

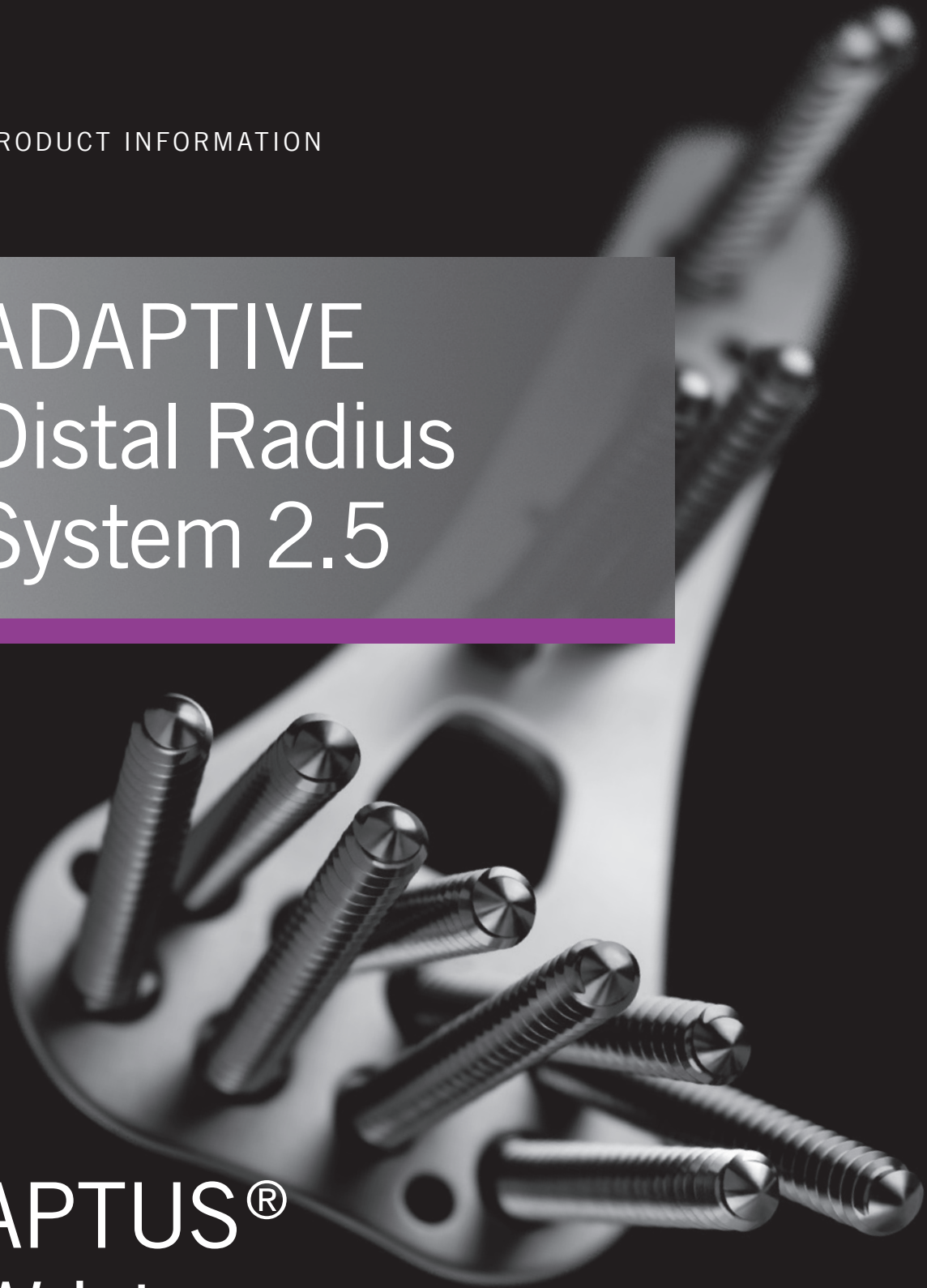
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PRECISION IN FIXATION

PRODUCT INFORMATION


# ADAPTIVE Distal Radius System 2.5

APTUS®  
Wrist



## Literature

1. Krimmer, H., Pessenlehner, C., Haßelbacher, K., Meier, M., Roth, F., and Meier, R.  
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[Multidirektionale winkelstabile Versorgung der instabilen distalen Radiusfraktur]  
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[Palmare winkelstabile Plattenosteosynthese der instabilen distalen Radiusfraktur]  
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5. Figl, M., Weninger, P., Liska, M., Hofbauer, M., and Leixnering, M.  
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6. Weninger, P., Schueller, M., Drobetz, H., Jamek, M., Redl, H., and Tschegg, E.  
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7. Figl, M., Weninger, P., Jurkowsitsch, J., Hofbauer, M., Schauer, J., and Leixnering, M.  
Unstable Distal Radius Fractures in the Elderly Patient – Volar Fixed-Angle Plate Osteosynthesis  
Prevents Secondary Loss of Reduction  
Journal of Trauma – Injury, Infection, and Critical Care, 68[4], 992-998. 2010.
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do intraarticular fractures have a worse outcome than extraarticular fractures?  
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Strategy of early corrective osteotomy  
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Obere Extremität, 5[2], 92-97. 2010.
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First experience with a dorsal plate in modern design for the treatment of distal radius fractures  
Journal of Hand Surgery, European Volume 35E[S1], A-0461. 2010.

A close-up, black and white photograph of a threaded metal rod, likely a surgical screw, running diagonally from the bottom left towards the top right. The threads are clearly visible and create a strong sense of depth and texture. The background is blurred, showing more of the same material.

