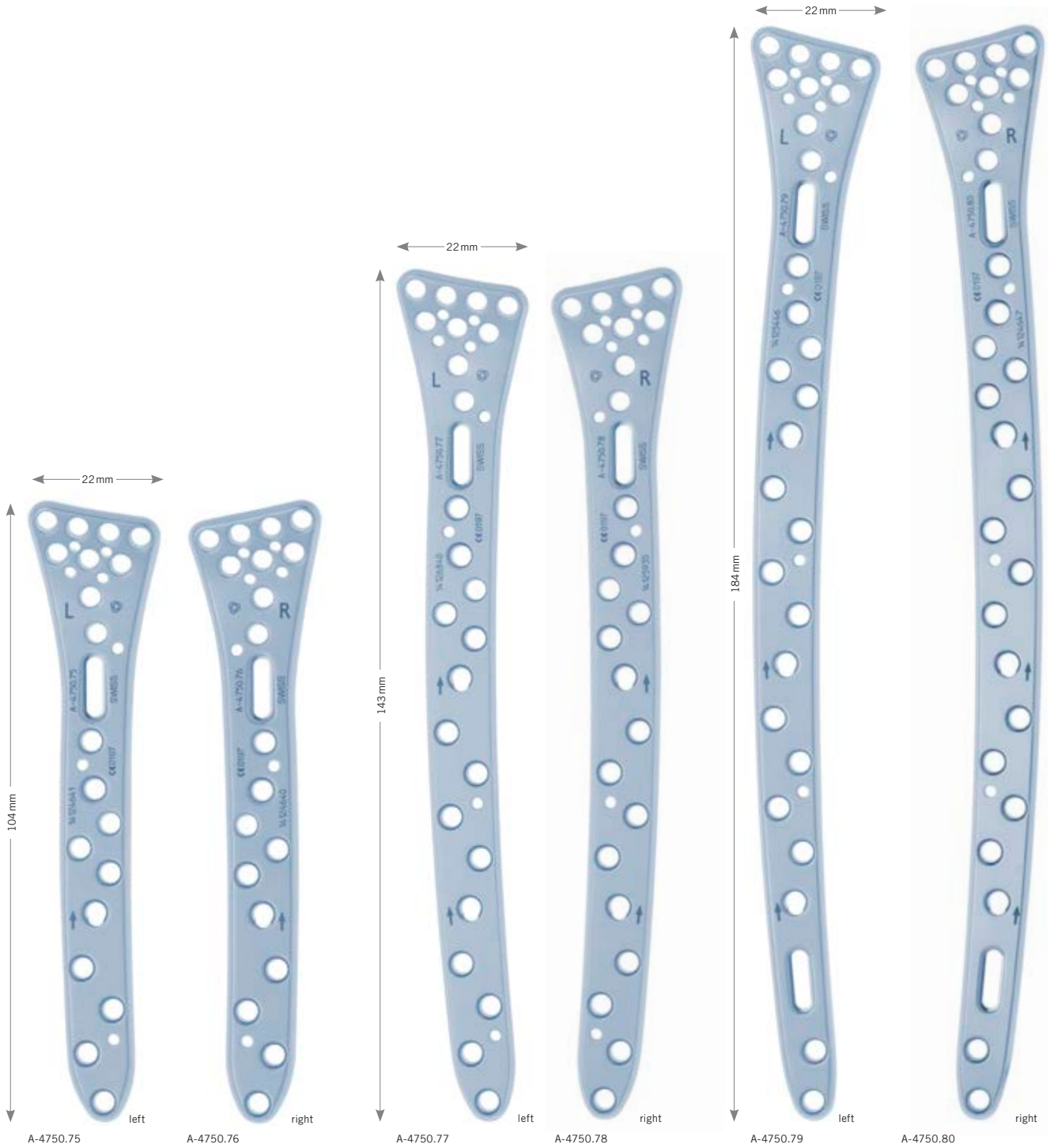
A-4750.36

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.03	A-4750.03S	left	10	1
A-4750.04	A-4750.04S	right	10	1
A-4750.05	A-4750.05S	left, long	12	1
A-4750.06	A-4750.06S	right, long	12	1
A-4750.33	A-4750.33S	left, narrow	10	1
A-4750.34	A-4750.34S	right, narrow	10	1
A-4750.35	A-4750.35S	left, narrow, long	12	1
A-4750.36	A-4750.36S	right, narrow, long	12	1

