



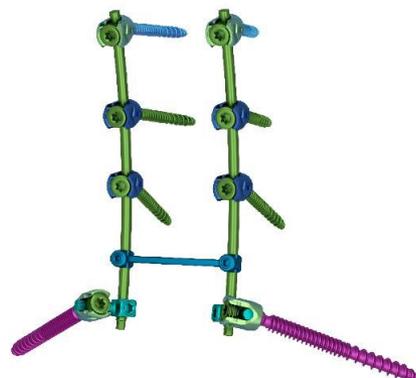
CATÁLOGO DE PRODUCTOS

COLUMNA



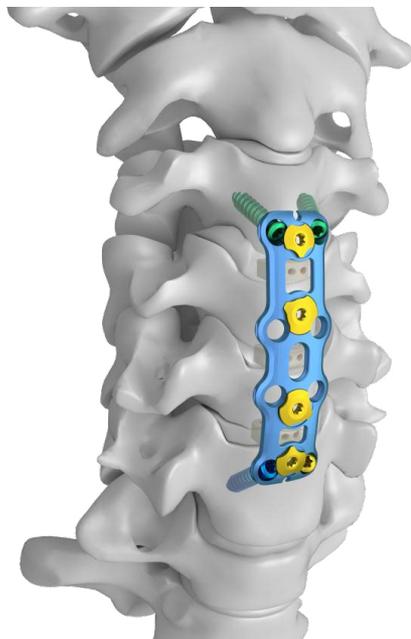
DOUBLE MEDICAL

Product Overview



- Solutions for Anterior Cervical Spine
- Solutions for Posterior Cervical Spine
- Cages and Titanium Meshes
- Solutions for Anterior and Posterior Thoracolumbar Spine

Anterior Cervical Spine Locking Plate System IV



Features

- Low profile design with 1.75mm thickness, preventing soft tissue irritation.
- Special locking mechanism with simple intrusion to prevent screw back out.
- Variable and fixed angle screws allow the surgeon to build a semi-rigid, constrained or hybrid fixation construct.



3.5mm locking screw, self-drilling, variable angle/fixed angle



4.0 mm emergency screw, variable angle/fixed angle

Anterior Cervical Spine Locking Plate System IV

Indications

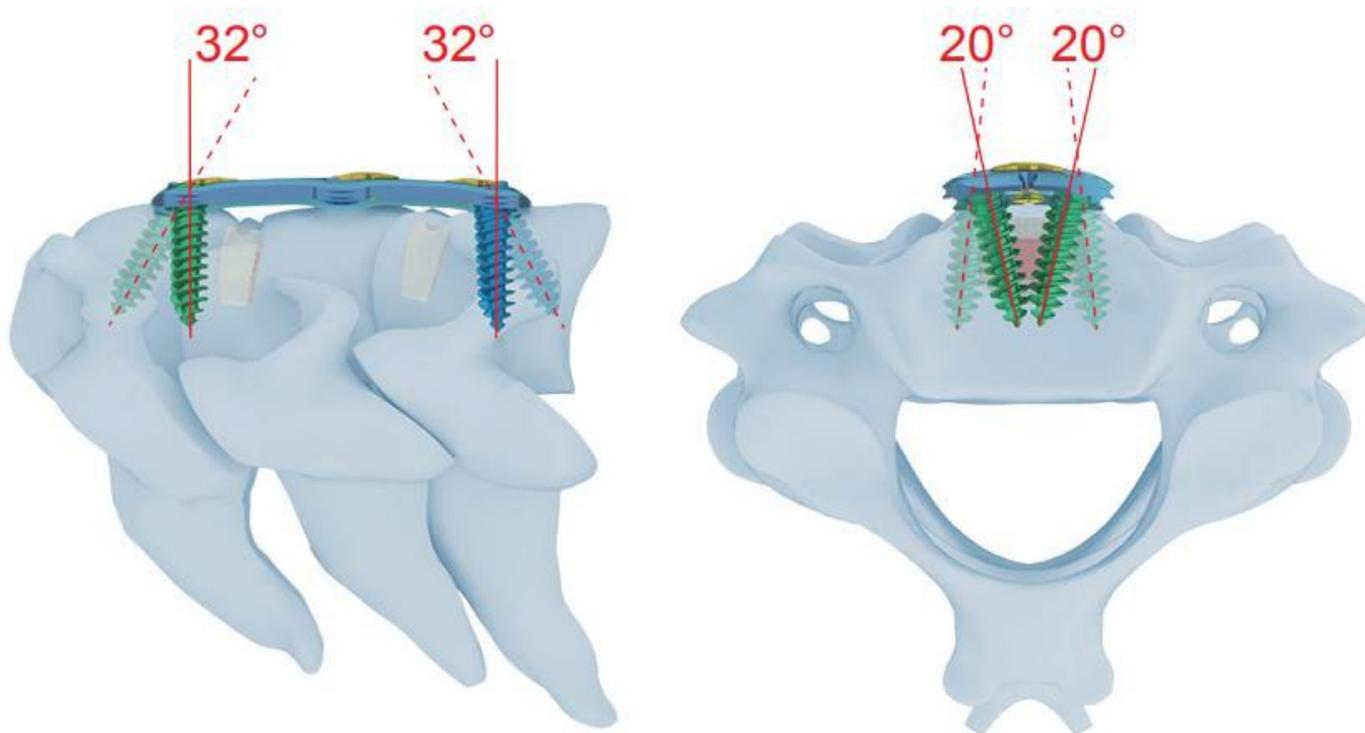
Indicated for stabilization of the cervical spine from C2 to C7

- Degenerative disc disease
- Trauma
- Tumors
- Deformity (defined as kyphosis, lordosis, or scoliosis)
- Pseudarthrosis
- Failed previous fusions