# ADAPTIVE Distal Radius System 2.5

## Contents

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8	Fracture Treatment Concept
9	Precise Guided Screw Placement
10	Storage in Perfection
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# ADAPTIVE Distal Radius Plates 2.5

Optimal support of the lunate facet and the DRUJ

## Indications

- Intra- and extra-articular fractures
- Correction osteotomies

## ADAPTIVE Watershed Line Design

- Improved stabilization of the sigmoid notch and lunate facet
- Optimal support of the radial styloid
- Treatment of fractures with ulnar fragment
- Perfect distal anatomical fit

ADAPTIVE  
Watershed line design

Pre-angled screw holes

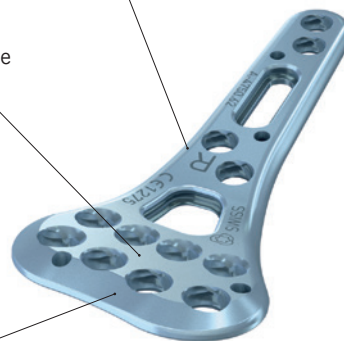
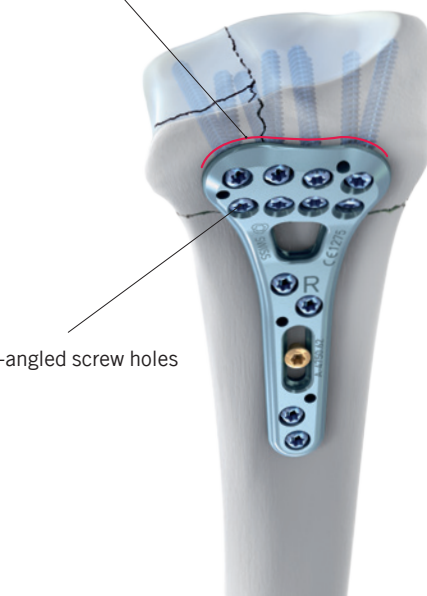
Easy plate identification

Highly polished surface

Chamfered plate contour

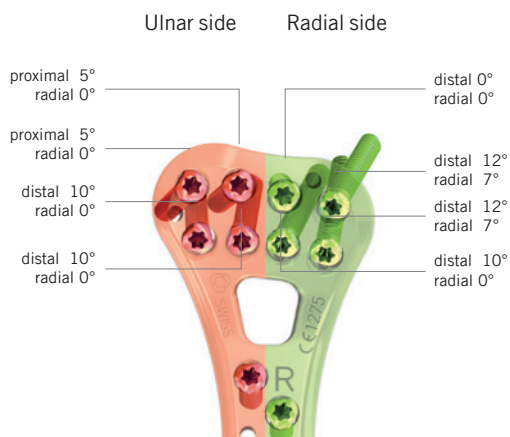
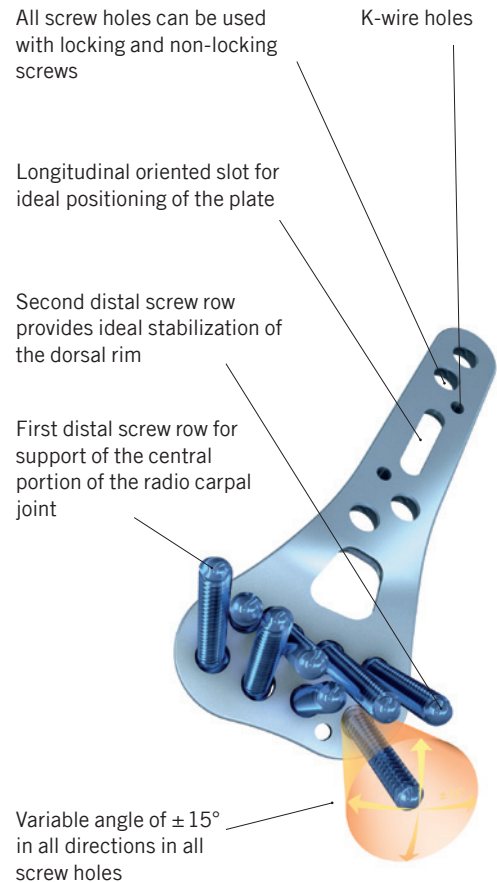


Subchondral buttressing of the RCJ and DRUJ due to converging screw placement

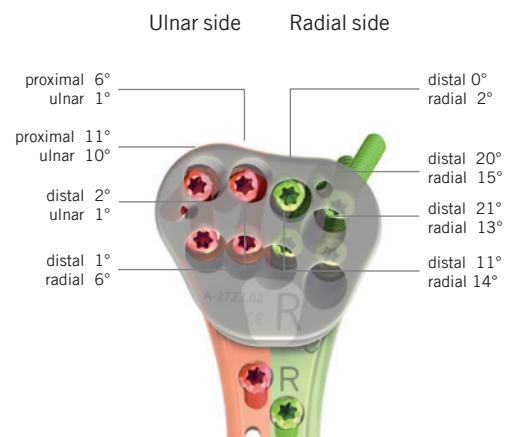


# Plate Features

- Pre-angled holes for ideal screw placement
- TriLock – variable angled locking of  $\pm 15^\circ$  in each plate hole
- Low overall profile height
- Chamfered plate contour for reduction of tendon irritation and abrasion
- Anatomically shaped to match the volar aspect of the distal radius
- Grade 4 Titanium for improved strength to bridge the fracture gap
- Clear marking for easy plate identification
- Radiolucent drill guide block for rapid and accurate insertion of screws
- K-wire holes to assist with temporary plate fixation and verification of implant position
- Consistent 2.5 mm screw diameter throughout for intra-operative simplicity



Pre-angled screw holes allow for additional angulation of  $\pm 15^\circ$



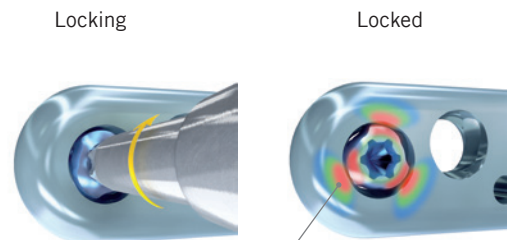
Unidirectional insertion of screws due to fixed angles of the drill guide block

# Technology, Biomechanics and Screw Features

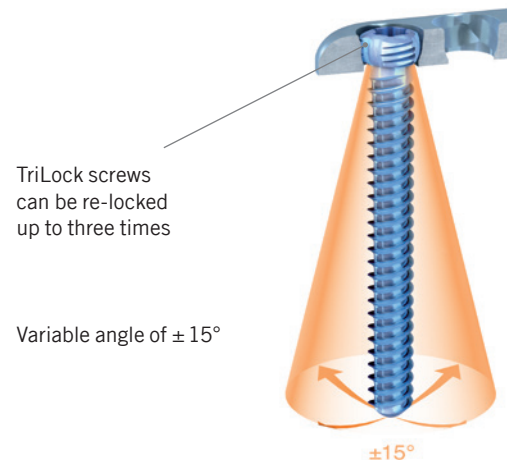
## Multidirectional and angular stable TriLock locking technology