Scale 1:1

2.5 TriLock Distal Radius Plates, XL, Volar

Material: Titanium (ASTM F67)
Plate thickness: 1.8–3.2 mm



Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.75	A-4750.75S	left, TriLock^{PLUS}	20	1
A-4750.76	A-4750.76S	right, TriLock^{PLUS}	20	1
A-4750.77	A-4750.77S	left, TriLock^{PLUS}	25	1
A-4750.78	A-4750.78S	right, TriLock^{PLUS}	25	1
A-4750.79	A-4750.79S	left, TriLock^{PLUS}	29	1
A-4750.80	A-4750.80S	right, TriLock^{PLUS}	29	1

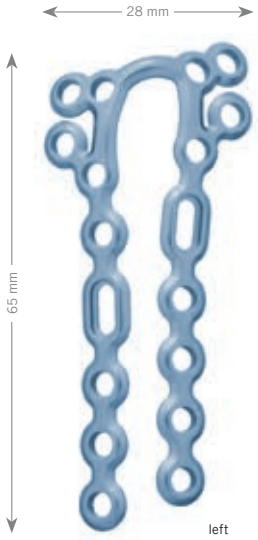
Scale 1:1

2.5 TriLock Distal Radius Plates, Dorsal

Material: Titanium (ASTM F67)
Plate thickness: 1.6 mm

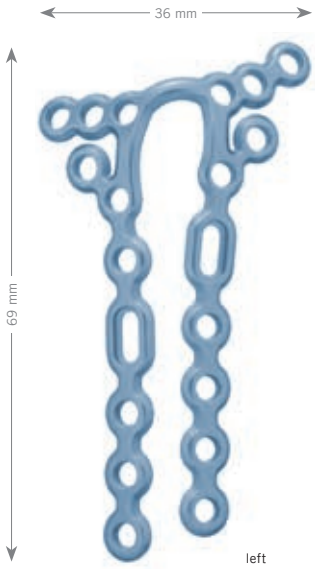
A-4750.13

A-4750.14

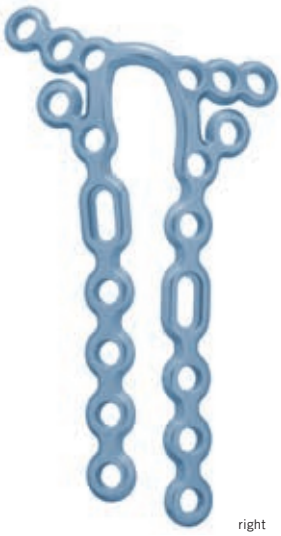


A-4750.41

A-4750.42



A-4750.43

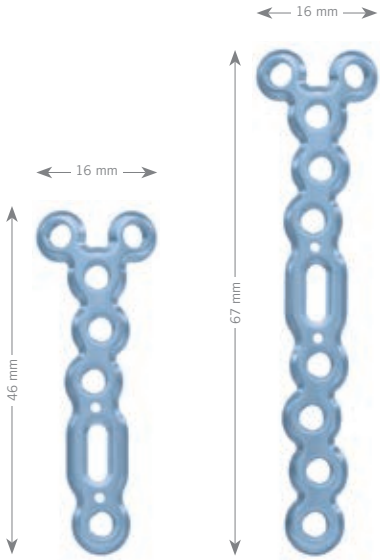


A-4750.44

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.13	A-4750.13S	H, left	12	1
A-4750.14	A-4750.14S	H, right	12	1
A-4750.41	A-4750.41S	frame, left, narrow	18	1
A-4750.42	A-4750.42S	frame, right, narrow	18	1
A-4750.43	A-4750.43S	frame, left	20	1
A-4750.44	A-4750.44S	frame, right	20	1