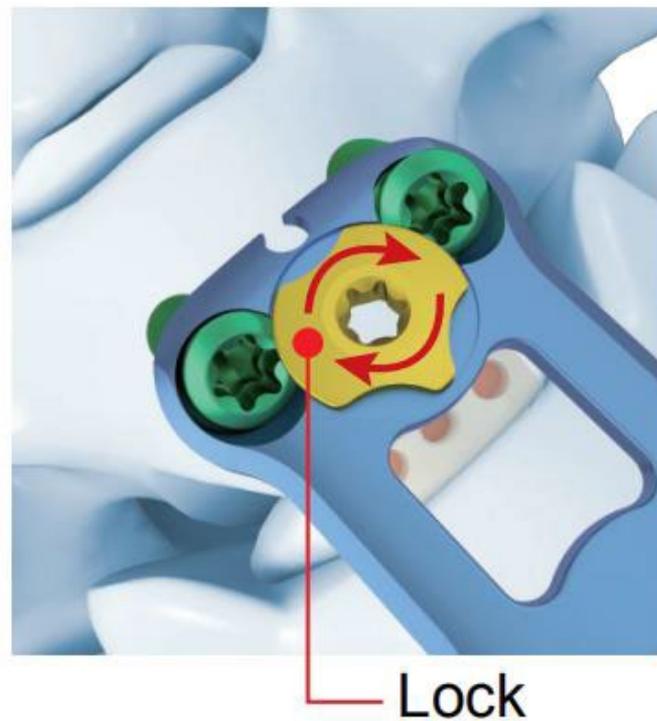
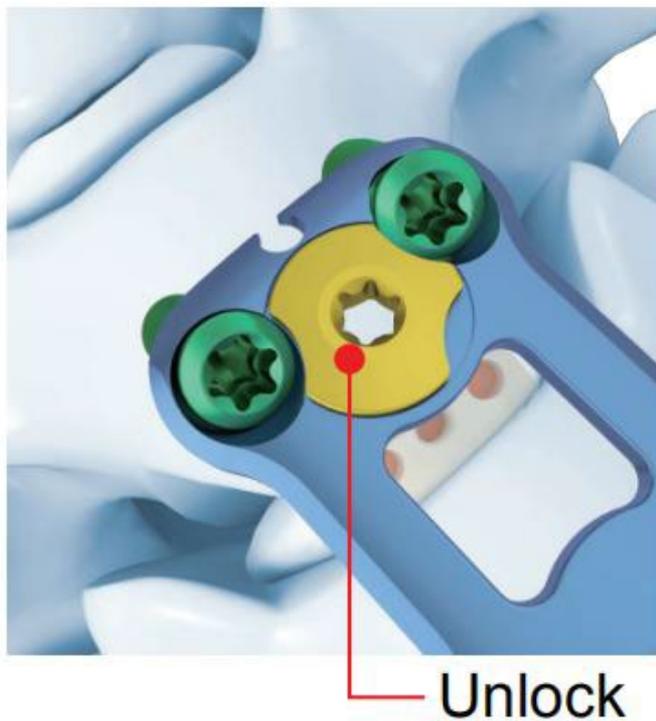
Anterior Cervical Spine Locking Plate System IV

Fixed and Variable Angle Locking Screw



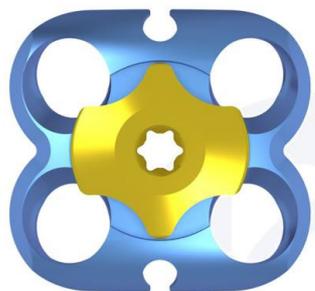
Anterior Cervical Spine Locking Plate System IV

Special Locking Mechanism



Anterior Cervical Spine Locking Plate System IV

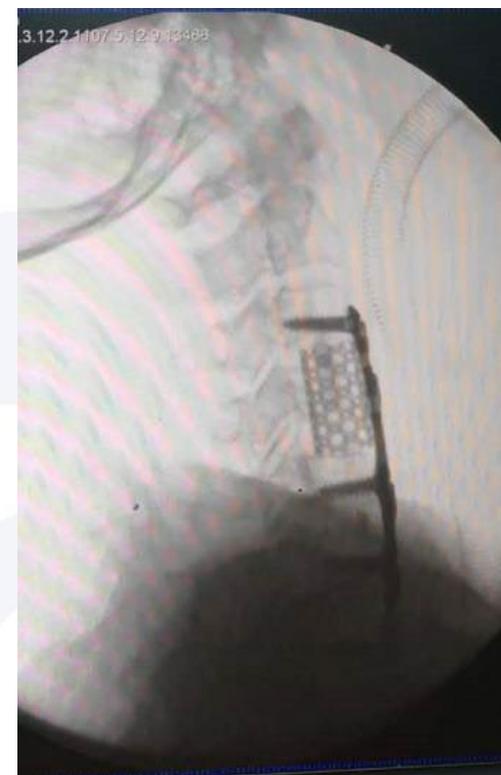
Specification



4 Holes	15-25	27-29					
6 Holes		27-29	31-41	43-51			
8 Holes				43-51	53-63	65-71	
10 Holes						65-71	71-86

Anterior Cervical Spine Locking Plate System IV

Clinical Case



DELTA Anterior Cervical Plate and Cage System



Indications

Cervical Spine C2-C7

- Degenerative disc disease
- Spinal stenosis
- Failed previous fusion
- Pseudoarthrosis

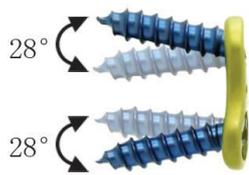


4.0mm locking screw, self-drilling / self-tapping



4.35mm emergency screw, self-drilling / self-tapping

DELTA Anterior Cervical Plate and Cage System



- Variable angle screw for more clinical needs.

Delta Guide

- Plate alignment using cage as reference.
- Fixed insertion angle screws.
- Drill and screw through guide.
- Less surgical steps.



CAGE

- Large cage window to accommodate more graft space.
- PEEK-OPTIMA® by Invibio (UK): proven material with modulus of elasticity similar to cancellous bone.

Anterior Cervical Intervertebral Cage System



Features

- PEEK-OPTIMA® material is biocompatible and much closer to that of spongy bone, consequently minimizing the risk of systemic uptake and local inflammatory reactions.
- Perforated structure for bone ingrowth.
- Roughened surface promotes integration.



3.0mm Locking Screw, self-tapping



3.5mm Locking Screw, self-drilling, variable angle



4.0mm Locking Screw, self-drilling, variable angle

Indications

Cervical Spine C2-C7

- Degenerative disc disease
- Spinal stenosis
- Failed previous fusion
- Pseudoarthrosis

Anterior Cervical Intervertebral Cage System

PROXIMATE

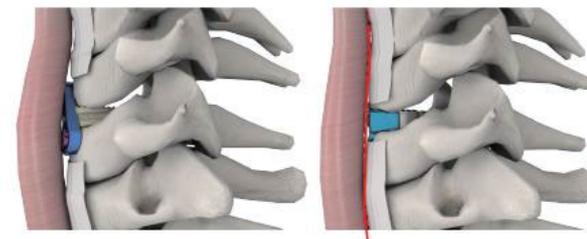
Titanium Alloy Plate

- Provides a secure, rigid screw locking interface.
- Stresses in plate are decoupled from spacer through an innovative interface.



Zero Profile

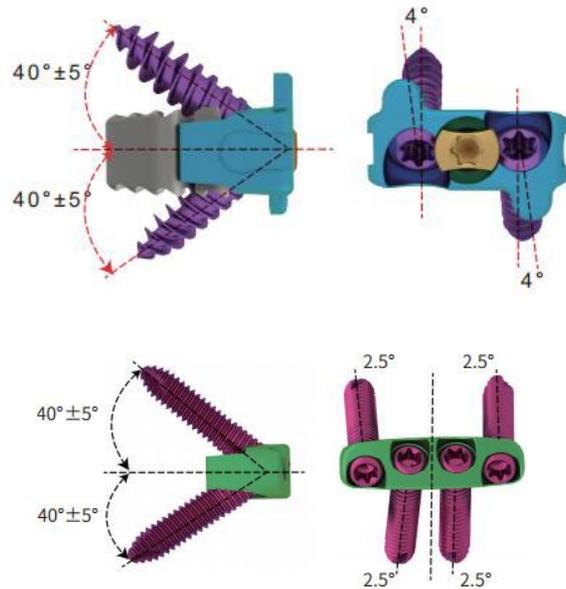
- Contained within the excised disc space, reducing the postoperative dysphagia.
- Prevents adjacent level ossification.



