

Aesculap[®] S4[®] Cervical System

Posterior Occipital Cervical Thoracic Stabilization System



Aesculap Spine

Aesculap® S⁴® Cervical System

Meeting the Challenge - Posterior Cervical Spine Surgery

S⁴C

The special needs of the cervical spine make posterior cervical stabilization a challenging procedure. High construct stability combined with minimal implant size make the S⁴ Cervical System the partner to rely on.

By combining the exceptionally small yet stable design of the screw construct with simple instrumentation, the S⁴ Cervical System is a remarkably innovative system for posterior cervical column stabilization.

The S⁴ Cervical System fulfills these aims with its four key features:

- Small size
- Stable construct
- Simple insertion
- Safe procedure

The S⁴ Cervical System efficiently transfers these features to its wide implant and instrument versatility to meet the special needs of the cervical and thoracic spine.

S⁴ mall

- Revolutionary undercut thread for miniature size of the screw head, especially important in small bony structures
- Wide screw angle and low profile for adaptation of the construct to patient anatomy
- Minimal access instruments for subcutaneous approach

S⁴ table

- Unique S⁴ closure mechanism with undercut thread stabilizes polyaxial construct
- Special shaped seat inside the screw body creates pressure vessel effect
- Provides high overall bio-mechanical stability



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- Specialized instruments for easy screw and hook placement in various anatomical situations
- Color-coded implants and instruments for ease of use
- Guiding instruments for minimal access and soft tissue and nerve root protection

S⁴ afe

- Small implant volume, overall biomechanical strength, and easy access instruments help to achieve a fast and efficient surgical procedure and excellent patient outcome

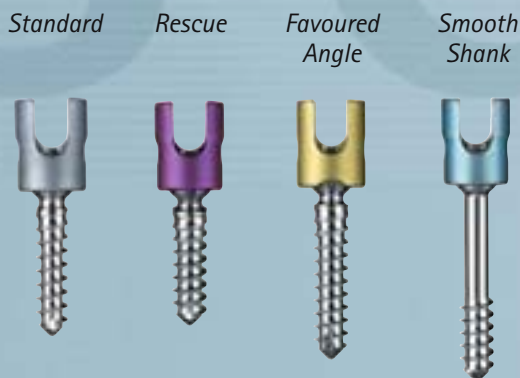
Aesculap® S4® Cervical System

S4® Cervical Implants

S4C

A big variety of implants is important to match every possible anatomical situation. Small, top-loading implants, connecting options to the thoracolumbar spine and a wide range of implants provide all thinkable solutions.

Multiple Screw Options



- \varnothing 3.5 and \varnothing 4.0 mm polyaxial screws, $\pm 35^\circ$
- $\pm 45^\circ$ favored angle screws
- Smooth shank screws in variable thread and shank lengths

Various Connecting Options

- Fixed and variable cross connectors 22 - 58 mm
- Rod to rod connectors
- Lateral offset connectors straight and L-shaped



Occiput Plate

- Stability through midline fixation
- Self-locking occiput screws



Laminar Hooks

- Small and large size options



Rod Diversity

- Straight
- Prebent rod for occipital plate
- Dual diameter rod \varnothing 3.5 - 5.5 mm to connect to thoracolumbar construct



S⁴ Cervical Instruments

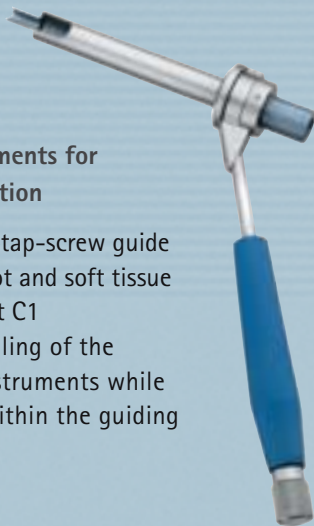
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The S⁴ Cervical instruments address the anatomical needs, and allow simple implant insertion.

Additional support instruments are available for ease of use in challenging situations.

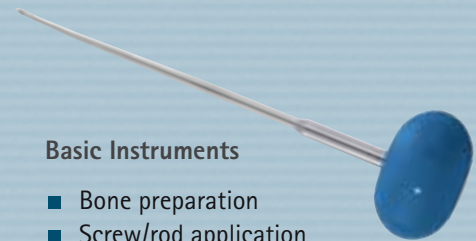
Guiding Instruments for C1 Screw Insertion

- Unique drill-tap-screw guide for nerve root and soft tissue protection at C1
- Secure handling of the insertion instruments while operating within the guiding sleeve



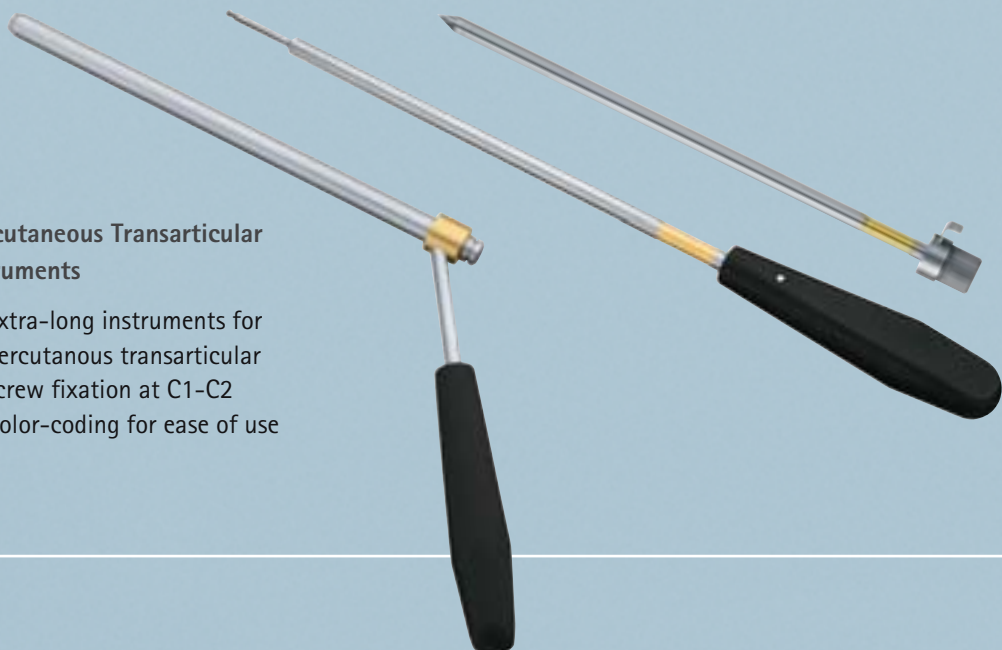
Basic Instruments

- Bone preparation
- Screw/rod application and removal
- Rod bending and reconstruction



Subcutaneous Transarticular Instruments

- Extra-long instruments for percutaneous transarticular screw fixation at C1-C2
- Color-coding for ease of use



Aesculap® S4® Cervical System

S4®C Construct Overview



- 1 Occiput Plate
- 2 Pre-Bent-Rod
- 3 Smooth Shank Screw
- 4 Favored Angle Screw
- 5 L-shaped Offset Connector
- 6 Hook
- 7 Cross Connector
- 8 Offset Connector
- 9 Rod-to-Rod Connector
- 10 S⁴ Cervical Polyaxial Screw
- 11 S⁴ Thoracolumbar Screw
- 12 Dual Diameter Rod

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