2.5 TriLock Distal Ulna Plates

Material: Titanium (ASTM F67)
Plate thickness: 1.6 mm



A-4750.91 A-4750.92

Art. No.	STERILE	Description	Holes	Pieces/Pkg
A-4750.91	A-4750.91S	Y	7 (2/5)	1
A-4750.92	A-4750.92S	Y	10 (2/8)	1

Scale 1:1

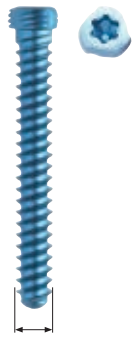
2.5 Cortical Screws, HexaDrive 7

Material: Titanium alloy (ASTM F136)

Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
8 mm	A-5700.08/1	A-5700.08/1S	1	A-5700.08	5
10 mm	A-5700.10/1	A-5700.10/1S	1	A-5700.10	5
11 mm	A-5700.11/1		1		
12 mm	A-5700.12/1	A-5700.12/1S	1	A-5700.12	5
13 mm	A-5700.13/1		1		
14 mm	A-5700.14/1	A-5700.14/1S	1	A-5700.14	5
15 mm	A-5700.15/1		1		
16 mm	A-5700.16/1	A-5700.16/1S	1	A-5700.16	5
18 mm	A-5700.18/1	A-5700.18/1S	1	A-5700.18	5
20 mm	A-5700.20/1	A-5700.20/1S	1	A-5700.20	5
22 mm	A-5700.22/1	A-5700.22/1S	1	A-5700.22	5
24 mm	A-5700.24/1	A-5700.24/1S	1	A-5700.24	5
26 mm	A-5700.26/1	A-5700.26/1S	1	A-5700.26	5
28 mm	A-5700.28/1	A-5700.28/1S	1	A-5700.28	5
30 mm	A-5700.30/1	A-5700.30/1S	1	A-5700.30	5
32 mm	A-5700.32/1	A-5700.32/1S	1	A-5700.32	5
34 mm	A-5700.34/1	A-5700.34/1S	1	A-5700.34	5

2.5 TriLock Screws, HexaDrive 7

Material: Titanium alloy (ASTM F136)



Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
8 mm	A-5750.08/1	A-5750.08/1S	1	A-5750.08	5
10 mm	A-5750.10/1	A-5750.10/1S	1	A-5750.10	5
12 mm	A-5750.12/1	A-5750.12/1S	1	A-5750.12	5
14 mm	A-5750.14/1	A-5750.14/1S	1	A-5750.14	5
16 mm	A-5750.16/1	A-5750.16/1S	1	A-5750.16	5
18 mm	A-5750.18/1	A-5750.18/1S	1	A-5750.18	5
20 mm	A-5750.20/1	A-5750.20/1S	1	A-5750.20	5
22 mm	A-5750.22/1	A-5750.22/1S	1	A-5750.22	5
24 mm	A-5750.24/1	A-5750.24/1S	1	A-5750.24	5
26 mm	A-5750.26/1	A-5750.26/1S	1	A-5750.26	5
28 mm	A-5750.28/1	A-5750.28/1S	1	A-5750.28	5
30 mm	A-5750.30/1	A-5750.30/1S	1	A-5750.30	5
32 mm	A-5750.32/1	A-5750.32/1S	1	A-5750.32	5
34 mm	A-5750.34/1	A-5750.34/1S	1	A-5750.34	5

2.5 TriLock Express Screws, HexaDrive 7

Material: Titanium alloy (ASTM F136)

Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
14 mm	A-5755.14/1	A-5755.14/1S	1	A-5755.14	5
16 mm	A-5755.16/1	A-5755.16/1S	1	A-5755.16	5
18 mm	A-5755.18/1	A-5755.18/1S	1	A-5755.18	5
20 mm	A-5755.20/1	A-5755.20/1S	1	A-5755.20	5
22 mm	A-5755.22/1	A-5755.22/1S	1	A-5755.22	5
24 mm	A-5755.24/1	A-5755.24/1S	1	A-5755.24	5