Ease of Use

- Preassembled plate and spacer avoid the process of aligning and realigning an anterior cervical plate.

Anterior Cervical Intervertebral Cage System



Locking Screw

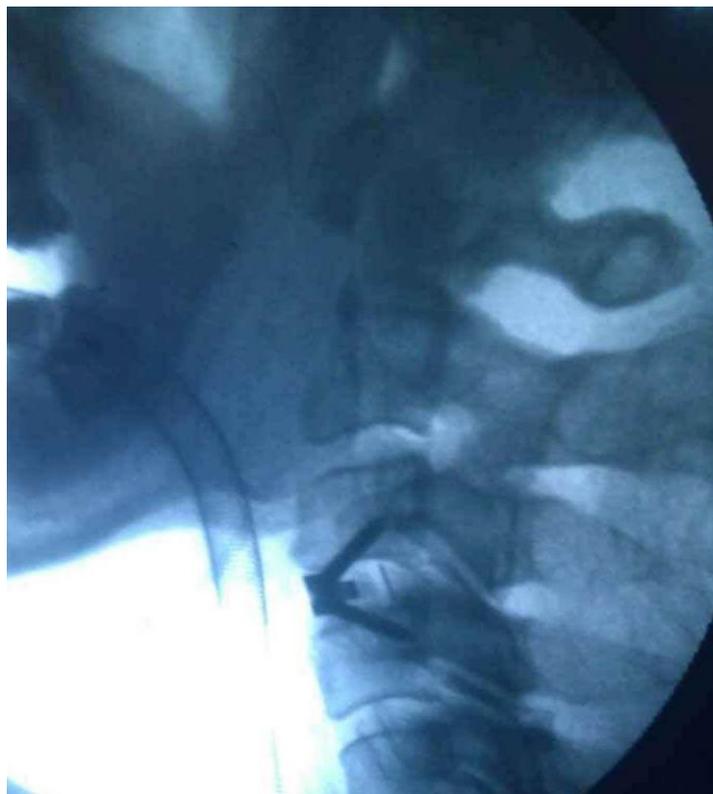
- Screws form a bone wedge with a 40° cranial/caudal angle and 2.5° medial/lateral angle/ 4° medial/lateral angle.
- One step and dual core locking screws.

- Stand-alone design combines the functionality of a cervical interbody spacer and the benefits of an anterior cervical plate.



Anterior Cervical Intervertebral Cage System

Clinical Case



Post-operation

HOBBIT Posterior Cervical System 3.5/4.0



Indications

- Tumors
- Occipito-cervical and upper cervical spine instabilities
- Instabilities in the lower cervical and upper thoracic spine
- Posttraumatic conditions
- Latrogenic instabilities following laminectomy and etc.
- Anterior cervical fusions requiring additional posterior stabilization
- Degenerative and painful posttraumatic conditions in the lower cervical and upper thoracic spine

HOBBIT Posterior Cervical System 3.5/4.0



09909/09910
Polyaxial Pedicle
Screw, fully- threaded
(3.5/4.0 System)



09913
Polyaxial Pedicle
Screw, half- threaded
(3.5/4.0 System)



09911/09912
Polyaxial Long Arm
Pedicle Screw, fully-
threaded (3.5/4.0
System)



09914
Polyaxial Long Arm
Pedicle Screw, half-
threaded (3.5/4.0
System)



09944
Monoaxial Long Arm
Pedicle Screw, fully-
threaded (3.5/4.0
System)



09950
Occipital Plate,
triangular



09947
Occipital Plate,
straight



09952
Occipital Screw



09915
Screw Nut

HOBBIT Posterior Cervical System 3.5/4.0



09962
Transconnector for
4.0mm Rod



09968
Paralleled Connector,
4.0/4.0



09970
Paralleled Connector,
4.0/6.0



09972
Lateral Connector



09964
Straight Connector,
4.0/4.0



09966
Straight Connector,
4.0/6.0



09A11
Lateral Connector,
angled



09916/09917
3.5/4.0mm Cervical
Rod



09A13
Cable Fixator



09988
3.5mm Cervical Rod,
hinged



09953
Transconnector

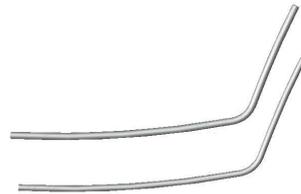


09958
Transconnector for
3.5mm Rod

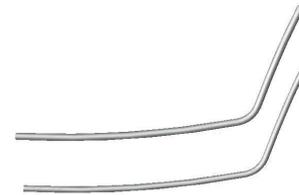
HOBBIT Posterior Cervical System 3.5/4.0



09A07 Polyaxial
Paralleled Connector,
4.0/6.0



09A44/09A45
Cervical Rod,
anatomic



09A59/09A60
Cervical Rod, single
bend



09B12 Laminar Hook



09B13 Polyaxial
Pedicle Screw (3.5/4.0
System), fully
threaded



09B14 Polyaxial
Pedicle Screw (3.5/4.0
System), half
threaded



09B46 Polyaxial
Pedicle Screw (3.5/4.0
System), fully
threaded, cannulated



09B47 Monoaxial
Pedicle Screw (3.5/4.0
System), fully
threaded, cannulated

HOBBIT Posterior Cervical System 3.5/4.0



Full Range of Types

- Monoaxial pedicle screw: stronger derotation strength, better reduction result.
- Half-threaded pedicle screw: half-threaded pedicle screw, comparable strength, precise protection.
- Long arm pedicle screw: spondylolisthesis reduction, precise derotation.

Self-maintaining Polyaxial Screw Head

- Special design of screw head realizes the temporal stabilization of different angle for easy placement of rod.



HOBBIT Posterior Cervical System 3.5/4.0

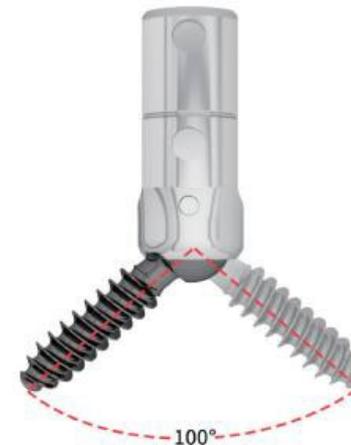


Detailed Design, Remarkable Performance

- Predesigned break line of the long arm for controllable break point and smooth broken end.
- Self-positioning design of inner thread of screw head for the automatic placement of screw nut reducing the cross threading.

Ultra Large Variable Angle

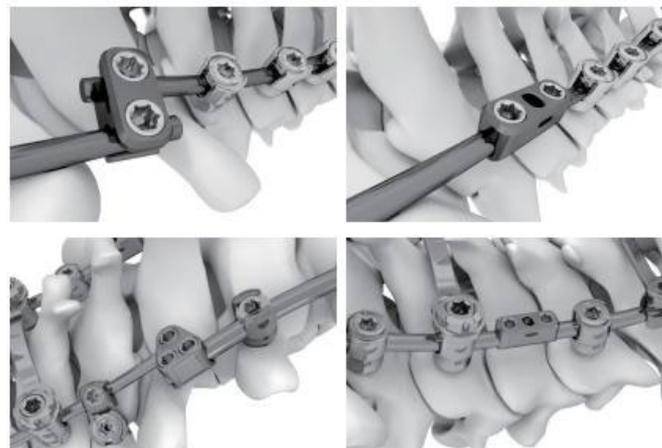
- 100° ultra-large variable angle reduces the difficulty of rod placement and applies to different kinds of posterior cervical situations.