### Technology

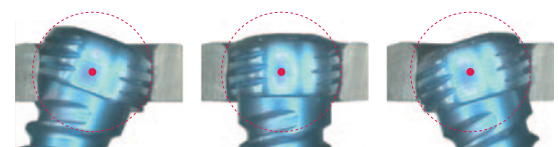
- TriLock locking technology – secure, angular stable locking of the screw in the plate
  - Spherical three-point wedge-locking
  - Friction locking through radial bracing of the screw head in the plate – without additional tensioning components
- Screws can pivot freely by  $\pm 15^\circ$  in all directions for optimal positioning
- Intra-operative fine tuning capabilities
- TriLock screws can be re-locked in the same plate hole under individual angles up to three times
- Minimal screw head protrusion thanks to internal locking contour
- No cold welding between plate and screws



Secure locking of the TriLock screw

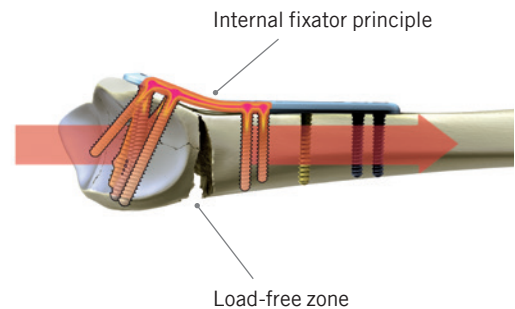


Minimal screw head protrusion



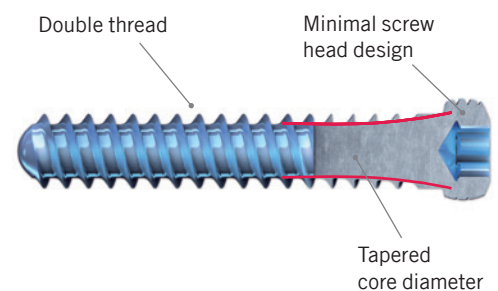
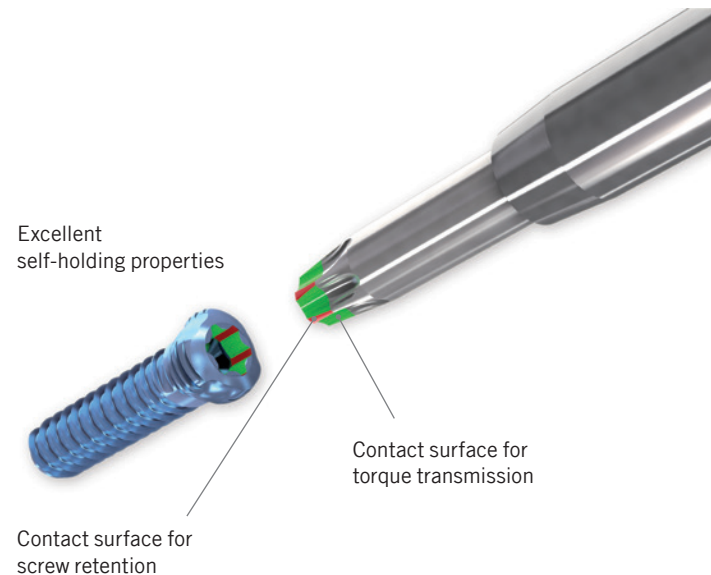
## Biomechanics

- Internal fixator principle
  - Forces around the distal radius bypass the generally unstable fracture site
  - Low contact for ideal blood supply
  - Functionally dynamic construct to avoid cut-out of screws



## Screw Features

- HexaDrive screw head design
  - Secure connection between screw and screwdriver
  - Increased torque transmission
  - Optimal self-retaining mechanism
- Maximum soft tissue protection due to chamfered shape of the screw head without sharp edges
- Atraumatic tip prevents soft tissue irritation when inserting screws bicortically
- Tapered core diameter for increased torsional and tensile strength
- Precision cut thread profile for improved sharpness and self-tapping properties
- Double threaded TriLock screws reduce screw insertion time
- Titanium alloy (TiAl6V4) for improved strength



# Fracture Treatment Concept

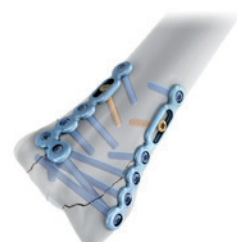
## Surgical Benefits

- One system for primary and secondary reconstruction of the distal radius
- Complete system for fracture specific treatment
  - ADAPTIVE volar radius plates for far distal placement and for maximum support of the lunate facet and the DRUJ
  - Styloid volar radius plates for the treatment of isolated and complex fractures of the styloid process
  - Small fragment plates for dorsal and radial fixation
  - Specific volar correction plates indicated for correction osteotomies
- Anatomically pre-shaped and fracture specific implant designs reduce OR time
- Intra-operative adjustability
- Reduced soft tissue irritation due to optimized implant design
- Internal fixator principle for early mobilization
- Ideally suited for osteoporotic bone



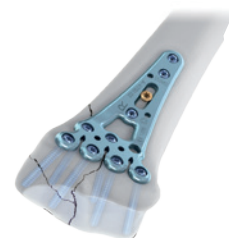
### ADAPTIVE Volar Radius Plate

Volar fixation of a comminuted distal radius fracture with involvement of the lunate facet and the DRUJ.



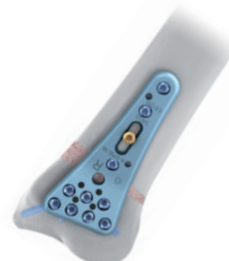
### Small Fragment Plates

Dorsal and radial fixation of a multifragmented distal radius fracture with involvement of the lunate facet and the DRUJ.



### Styloid Radius Plate

Volar fixation of an intra-articular radio-styloid fracture.