1.5 SpeedTip Screws, HexaDrive 4

Material: Titanium alloy (ASTM F136)

∅ 1.5 mm

2:1

Length	Art. No.	STERILE	Pieces/Pkg	Art. No.	Pieces/Pkg
8 mm	A-5210.08/1	A-5210.08/1S	1	A-5210.08	5
10 mm	A-5210.10/1	A-5210.10/1S	1	A-5210.10	5
12 mm	A-5210.12/1	A-5210.12/1S	1	A-5210.12	5
14 mm	A-5210.14/1	A-5210.14/1S	1	A-5210.14	5

Twist Drills ∅ 2.0 mm

A-3713

A-3723

A-3733

Art. No.	STERILE	System Size	Stop	Length	Drill Shaft End	Pieces/Pkg
A-3713	A-3713S	2.5	40 mm	97 mm	Dental	1
A-3723	A-3723S	2.5	40 mm	97 mm	Stryker J-Latch	1
A-3733	A-3733S	2.5	40 mm	91 mm	AO Quick Coupling	1

Twist Drills ∅ 2.6 mm (for Gliding Hole)

A-3711

A-3721

A-3731

Art. No.	STERILE	System Size	Stop	Length	Drill Shaft End	Pieces/Pkg
A-3711		2.5	10 mm	67 mm	Dental	1
A-3721		2.5	10 mm	67 mm	Stryker J-Latch	1
A-3731	A-3731S	2.5	10 mm	61 mm	AO Quick Coupling	1

Countersink for Cortical Screws

Art. No.	STERILE	System Size	∅	Length	Shaft End	Pieces/Pkg
A-3830	A-3830S	2.5	3.7 mm	45 mm	AO Quick Coupling	1

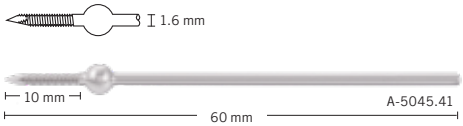
K-Wires, Stainless Steel

Art. No.	STERILE	∅	Description	Length	Pieces/Pkg
A-5040.21		1.2 mm	trocar	150 mm	10
	A-5040.21/2S	1.2 mm	trocar	150 mm	2
A-5040.41		1.6 mm	trocar	150 mm	10
	A-5040.41/2S	1.6 mm	trocar	150 mm	2

K-Wires, Stainless Steel

Art. No.	STERILE	∅	Description	Length	Pieces/Pkg
A-5042.21		1.2 mm	lancet	150 mm	10
	A-5042.21/2S	1.2 mm	lancet	150 mm	2
A-5042.41		1.6 mm	lancet	150 mm	10
	A-5042.41/2S	1.6 mm	lancet	150 mm	2

Olive K-Wire, Stainless Steel



Length	Thread Length	∅	Art. No.	Pieces/Pkg	Art. No.	Pieces/Pkg	STERILE	Pieces/Pkg
60 mm	10 mm	1.6 mm	A-5045.41/1	1	A-5045.41/4	4	A-5045.41/2S	2

K-Wire Dispensers

1:2

Art. No.	System Size	Length	Pieces/Pkg
A-6010.12	1.2	185 mm	1
A-6010.16	1.6	185 mm	1

Drill Guides

A-2722

A-2026

A-2721

Art. No.	System Size	Description	Length	Pieces/Pkg
A-2026	2.5/2.8	TriLock^{PLUS}	146 mm	1
A-2721	2.5	for lag screw technique	144 mm	1
A-2722	2.5	scaled	114 mm	1

Drill Sleeve

1:1

Art. No.	System Size	Description	Length	Pieces/Pkg
A-2726	2.5	self-holding, scaled	34 mm	1

Depth Gauge

A-2730

A-2730.1

Art. No.	System Size	Description	Length	Pieces/Pkg
A-2730	2.5		151 mm	1
A-2730.1	2.5	caliper	149 mm	1

