

Polyaxial Screw

A polyaxial screw is used for connecting vertebrae to rods in spinal surgery. It is essentially a screw whose spherical head is enclosed on a housing, which allows the screw a range of motion along several different axes relative to the housing.

Design:

- Polyaxial Screws have a unique design with Buttress-Shaped highly sharp threads
- Stronger connection with head part by milled surface feature.
- More reliable tightening with the torx design of set screw.
- Easy initiative insertion
- Wide range of available sizes: 4.5mm, 5.0mm, 5.5mm, 6.0mm, 6.5mm, 7.0mm, 7.5mm

Intended Use, Indications and Contraindications

Intended Use

The USS II Polyaxial System is a posterior pedicle screw Fixation system designed to provide precise and Segmental stabilization of the spine in skeletally mature Patients.

Indications

- * Degenerative diseases
- * Deformities in combination with Low Profile pedicle screws
- * Fractures and tumours with sufficient anterior support when using Polyaxial as a stand-alone device for posterior fixation

Contraindications

Fractures and tumors with insufficient anterior support.

Precautions: For patients with osteoporosis, the use of cancellous bone screws is recommended.



(4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5)

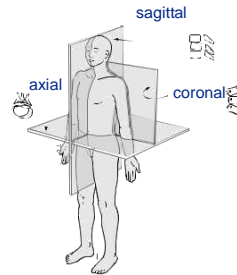
AO Spine Principles

The four principles to be considered as the foundation for proper spine patient management underpin the Design and delivery of the Curriculum: Stability – Alignment – Biology – Function.1, 2

Stability

Stabilization to achieve

a specific therapeutic outcome



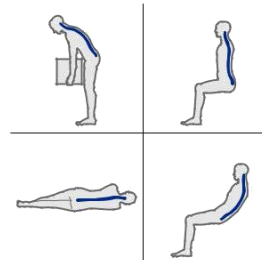
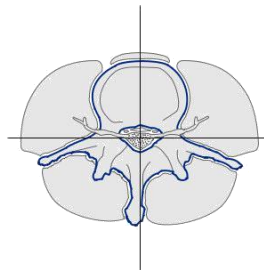
Alignment

Balancing the spine in three dimensions

Biology

Etiology, pathogenesis,

neural protection, and tissue healing



Function

Preservations and restoration of function to prevent disability

Surgical Technique

Patient Positioning and Approach

Diagnosis is based upon patient history, physical findings, and preoperative radiographic assessment.



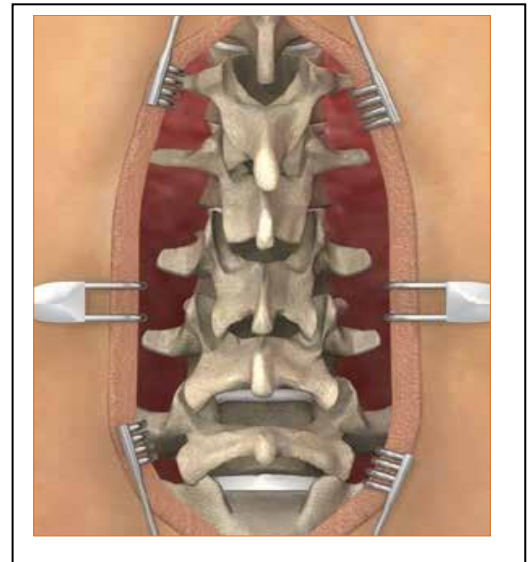
The patient can be positioned on the operating table in the prone position. Care should be taken to pad all bony prominences. To facilitate venous drainage, the abdomen should not be compressed



Surgical levels may be verified either clinically or radiographically. To help ensure adequate exposure, the incision is made to extend just beyond the length of the intended fusion.

Presurgical planning defines the most appropriate implants in addition to the optimal location for insertion of implants.