### Correction Osteotomy Plate

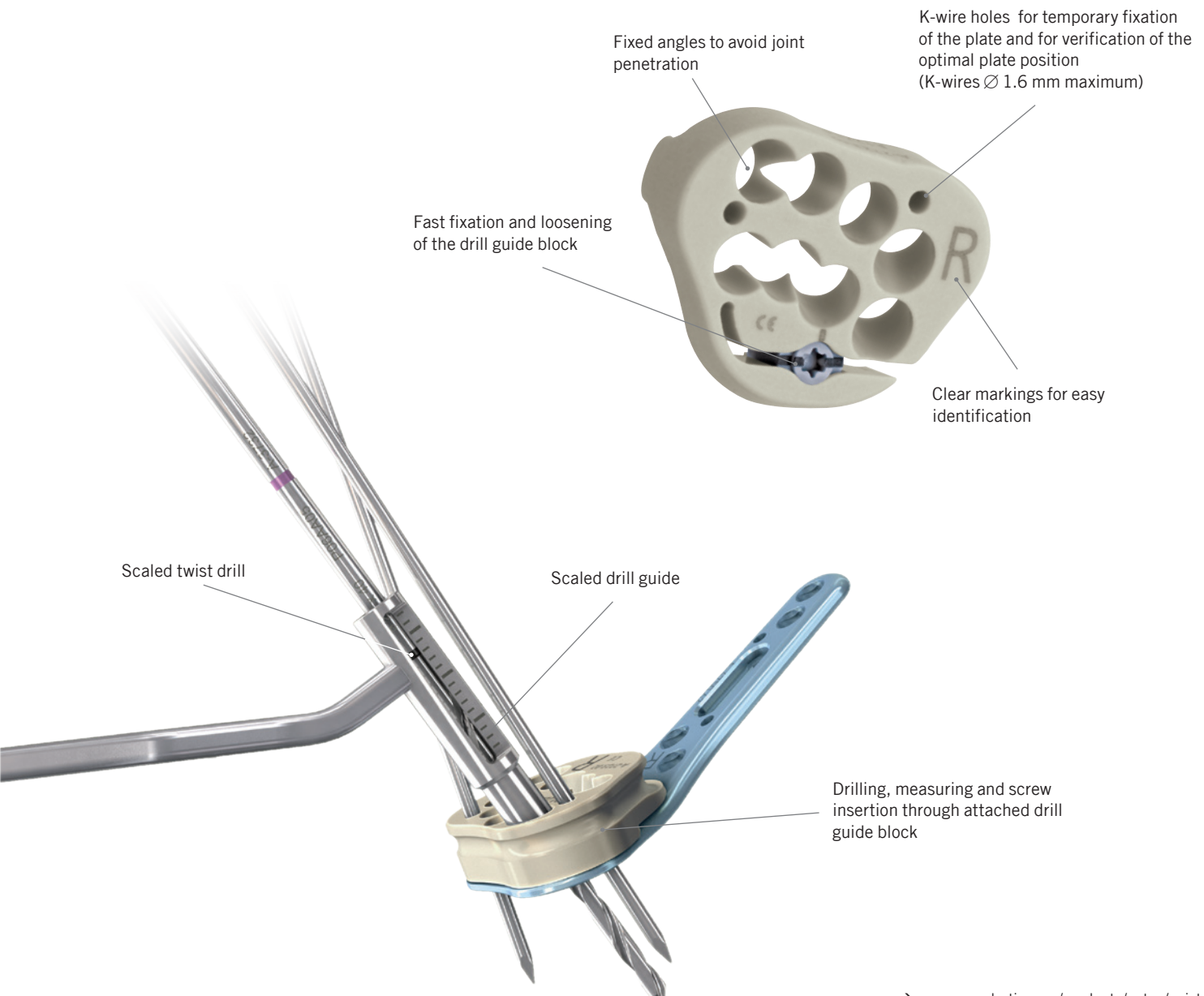
Volar correction osteotomy of a malunited fracture.



# Precise Guided Screw Placement

## Drill Guide Block Features

- Rapid screw insertion and simple to use
- Radiolucent
- Specific left and right drill guide blocks to fit all ADAPTIVE volar plates



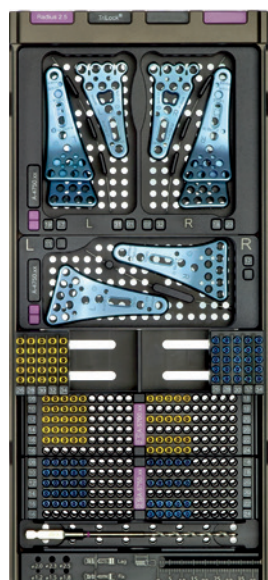
# Storage in Perfection

- Modular concept
- Economic and compact system
- Easy to handle
- Customized kit arrangement
- Streamlined organization of implants and instruments
- Lightweight components



## APTUS ADAPTIVE Distal Radius 2.5 Implant Container

Art. No. A-0760 (incl. stickers, empty)



Upper module

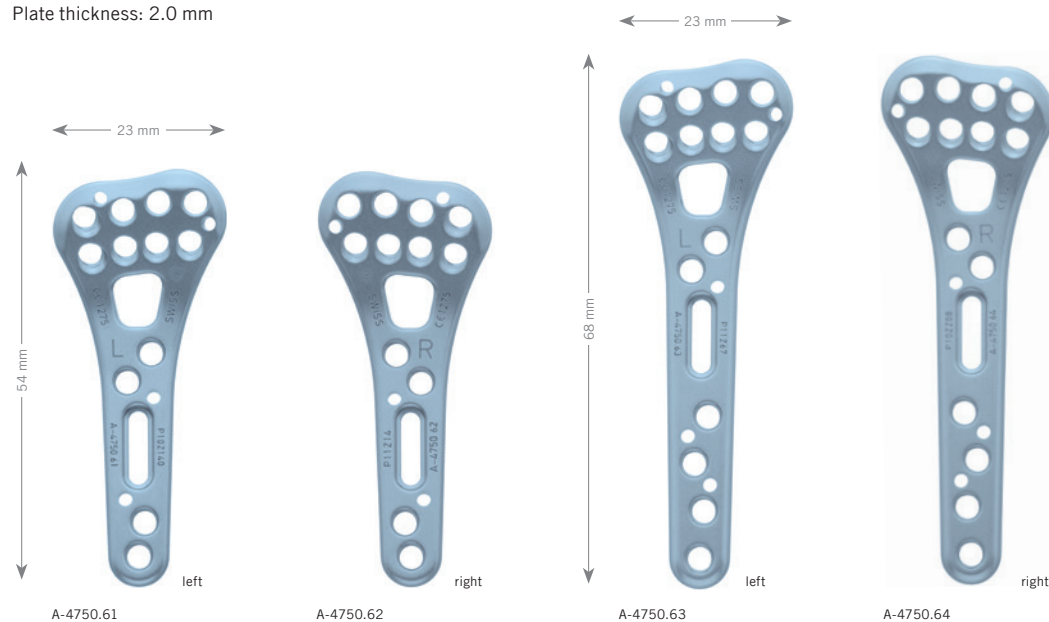
Example of a fully equipped implant container A-0760.