Screwdrivers, Self-Holding

A-2310 HD4

A-2710 HD7

Art. No.	System Size	Interface	Length	Pieces/Pkg
A-2310	1.2/1.5	HD4	138 mm	1
A-2710	2.5	HD7	166 mm	1

Scale 1:2

Handle with Quick Connector

Art. No.	Description	Length	for Shaft End	Pieces/Pkg
A-2073	with twist cap	124 mm	AO Quick Coupling	1

Screwdriver Blade, Self-Holding

Art. No.	System Size	Description	Length	for Shaft End	Pieces/Pkg
A-2013	2.5/2.8	HD7	75 mm	AO Quick Coupling	1

Plate and Screw Holding Forceps

Art. No.	Description	Length	Pieces/Pkg
A-2060	angled	148 mm	1

Plate Holding and Positioning Instrument

Art. No.	System Size	Length	Pieces/Pkg
A-2750	2.5	177 mm	1

Instrument for Restoration of the Volar Tilt

A-2794

A-2795

Art. No.	System Size	Description	Length	Pieces/Pkg
A-2794	2.5		105 mm	1
A-2795	2.0	guide wire	105 mm	1

Scale 1:2

Plate Cutting Pliers

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

Plate Bending Pliers

Art. No.	System Size	Description	Length	Pieces/Pkg
A-2047	2.0–2.8	with pins	158 mm	1

Bone Holding Forceps

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

Scale 1:2

Bone Elevator Mini-Hohmann

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

Periosteal Elevator

Art. No.	Width	Length	Pieces/Pkg
A-7007	6 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

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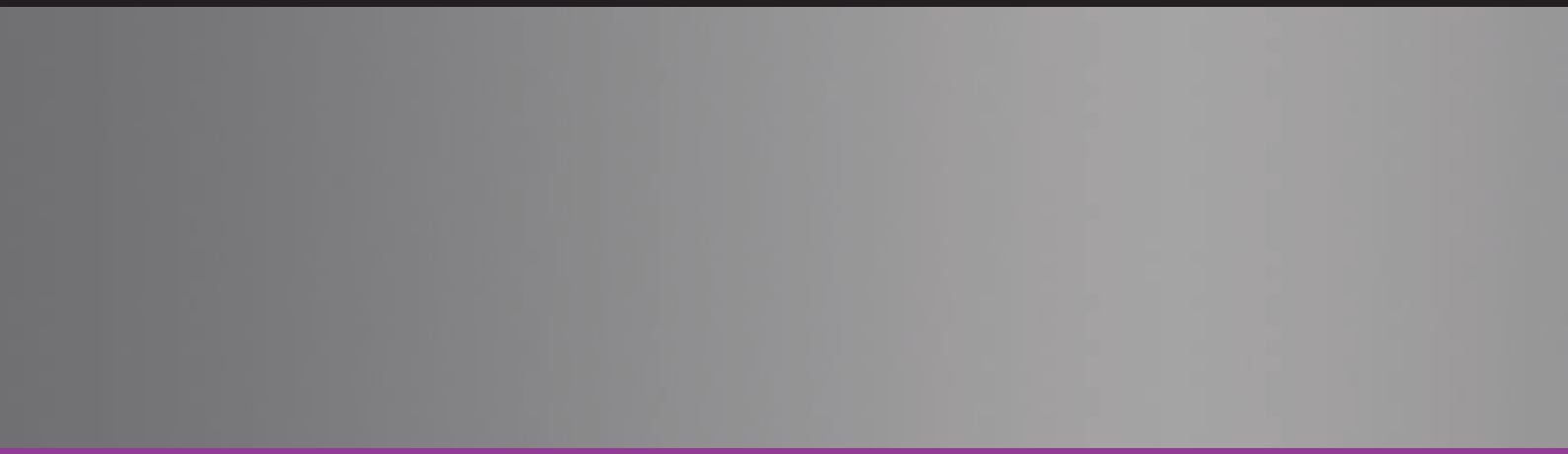

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