

S⁴® Element® Spinal System



Aesculap Spine

AESCULAP
Implant Systems

S⁴® Element® Spinal System

A new benchmark from a leader in innovation and quality.

Implants – S⁴ Element shares some of the same excellent features and benefits as S⁴, mainly its Ultra Low Profile size, interlocking thread design and unique locking technology. All these combined features render the S⁴ Element screw anatomically safe and effective while maintaining impressive biomechanics.



Features

- Ultra Low Profile
- Patented interlocking thread design
- Pressure vessel effect
- Self tapping

Benefits

- Maximize screw head range of motion
- Anatomically friendly – facet sparing
- Simplify rod insertion due to low run on the rod
- Minimize splaying of screw body
- Innovatively transfers energy throughout screw construct transforming it into a solid monoaxial construct.
- Eliminate need to pre-tap

Instruments – S⁴ Element instruments are intuitive and designed to speed up and simplify the operation technique requiring only a minimal learning curve.



Features

- Speed multiplier handle
- Intuitive instrumentation
- Self-registration

Benefits

- Expedite tapping and screw placement by 3.5 times without altering the bone screw thread properties
- Minimize learning curve by having intuitive, self explanatory instrumentation
- Rod rocker and persuader self register to the undercut of the external geometry of the screw body making it easy to apply instrumentation

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Implant Overview

S⁴ Element Polyaxial Screws

Item No.	Diameter	Length	
ST251T	5.0 mm	30 mm	
ST252T	5.0 mm	35 mm	
ST253T	5.0 mm	40 mm	
ST254T	5.0 mm	45 mm	
ST254T	5.0 mm	50 mm	
ST261T	6.0 mm	30 mm	
ST262T	6.0 mm	35 mm	
ST263T	6.0 mm	40 mm	
ST264T	6.0 mm	45 mm	
ST265T	6.0 mm	50 mm	
ST266T	6.0 mm	55 mm	
ST267T	6.0 mm	60 mm	
ST271T	7.0 mm	30 mm	
ST272T	7.0 mm	35 mm	
ST273T	7.0 mm	40 mm	
ST274T	7.0 mm	45 mm	
ST275T	7.0 mm	50 mm	
ST276T	7.0 mm	55 mm	
ST277T	7.0 mm	60 mm	
ST281T	8.0 mm	30 mm	
ST282T	8.0 mm	35 mm	
ST283T	8.0 mm	40 mm	
ST284T	8.0 mm	45 mm	
ST285T	8.0 mm	50 mm	
ST286T	8.0 mm	55 mm	
ST287T	8.0 mm	60 mm	

Pre-Bent Rods, 5.5 mm

Item No.	Length	
SW653T	30 mm	
SW654T	35 mm	
SW655T	40 mm	
SW656T	45 mm	
SW657T	50 mm	
SW658T	55 mm	
SW659T	60 mm	
SW661T	70 mm	
SW662T	80 mm	
SW663T	90 mm	
SW684T	100 mm	

Straight Rods, 5.5 mm

Item No.	Length	
SW674T	35 mm	
SW675T	40 mm	
SW676T	45 mm	
SW677T	50 mm	
SW678T	55 mm	
SW679T	60 mm	
SW681T	70 mm	
SW682T	80 mm	
SW664T	100 mm	
SW666T	120 mm	
SW667T	150 mm	
SW668T	180 mm	
SW669T	200 mm	
SW670T	300 mm	
SW671T	400 mm	
SW672T	500 mm	