# Ordering Information

## 2.5 ADAPTIVE TriLock Distal Radius Plates, Volar

Material: Titanium (ASTM F67)

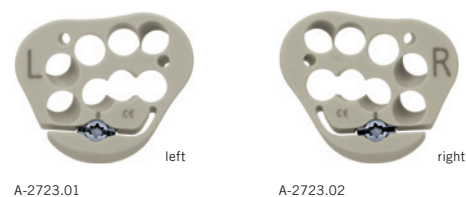
Plate thickness: 2.0 mm



Art. No.	Description	Holes	Pieces/Pkg
A-4750.61	left	13	1
A-4750.62	right	13	1
A-4750.63	left, long	15	1
A-4750.64	right, long	15	1

## 2.5 Drill Guide Blocks

Material: PEEK

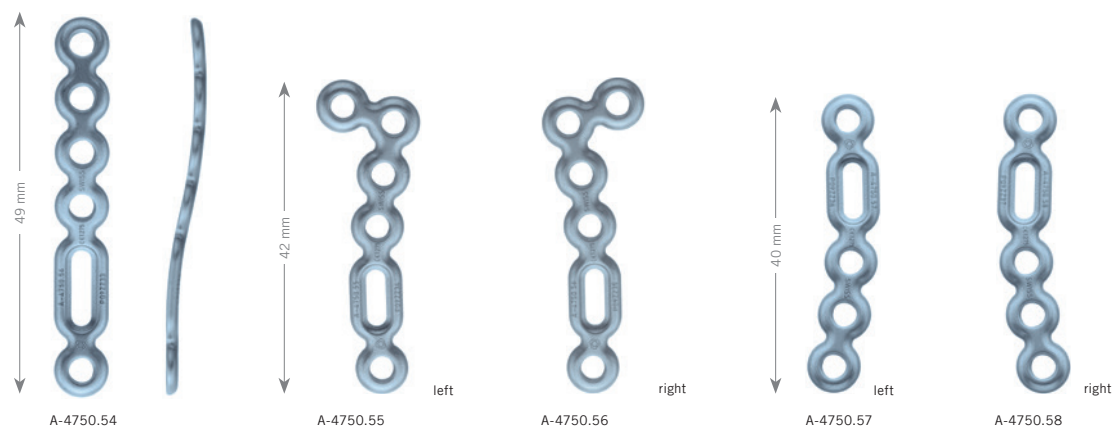


Art. No.	Description	Holes	Pieces/Pkg
A-2723.01	left	8	1
A-2723.02	right	8	1

## 2.5 TriLock Distal Radius Small Fragment Plates

Material: Titanium (ASTM F67)

Plate thickness: 1.6 mm

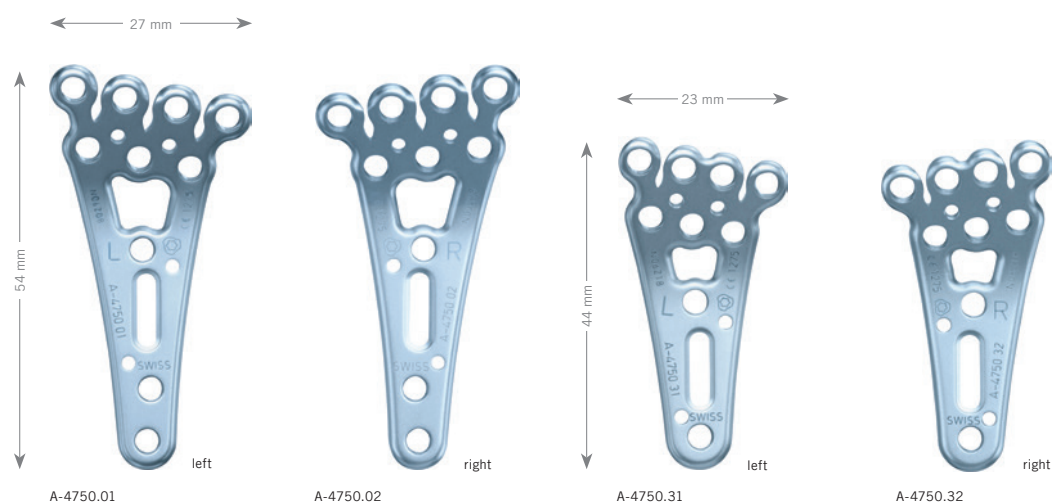


Art. No.	Description	Holes	Pieces / Pkg
A-4750.54	lateral	6	1
A-4750.55	L left	6 (2/4)	1
A-4750.56	L right	6 (2/4)	1
A-4750.57	left	5	1
A-4750.58	right	5	1

## 2.5 TriLock Distal Radius Fracture Plates, Volar

Material: Titanium (ASTM F67)