HOBBIT Posterior Cervical System 3.5/4.0

Complete Types of Connecting Accessories

- Special occipitocervical joint rod: special joint design avoids the large bending angle of rod and ensures the fixation strength of connecting rod.
- Lateral connector/straight connector: easier thoracic-lumbar transition for more clinical options.



Product Overview

Cages and Titanium Meshes



- Cervical Cage
- Thoracic -Lumbar Cage (PLIF)
- Transforminal Lumbar Interbody Fusion Cage (TLIF)
- Oblique Lateral Interbody Fusion Cage (OLIF)
- MIS Anterolateral Spine Access System
- ATP Instrument Set
- Titanium Mesh for Cervical Spine
- Titanium Mesh for Thoracic-Lumbar Spine

Cervical Cage

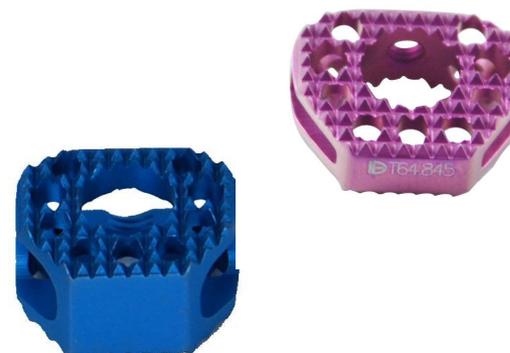


Features

- PEEK-OPTIMA® material is biocompatible and much closer to that of spongy bone, consequently minimizing the risk of systemic uptake and local inflammatory reactions.
- Perforated structure for bone ingrowth and through growth.
- Roughened surface promotes integration and bone ongrowth.

Indications

- Ruptured and herniated discs
- Degenerative disc disease and spinal instability
- Pseudarthrosis or failed spondylodesis



Cervical Cage



- Precisely machined instrument slot ensures secure fit between implant and implant holder.

- Axial window accommodates autogenous bone graft or bone graft substitute to allow fusion to occur through the cage.
- X-ray markers allow 3D visualization and radiological identification.



- Pyramidal teeth anchor in the adjacent vertebral body endplates, providing resistance to implant migration and reducing the risk of cage expulsion.

Thoracic -Lumbar Cage (PLIF)



Features

- Maximized contact area provides maximum space for bone graft and vascularization with optimal load bearing surface area.
- Perforated structure for bone ingrowth and through growth.
- Roughened surface promotes integration and bone ongrowth.

Indications

- Narrow lumbar spinal canal
- Pseudarthrosis or failed arthrodesis
- Degenerative spondylolisthesis
- Spondylolisthesis with stenosis
- Degenerative disc disease and spinal instability



Thoracic -Lumbar Cage (PLIF)



- Pyramidal teeth on superior and inferior surfaces ensure good primary stability and reduce the risk of cage migration.

- X-ray markers allow 3D visualization and radiological control of graft density.
- Bevelled leading end facilitates insertion and spares the endplates without any drilling or cutting required.



Transforaminal Lumbar Interbody Fusion Cage (TLIF)



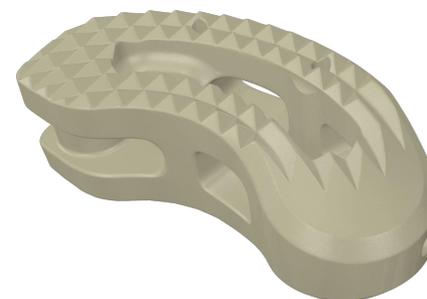
Features

- Bullet nose design for self-distracting allows for ease of insertion.
- Self-leading rails design on the surface to guide and turn the cage into the desired position.
- Connecting post permits the pivoting mechanism in combination with the applicator.

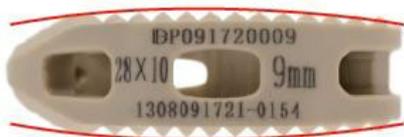
Indications

Indications are lumbar and lumbosacral pathologies in which segmental spondylodesis is indicated:

- Degenerative disc diseases and spinal instabilities
- Revision procedures for post-discectomy syndrome
- Pseudarthrosis or failed spondylodesis
- Degenerative spondylolisthesis
- Isthmic spondylolisthesis



Transforaminal Lumbar Interbody Fusion Cage (TLIF)



- Large axial window accommodates more autogenous bone graft in additional groove.
- Two X-ray markers help to visualize the implant height under radiographic control.

- Lordotic angle 5° to restore the natural lordotic curve.