Set Screw

Item No.	Description	
SW790T	Set Screw	

Instrumentation Overview

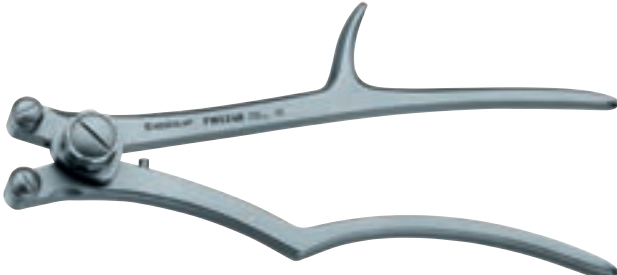
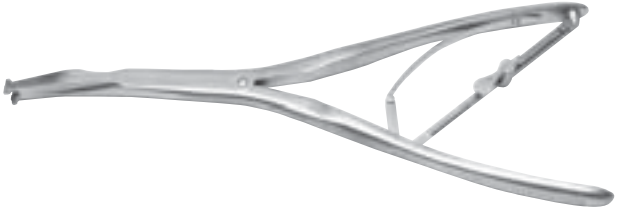
S ⁴ ® Element® Pedicle Preparation Instrumentst		
Item No.	Description	
FW190R	Bone Awl	
FW188R	Straight Pedicle Probe	
FW189R	Curved Pedicle Probe	
FW248R	Straight Thoracic Probe	
FW249R	Curved Thoracic Probe	
FW195R	Screw Tap, 5.0 mm	
FW196R	Screw Tap, 6.0 mm	
FW197R	Screw Tap, 7.0 mm	
FW198R	Screw Tap, 8.0 mm	
FW146R	Ball-Tip Pedicle Sounder, Straight	
FW147R	Ball-Tip Pedicle Sounder, Curved	
FW191R	Single Band Pedicle Marker	
FW192R	Dual Band Pedicle Marker	
FW165R	S ⁴ Ratchet Handle, Straight	
FW167R	S ⁴ Cannulated T-Handle	
FW154R	Marnay Lever	

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Instrumentation Overview

S ⁴ Element Screw Instruments		
Item No.	Description	
FW277R	S ⁴ Element Polyaxial Screwdriver	
FW250R	Speed Multiplier Handle	
FW278R	S ⁴ Element Screw Body Manipulator	
FW251R	Handled Set Screw Starter	
FW279R	Dual Ended Set Screw Starter	
FW280R	Set Screw Driver	
FW224R	Torque Limiting Handle	
S ⁴ Element Screw Instruments		
Item No.	Description	
FW283R	S ⁴ Element Counter-Torque L-Handle	
FW174R	Screwdriver with Shank Tip	
FW193R	Set Screw Revision Screwdriver with 4 mm Hex Tip	

S⁴ Element[®] Rod Manipulation Instruments

Item No.	Description	
FW012R	Rod Holding Forceps	
FW024R	French Rod Bender	
FW513R	Rod Pusher	
FW288R	S ⁴ Element Forked Rocker, Straight	
FW289R	S ⁴ Element Forked Rocker, Curved	
FW285R	S ⁴ Element Rod Persuader	
FW281R	Distraction Forceps	
FW282R	Compression Forceps	
FW252R	In-Situ Rod Bender, Left	
FW253R	In-Situ Rod Bender, Right	

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Instrumentation and Cross Connector Implant Overview

S⁴® Element® Rod Manipulation Instruments *(continued)*

Item No.	Description	
FW185R	Disposable Rod Trial	
FW287R	S ⁴ Element Derotation Sleeve	

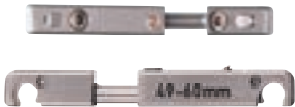
Step Style Adjustable Cross Connectors

Item No.	Description	
SW488T	S ⁴ Adjustable Cross Connector 35-36 mm	
SW489T	S ⁴ Adjustable Cross Connector 36-38 mm	
SW494T	S ⁴ Adjustable Cross Connector 38-42 mm	
SW495T	S ⁴ Adjustable Cross Connector 42-50 mm	
SW496T	S ⁴ Adjustable Cross Connector 50-60 mm	
SW497T	S ⁴ Adjustable Cross Connector 60-77 mm	
SW498T	S ⁴ Adjustable Cross Connector 77-107 mm	

Step Style Rigid Cross Connectors

Item No.	Description	
SW490T	S ⁴ Rigid Cross Connector 28 mm	
SW491T	S ⁴ Rigid Cross Connector 30 mm	
SW492T	S ⁴ Rigid Cross Connector 32 mm	
SW493T	S ⁴ Rigid Cross Connector 34 mm	