Plate thickness: 1.6 mm

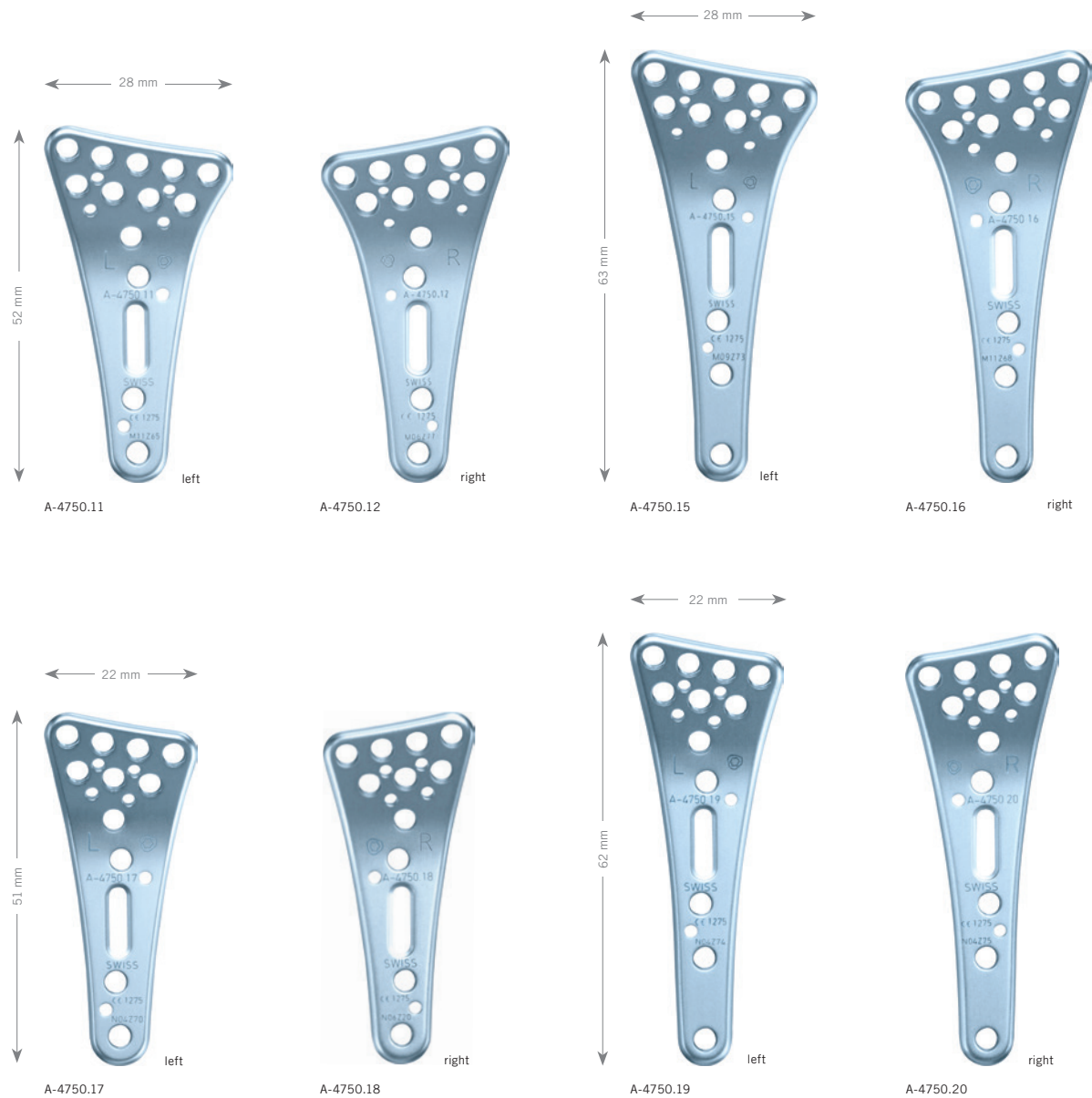


Art. No.	Description	Holes	Pieces / Pkg
A-4750.01	left	11	1
A-4750.02	right	11	1
A-4750.31	left, narrow, short	10	1
A-4750.32	right, narrow, short	10	1

## 2.5 TriLock Distal Radius Correction Plates, Volar\*

Material: Titanium (ASTM F67)

Plate thickness: 1.6 mm



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

\* Plates can also be used for treatment of fractures

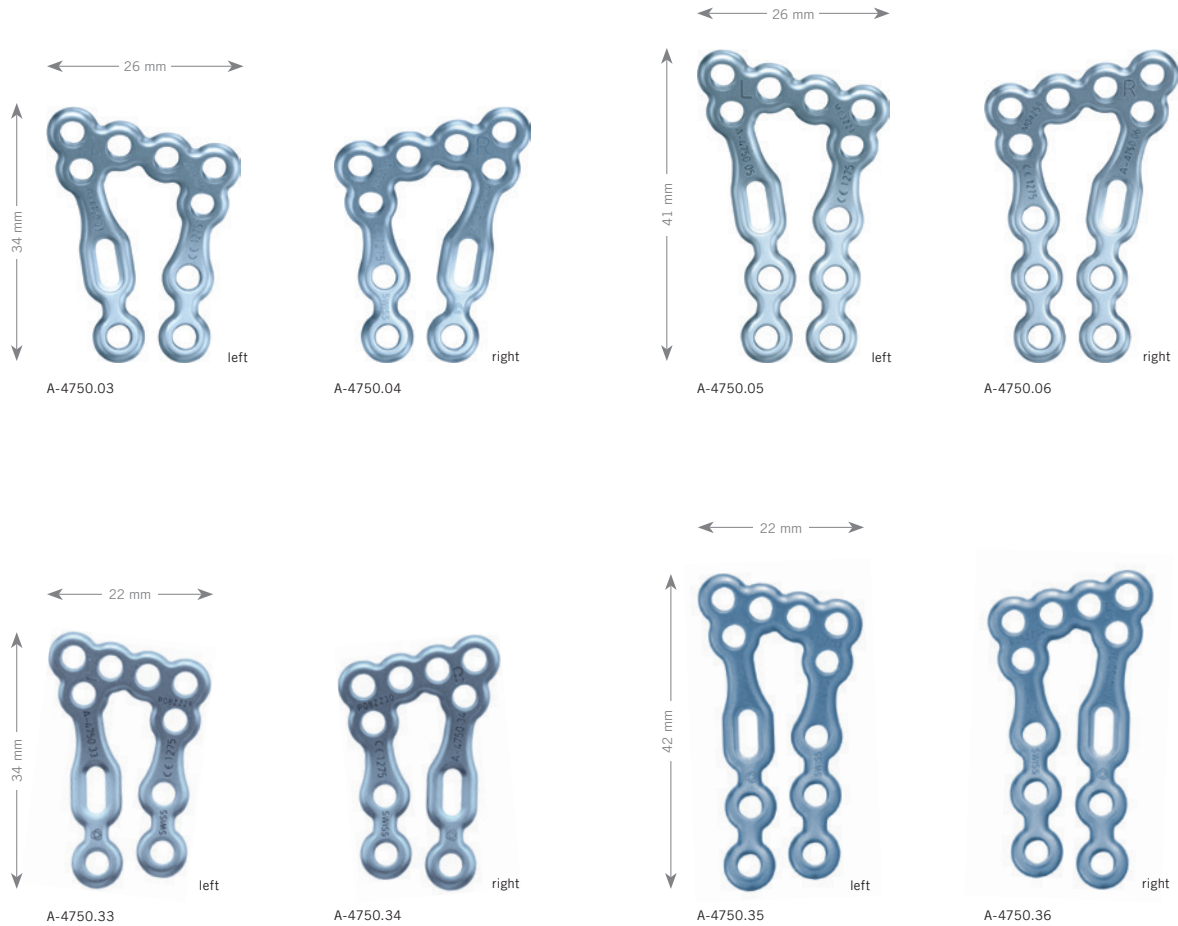
Scale: 1:1



## 2.5 TriLock Distal Radius Frame Plates, Volar

Material: Titanium (ASTM F67)