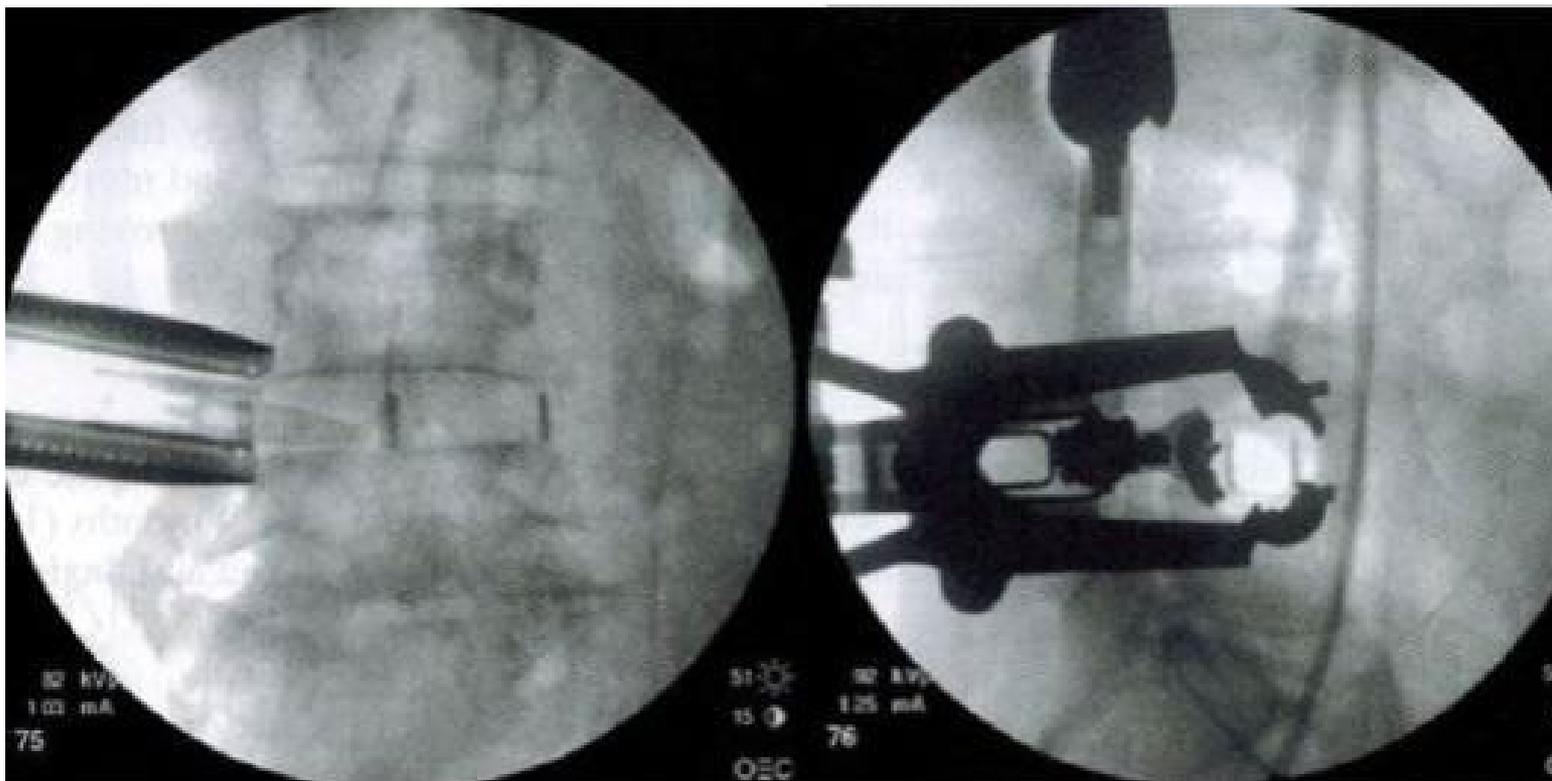


TLIF Applicator

- One applicator for insertion of implant and trial.
- Applicator allows a controlled and guided insertion based on the pivoting option.
- Applicator is designed for minimally invasive surgeries.

Transforaminal Lumbar Interbody Fusion Cage (TLIF)

Clinical Case



Intra-operation

Transforaminal Lumbar Interbody Fusion Cage (TLIF)

Clinical Case



Post-operation

Oblique Lateral Interbody Fusion Cage (OLIF)

Indications

Lumbar pathologies with indicated segmental spondylodesis:

- Degenerative disc diseases and spinal instabilities
- Revision procedures for post-discectomy syndrome
- Pseudoarthrosis or failed spondylodesis
- Degenerative spondylolisthesis
- Isthmic spondylolisthesis



Oblique Lateral Interbody Fusion Cage (OLIF)

- Three lordotic angles: 5° , 10° and 20° , restore spinal physiological lordosis.



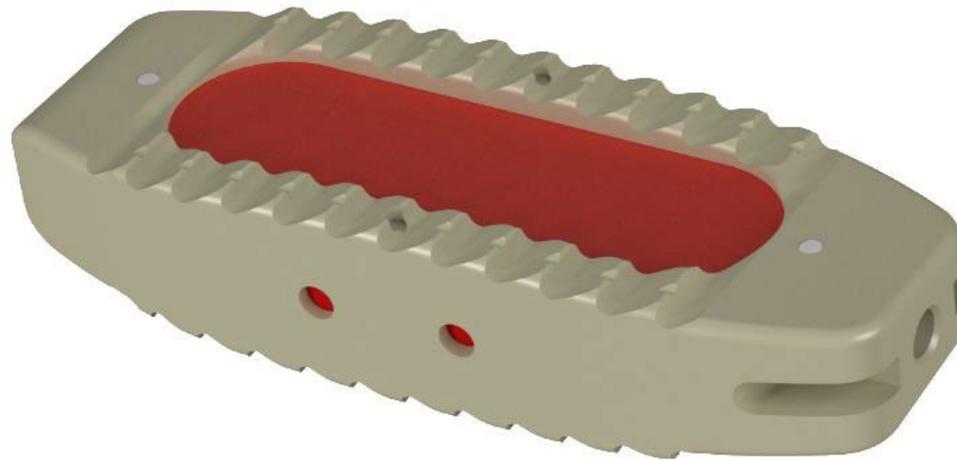
- 5 lengths and 11 heights.



Oblique Lateral Interbody Fusion Cage (OLIF)

Large Central Window

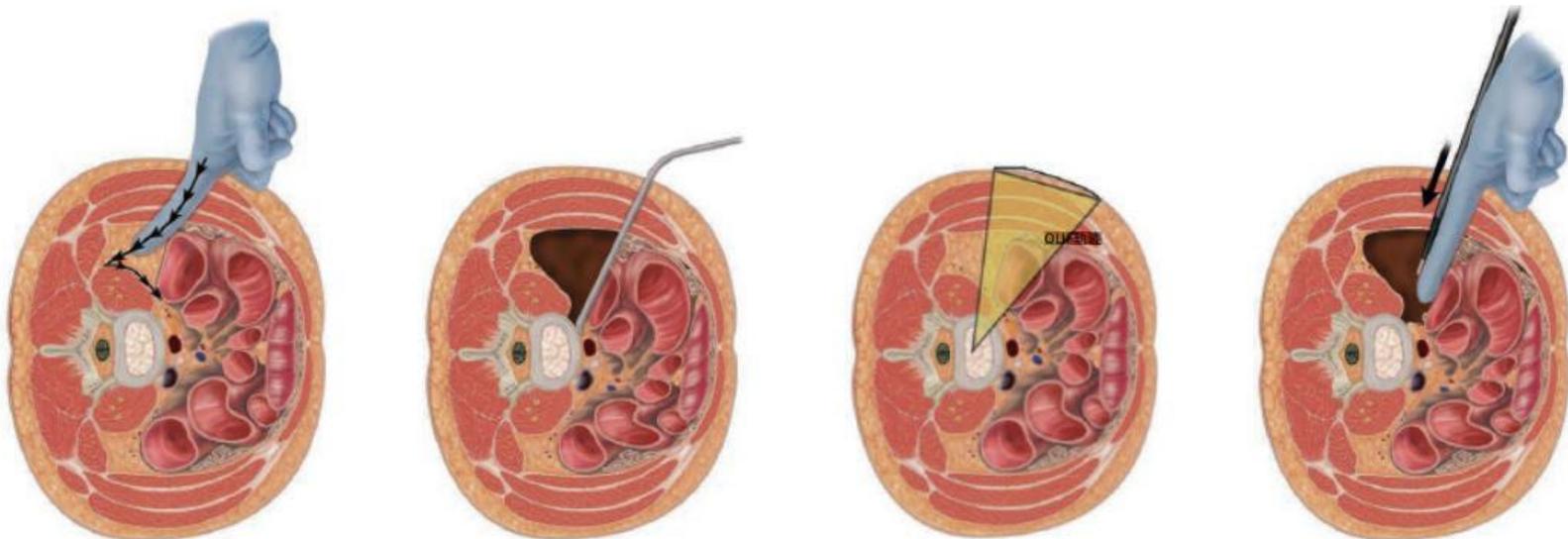
- Accommodates autogenous bone graft or bone graft substitute to allow fusion to occur through the cage.