POLYAXIAL SCREW



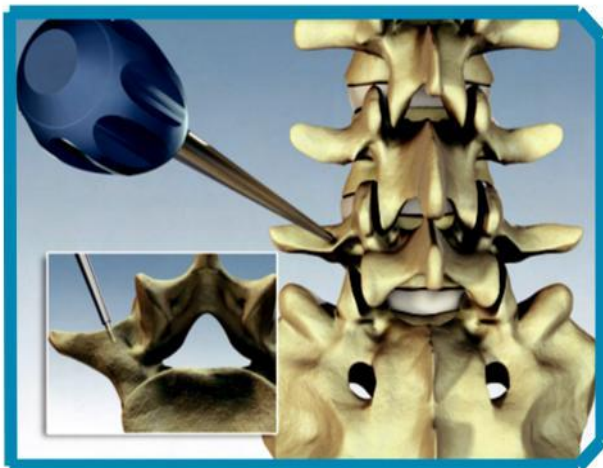
Pedicle Preparation

Step 1

Pedicle Entry

Identify the correct anatomical landmarks for creating an entry point for the pedicle screw pilot hole.

Drawing a horizontal line through the middle of the transverse process and a vertical line through the superior facet of the vertebral level being addressed will give you an approximate entry point to the pedicle.



Once the entry point is identified, use the sharp tip of the Awl to penetrate the cortical bone and create a pilot hole.

Note: The optional Awl-In-One may be used in place of a Standard Bone Awl. Its trocar tip, integrated with a sharp Threaded tap, reduces the number of steps required to prepare the pedicle.

Pedicle Probe

After the pilot hole is created, insert the Straight or Curved Pedicle Probe and use it to create a channel for the pedicle screw.

Step 2



Pedicle Probe

After the pilot hole is created, insert the Straight or Curved Pedicle Probe and use it to create a channel for the pedicle screw.

It is important that the appropriate cephalad/ caudad and converging angles are observed when engaging the Pedicle Probe.

Apply slight downward pressure while rotating back and forth to advance the Pedicle Probe into the pedicle and down into the anterior column.

To help determine depth, the Pedicle Probe is laser Marked with lines beginning at approximately 30mm and continuing in 10mm increments.

Note: Pedicle Probe markings are approximate Measurements.

Step 3



Pedicle Verification

Use the Straight or Curved Sounding Probe to palpate the channel, verifying the integrity of the pedicle wall and confirming that the anterior cortex of the vertebral body has not been penetrated.

Step 4



Tapping (if necessary)

Screws are fully threaded and have a self-tapping feature designed to eliminate the need to tap the pedicle canal.

In many situations where patient bone quality is compromised or where there is a dense cortical layer, it may be necessary to utilize one of the size-specific taps in the system.

If necessary, choose the appropriate diameter tap based on the diameter of the screw to be implanted.

Attach the tap to either the Straight Ratcheting or T-Ratcheting Handle. Shift the handle into the forward position and advance clockwise into the pedicle canal.

Laser-marked lines on the tap begin at 30mm and continue in increments of 10mm.

Advance to the desired depth, shift the ratcheting handle in reverse and remove the tap in a counter clockwise direction

LIST OF INSTRUMENTS

7600-INS-0001 Pedicle Probe Straight



7600-INS-0002 Pedicle Probe Curved



7600-INS-0003 Pedicle Sound Straight



7600-INS-0004 Pedicle Sound Curved



7600-INS-0005 Pedicle Feeler



7600-INS-0006 4.5 mm Bone Tap with Quick Coupling



7600-INS-0007 5.5 mm Bone Tap with Quick Coupling



POLYAXIAL SCREW

7600-Ins-0008 6.5 mm Bone Tap with Quick Coupling



7600-INS-0009 Monoaxial Screw Driver with Quick Coupling



7600-INS-0010 Polyaxial Screw Driver with Quick Coupling



7600-INS-0011 Rod Template



7600-INS-0012 Universal Rod Bender (Roller Type)