Plate thickness: 1.6 mm

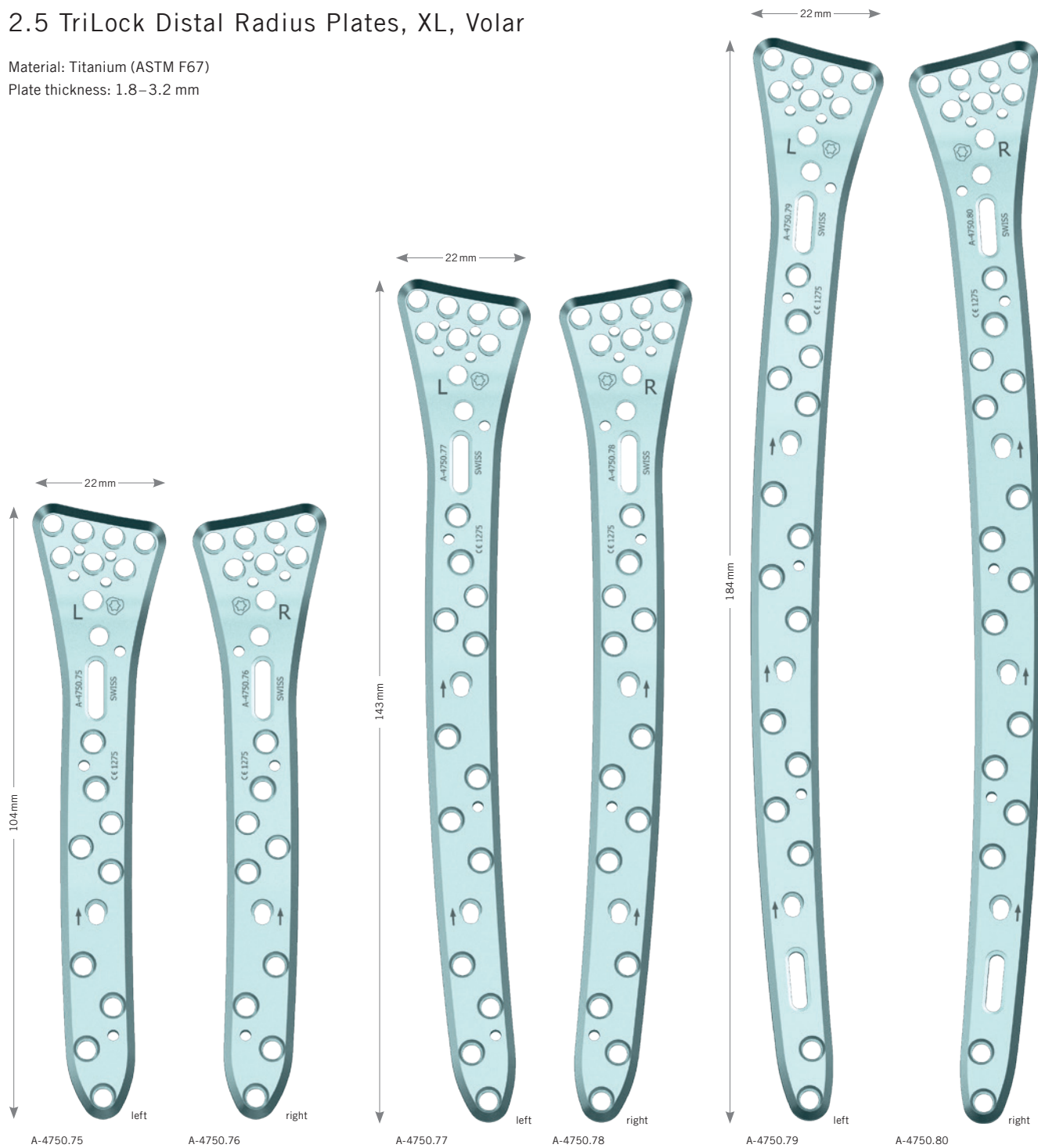


Art. No.	Description	Holes	Pieces/Pkg
A-4750.03	left	10	1
A-4750.04	right	10	1
A-4750.05	left, long	12	1
A-4750.06	right, long	12	1
A-4750.33	left, narrow	10	1
A-4750.34	right, narrow	10	1
A-4750.35	left, narrow, long	12	1
A-4750.36	right, narrow, long	12	1

## 2.5 TriLock Distal Radius Plates, XL, Volar

Material: Titanium (ASTM F67)