Oblique Lateral Interbody Fusion Cage (OLIF)

Approach

- OLIF cage is inserted through the lumbar oblique lateral approach.



Oblique Lateral Interbody Fusion Cage (OLIF)

OLIF Plate and Screw

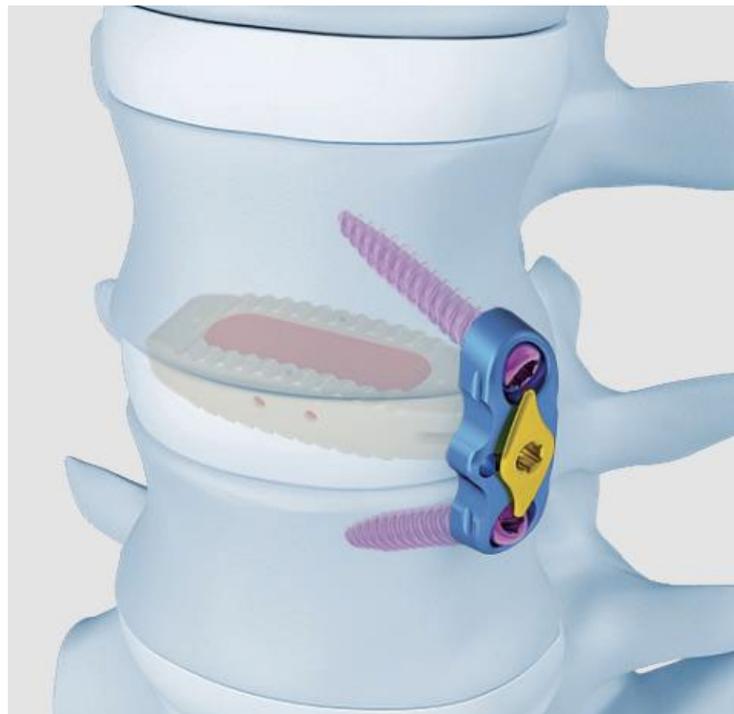


OLIF Plate, 2 holes

Length: 28/34mm

OLIF Plate, 4 holes

Length: 30/32/34/36/38mm



Locking Screw for 2 Holes OLIF Plate, self-drilling, fixed angle

Diameter: 5.5/6.0/6.5 mm, Length: 20-50mm

Locking Screw for 4 Holes OLIF Plate, self-drilling, fixed angle

Diameter: 5.5/6.0/6.5 mm, Length: 30-50mm

Locking Screw for OLIF 2 Holes Plate, cannulated, fixed angle

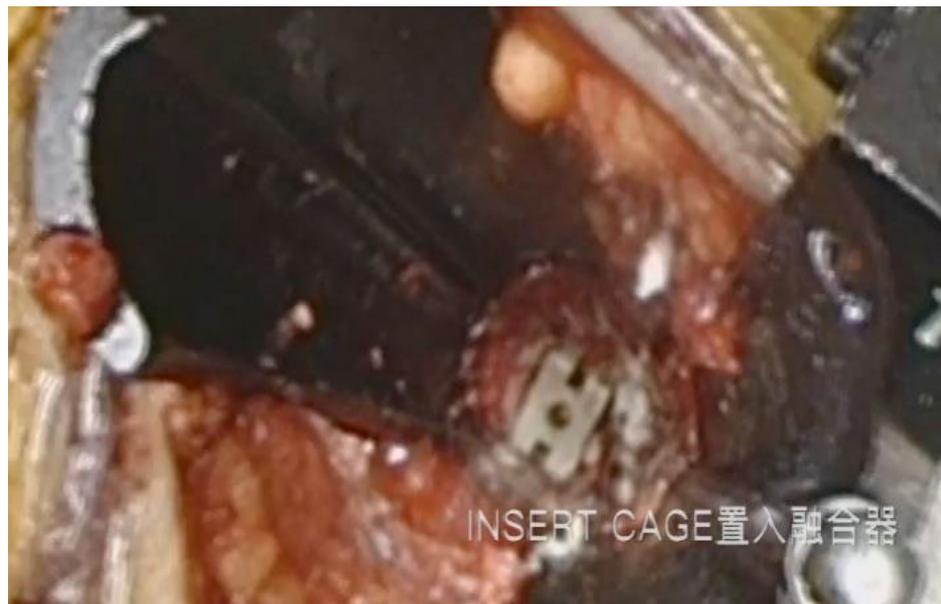
Diameter: 6.5mm, Length: 40-50mm

Oblique Lateral Interbody Fusion Cage (OLIF)

Insert Cage



FIG. 10. Illustration of OLIF technique, showing placement of interbody fusion implant. Image provided by Medtronic, Inc.



Oblique Lateral Interbody Fusion Cage (OLIF)