7600-INS-0013 Compressor



7600-INS-0014 Distractor



7600-INS-0015 Pedicle AWL with Stopper



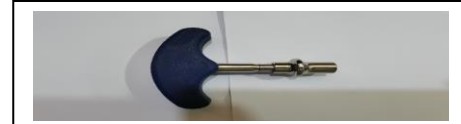
7600-INS-0016 Rod Pusher Straight



7600-INS-0017 Rod Pusher Curved



7600-INS-0018 Quick Coupling T – Handle



7600-INS-0019 Rod Persuader



7600-INS-0020 Anti Torque Key



7600-INS-0021 Rod Holding Forceps



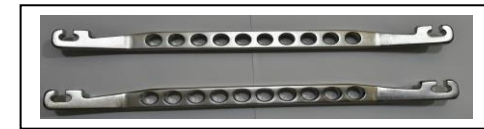
7600-INS-0022 Rod Rocking Forceps (Fork Type)



7600-INS-0023 Rod Holding Forceps Multi Purpose Large



7600-INS-0024 Bending Iron (Pair)



7600-INS-0025 Inner Holder



7600-INS-0026 Final Tightener



7600-INS-0027 Measuring Guide for Connector



7600-INS-0028 Rod Holding Forceps Multi Purpose



7600-INS-0029 Pedicle Centraliser (4 Pcs)



7600-INS-0030 Connector Final Tightener



7600-INS-0031 Connector Inner Holder



7600-INS-0032 Quick Coupling Handle Straight



7600-INS-0033 Connector Holding Forceps



7600-INS-0034 Reduction Break off (Pair)



7600-INS-0035 Reduction Break off Support



7600-INS-0036 Final Tightner with Quick Coupling



Polyaxial Screw

Ø4.5 MM POLYAXIAL SCREW (TIT)

2021-TT-4525	Titanium	25 MM
2021-TT-4530	Titanium	30 MM
2021-TT-4535	Titanium	35 MM
2021-TT-4540	Titanium	40 MM
2021-TT-4545	Titanium	45 MM
2021-TT-4550	Titanium	50 MM



Ø5.0 MM POLYAXIAL SCREW (TIT)

2021-TT-5025	Titanium	25 MM
2021-TT-5030	Titanium	30 MM
2021-TT-5035	Titanium	35 MM
2021-TT-5040	Titanium	40 MM
2021-TT-5045	Titanium	45 MM
2021-TT-5050	Titanium	50 MM



Ø5.5 MM POLYAXIAL SCREW (TIT)

2021-TT-5525	Titanium	25 MM
2021-TT-5530	Titanium	30 MM
2021-TT-5535	Titanium	35 MM
2021-TT-5540	Titanium	40 MM
2021-TT-5545	Titanium	45 MM
2021-TT-5550	Titanium	50 MM
2021-TT-5555	Titanium	55 MM



POLYAXIAL SCREW

Ø6.0 MM POLYAXIAL SCREW (TIT)

2021-TT-6025	Titanium	25 MM
2021-TT-6030	Titanium	30 MM
2021-TT-6035	Titanium	35 MM
2021-TT-6040	Titanium	40 MM
2021-TT-6045	Titanium	45 MM
2021-TT-6050	Titanium	50 MM
2021-TT-6055	Titanium	55 MM



Ø6.5 MM POLYAXIAL SCREW (TIT)

2021-TT-6525	Titanium	25 MM
2021-TT-6530	Titanium	30 MM
2021-TT-6535	Titanium	35 MM
2021-TT-6540	Titanium	40 MM
2021-TT-6545	Titanium	45 MM
2021-TT-6550	Titanium	50 MM
2021-TT-6555	Titanium	55 MM



Ø7.0 MM POLYAXIAL SCREW (TIT)

2021-TT-7025	Titanium	25 MM
2021-TT-7030	Titanium	30 MM
2021-TT-7035	Titanium	35 MM
2021-TT-7040	Titanium	40 MM
2021-TT-7045	Titanium	45 MM
2021-TT-7050	Titanium	50 MM
2021-TT-7055	Titanium	55 MM



Ø7.5 MM POLYAXIAL SCREW (TIT)

2021-TT-7525	Titanium	25 MM
2021-TT-7530	Titanium	30 MM
2021-TT-7535	Titanium	35 MM
2021-TT-7540	Titanium	40 MM
2021-TT-7545	Titanium	45 MM
2021-TT-7550	Titanium	50 MM
2021-TT-7555	Titanium	55 MM
2021-TT-7560	Titanium	60 MM



Address

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