Plate thickness: 1.8–3.2 mm

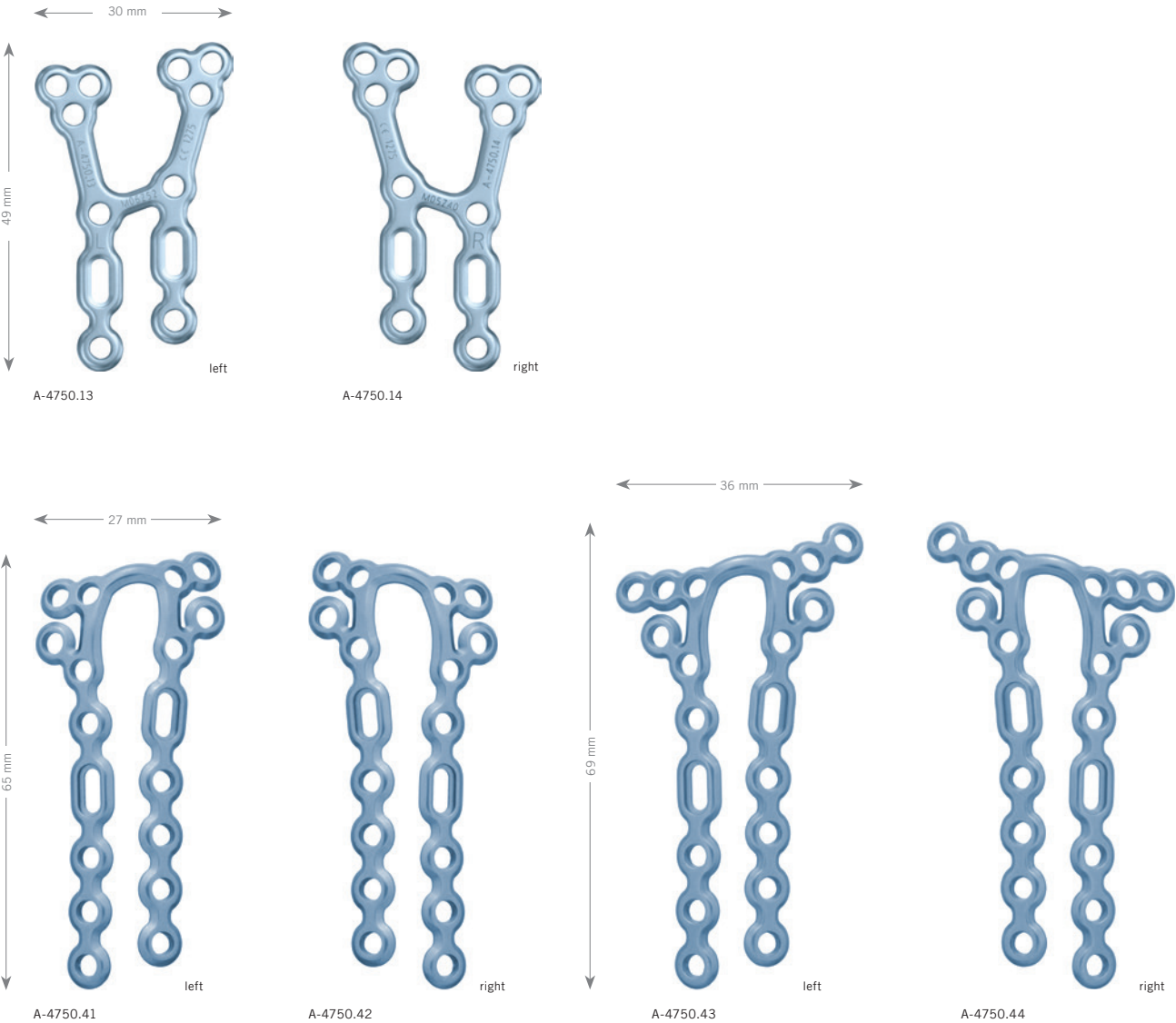


Art. No.	Description	Holes	Pieces/Pkg
A-4750.75	left, TriLock <sup>PLUS</sup>	20	1
A-4750.76	right, TriLock <sup>PLUS</sup>	20	1
A-4750.77	left, TriLock <sup>PLUS</sup>	25	1
A-4750.78	right, TriLock <sup>PLUS</sup>	25	1
A-4750.79	left, TriLock <sup>PLUS</sup>	29	1
A-4750.80	right, TriLock <sup>PLUS</sup>	29	1

2.5 TriLock Distal Radius Plates, Dorsal

Material: Titanium (ASTM F67)

Plate thickness: 1.6 mm



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

## 2.5 Cortical Screws, HexaDrive 7

Material: Titanium (ASTM F136)



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

## 2.5 TriLock Screws, HexaDrive 7

Material: Titanium (ASTM F136)



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

## 2.5 TriLock Express Screws, HexaDrive 7

Material: Titanium (ASTM F136)



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

Scale: 1:1

→ [www.medartis.com/products/aptus/wrist](http://www.medartis.com/products/aptus/wrist)

## Twist Drills Ø 2.0 mm



A-3713



A-3723



A-3733

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

## Twist Drills Ø 2.6 mm (for Gliding Hole)



A-3711



A-3721



A-3731

Art. No.	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	2.5	10 mm	61 mm	AO Quick Coupling	1

## 2.5 Countersink for Cortical Screws



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



## K-Wires, Stainless Steel



Art. No.	System Size	Description	Length	Pieces/Pkg
A-5040.21	1.2	trocár	150 mm	10
A-5040.41	1.6	trocár	150 mm	10

## K-Wires, Stainless Steel



Art. No.	System Size	Description	Length	Pieces/Pkg
A-5042.21	1.2	lancet	150 mm	10
A-5042.41	1.6	lancet	150 mm	10
A-5042.51	1.8	lancet	150 mm	10

## K-Wires, Stainless Steel



Art. No.	System Size	Description	Length	Pieces/Pkg
A-5045.40	1.6	olive	150 mm	10

## K-Wire Dispenser



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
A-6010.18	1.8	185 mm	1

## Plate and Screw Holding Forceps



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

## Screwdriver, Self-Holding



Art. No.	System Size	Interface	Length	Pieces/Pkg
A-2710	2.5	HD7	166 mm	1

## Drill Guides



A-2026



A-2721



A-2722

Art. No.	System Size	Description	Length	Pieces/Pkg
A-2026	2.5/2.8	TriLock <sup>PLUS</sup>	146 mm	1
A-2721	2.5	for lag screws	144 mm	1
A-2722	2.5	scaled	114 mm	1

## Depth Gauge



A-2730



A-2730.1

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

## Plate Cutting Pliers



Art. No.	System Size	Description	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 / mit Pins / avec pins	158 mm	1

## 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

## Handle with Quick Connector



Art. No.	Length	for Shaft End	Pieces/Pkg
A-2070	119 mm	AO Quick Coupling	1

## Screwdriver Blade, Self-Holding, HexaDrive 7



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

## Reduction Forceps



Art. No.	Description	Length	Pieces/Pkg
A-7001	«Apart»	130 mm	1

## Bone Holding Forceps



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

## Sterilizing Case



Art. No.	Description	Pieces/Pkg
A-6040	260 x 270 x 120 mm	1
A-6024	lid for A-6040	1

## Instrument Trays



Art. No.	Description	Pieces/Pkg
A-6026	lower «1»	1
A-6027	middle «2» for A-6026	1
A-6028	upper «3» for A-6026	1



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#### **HEADQUARTERS**

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