Clinical Case

Pre-operation

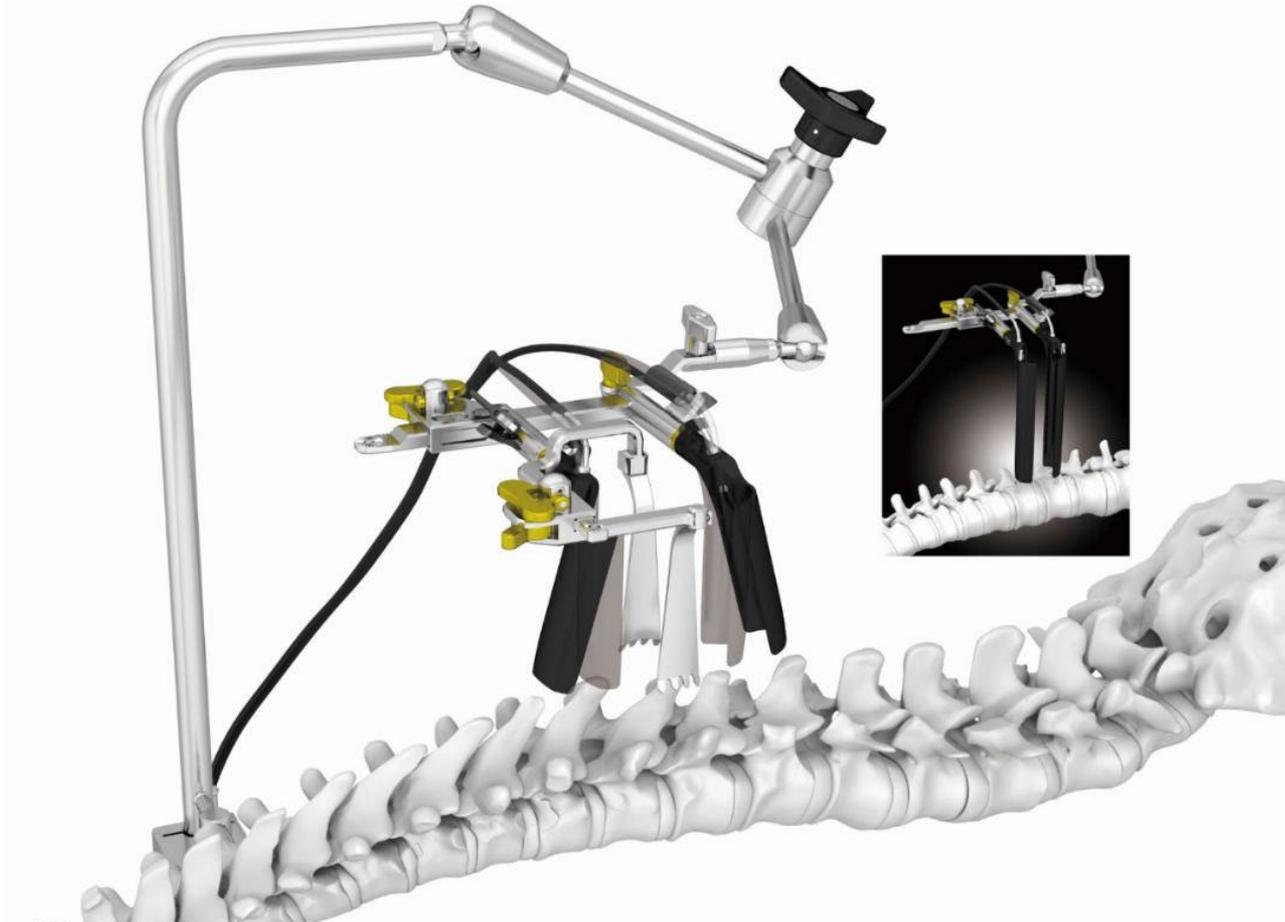


Post-operation

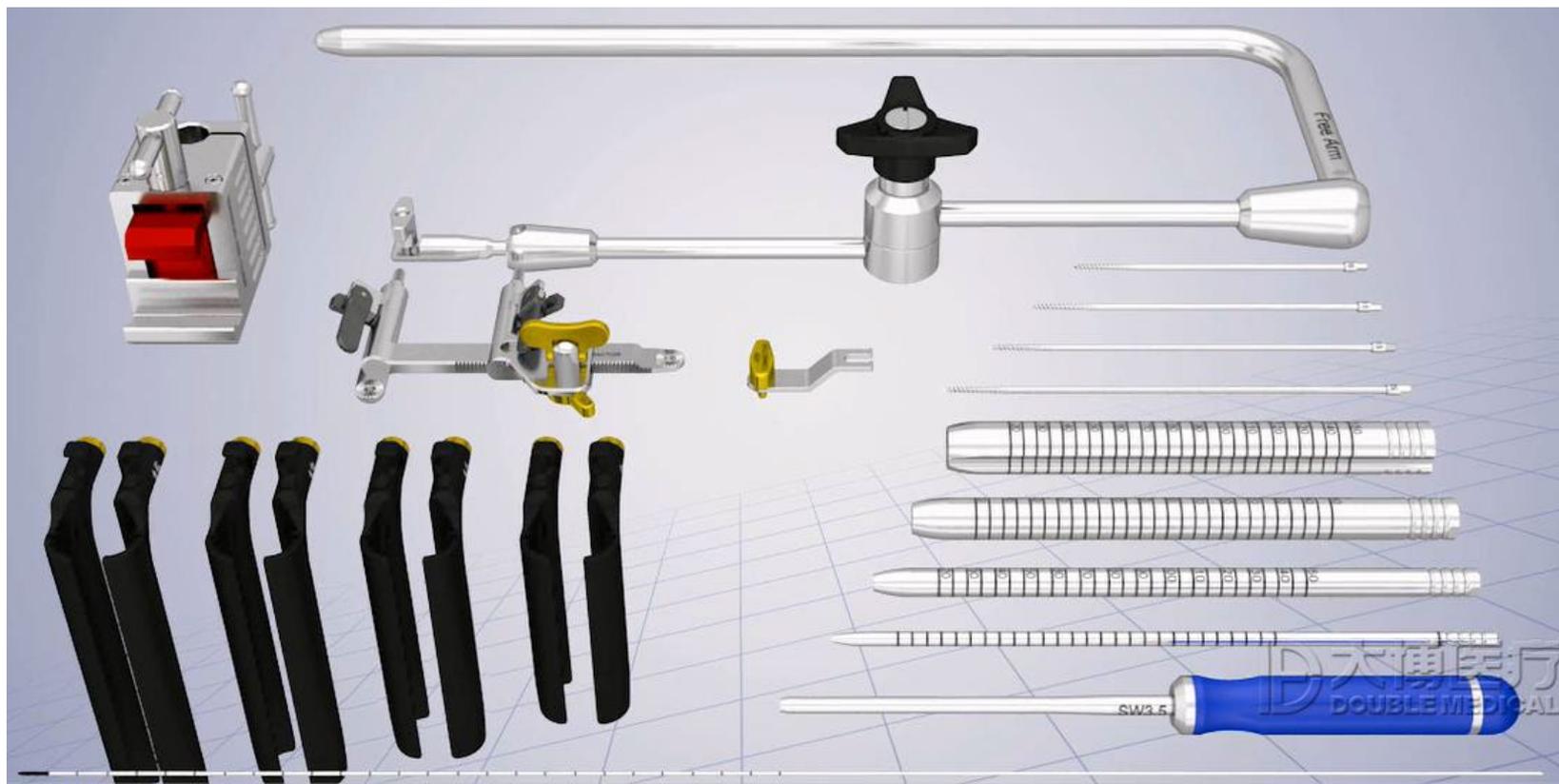


PROXIMAMENTE

MIS Anterolateral Spine Access System



MIS Anterolateral Spine Access System



MIS Anterolateral Spine Access System

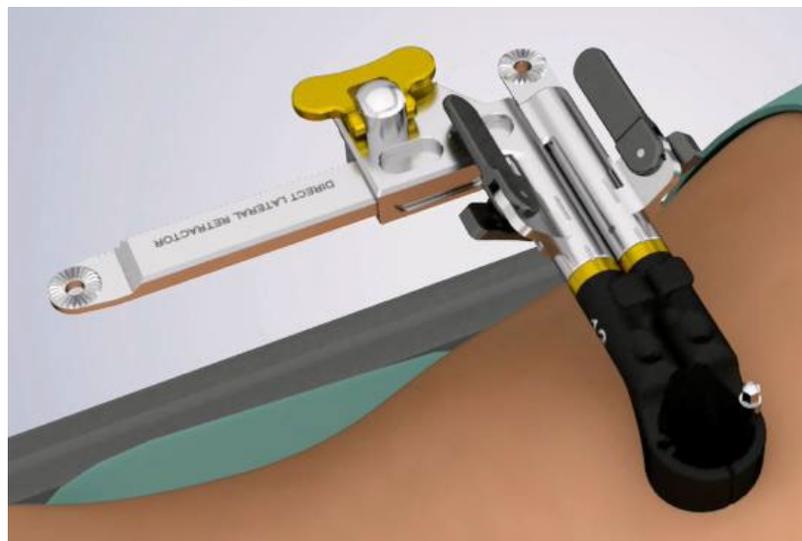
Retractor Length

90/110/130/150mm



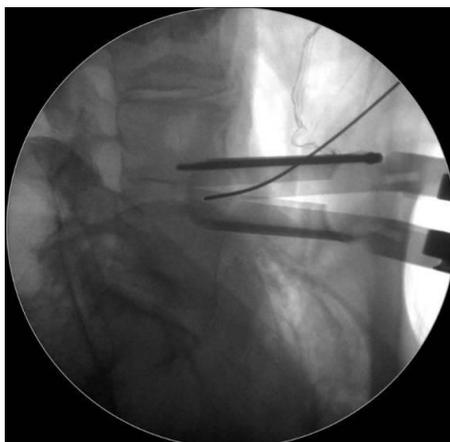
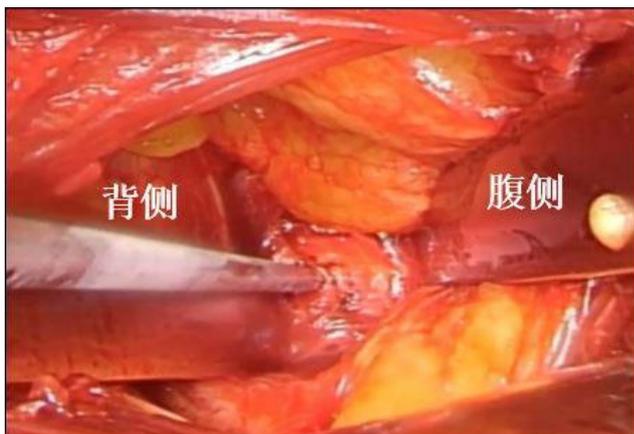
MIS Anterolateral Spine Access System

Surgical Procedure



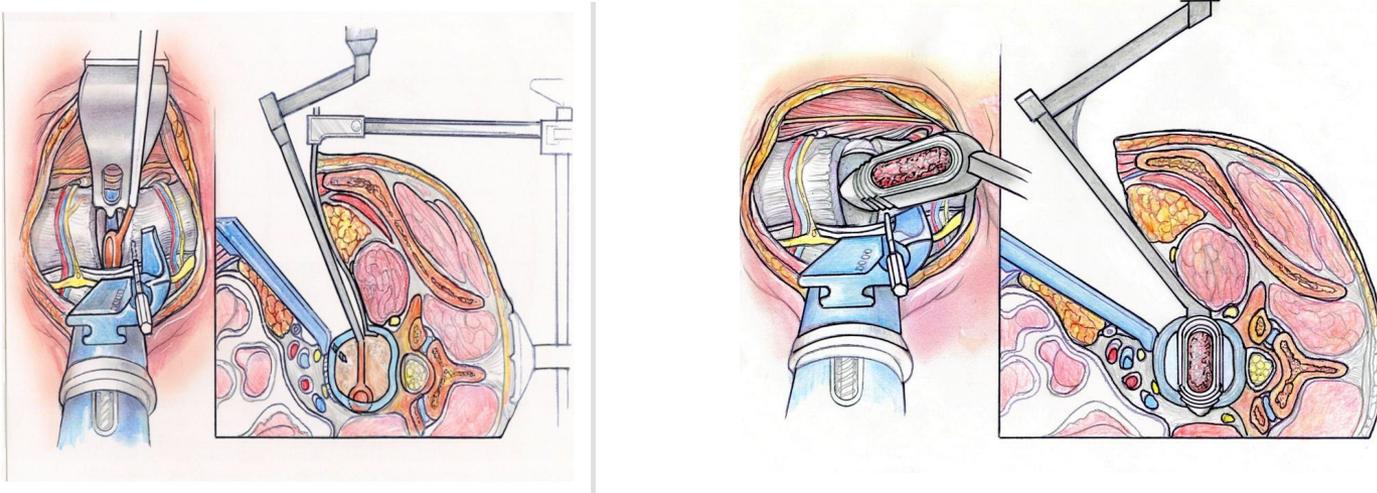
MIS Anterolateral Spine Access System

Intraoperation



PROXIMAMENTE

ATP Instrument Set



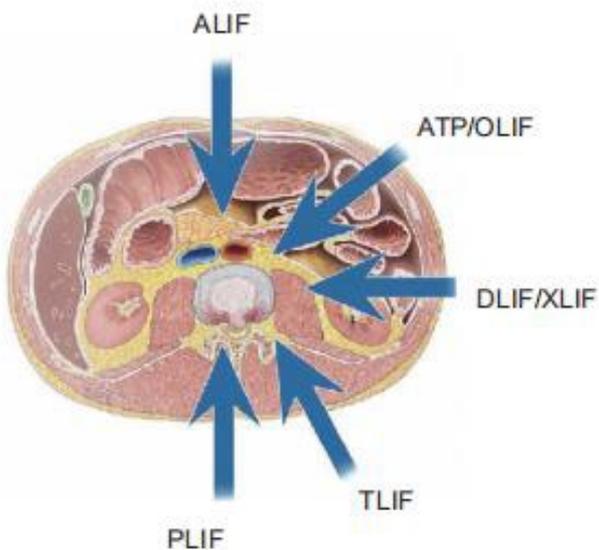
- ATP is an supplementary instrument set for OLIF Instrument Set. It's supposed to be used with OLIF Instrument Set.
- ATP Instrument Set is divided in two part: one part is angled instruments for disc preparation including curette, end plate rasp, cobb, etc., another part is angled trial implants and holder for cage.

ATP Instrument Set



- The angled instruments not only avoid the high iliac block, but also reduce irritation the psoas.
- During the disc preparation, the end plate can be protected according to the position of handle and injuries to the contralateral nerve root can also be avoided.
- When inserting the trial implant and the cage, by observing whether the handle is perpendicular to the vertebral body, the cage can be inserted into the appropriate position