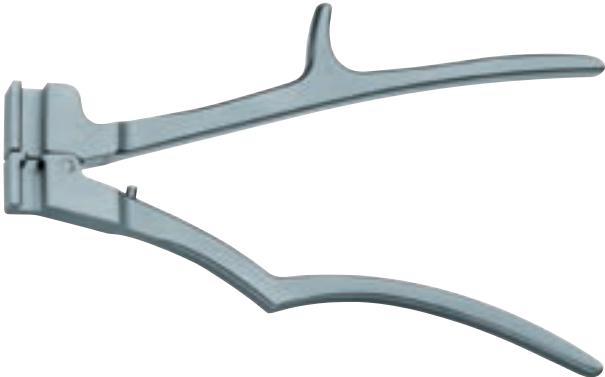
Bar Style Adjustable Cross Connectors

Item No.	Description	
SW697T	S ⁴ Adjustable Cross Connector 43-49 mm	
SW698T	S ⁴ Adjustable Cross Connector 49-60 mm	
SW699T	S ⁴ Adjustable Cross Connector 60-75 mm	

Bar Style Rigid Cross Connectors

Item No.	Description	
SW690T	S ⁴ Rigid Cross Connector 21 mm	
SW691T	S ⁴ Rigid Cross Connector 25 mm	
SW695T	S ⁴ Rigid Cross Connector 38 mm	
SW696T	S ⁴ Rigid Cross Connector 41 mm	

Cross Connector Implant Overview

Cross Connector Instruments		
Item No.	Description	
FW204R	Counter Torque for Cross Connectors	
FW203R	Cross Connector Bender	
FW202R	Cross Connector Sizing Template	
FW207R	Torque Wrench for Cross Connectors (4 Nm)	

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Order Information

S⁴ Element Trays

Item No.	Description
MF659	Implant Set Lid
MF660	Implant Set Base
MF661	Implant Screw Caddy
MF662	Pre-Bent Rod Caddy
MF663	Pre-Bent Rod Tray
MF664	Straight Rod Caddy
MF665	Straight Rod Tray
MF666	Set Screw Caddy
MF670	Pedicle Preparation Set Lid
MF671	Pedicle Preparation Set Base
MF672	Screw Instrument Set Lid
MF673	Screw Instrument Set Base
MF674	Rod Manipulation Set Lid
MF675	Rod Manipulation Set Base
MF676	Rod Manipulation Set Top Tray
MF677	Rod Manipulation Set Bottom Tray

S⁴ Element Sterile Containers

Item No.	Description
JN442	Full-size Perforated Bottom (135 mm)
JN444	Full-size Perforated Bottom (187 mm)
JK489	Full-size Lid w/ Retention Plate (Silver)

Cross Connector Trays

Item No.	Description
MF684	Cross Connector Set Lid
MF685	Cross Connector Set Base
MF686	Cross Connector Implant Caddy
MF687	Cross Connector Implant Tray (Top Tray)
MF688	Cross Connector Instrument Tray (Bottom Tray)

Cross Connector Sterile Containers

Item No.	Description
JN442	Full-size Perforated Bottom (135 mm)
JK489	Full-size Lid w/ Retention Plate (Silver)

S⁴ Element[®] Set Configurations

Set No.	Set Description
ST0368	S ⁴ Element Polyaxial Screws Basic Set
ST0272	Cross Connector Set (Implants, Instruments)

ST0368	S ⁴ Element Polyaxial Screws Basic Set Implant and Instrument Components
Implants	
✓	5.0 mm Polyaxial Screws (Sizes 30-50 mm in 5 mm increments)
✓	6.0 mm, 7.0 mm, 8.0 mm Polyaxial Screws (Sizes 30-60 mm in 5 mm increments)
✓	Set Screws
✓	5.5 mm Pre-bent Rods (30, 35, 40, 45, 50, 55, 60, 70, 80, 90, 100 mm)
✓	5.5 mm Straight rods (35, 40, 45, 50, 55, 60, 70, 80, 100, 120, 150, 400 mm)
Instruments	
✓	Pedicle Preparation Instruments
✓	Screw Instruments
✓	Rod Manipulation Instruments

ST0272	Cross Connector Set Implant and Instrument Components
Implants	
✓	Bar Style Rigid Cross Connectors (21, 25, 29, 32, 35, 38, 41 mm)
✓	Bar Style Adjustable Cross Connectors (43-49, 49-60, 60-75 mm)
✓	Step Style Rigid Cross Connectors (28, 30, 32, 34 mm)
✓	Step Style Adjustable Cross Connectors (35-36, 36-38, 38-42, 42-50, 50-60, 60-77, 77-107 mm)
Instruments	
✓	Cross Connector Application Instruments

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