ATP Instrument Set



Solution	Approach	Muscle Distraction	Risk of Damaging the Psoas Nerve Plexus	Nerve Monitoring	Implantation Direction	Retraction Direction	Channel
XLIF/DLIF	Through the psoas	Split and damage the muscle	High	Yes	Perpendicular	Cyclic	Traditional channel, complex structure, consistent shape and direction, without optimal adjustment
OLIF	The anterior edge of the psoas	Uncertain distraction direction	Medium	No	Oblique	Cyclic/ Cephalocaudal	
ATP	The anterior edge of the psoas	Retract perpendicularly along the muscle fiber	Low	No	Perpendicular	Ventrodorsal	Asymmetric retractor used manually or automatically, optimal adjustable direction and strength

Titanium Mesh for Cervical Spine



Features

- Available in different heights for individual pathology and anatomical conditions.
- Open architecture to allow bony fusion and optimize bony ingrowth.
- Parallel end rings designed to restore normal spinal alignment and resist subsidence.

Indications

- Cervical fracture
- Tumor
- Instability of cervical vertebral



Titanium Mesh for Thoracic-Lumbar Spine



Features

- Available in different heights for individual pathology and anatomical conditions.
- Open architecture to allow bony fusion and optimize bony ingrowth.
- Parallel end rings designed to restore normal spinal alignment and resist subsidence.

Indications

- Trauma
- Tumor
- Spondylolisthesis
- Degenerative disc disease



Product Overview

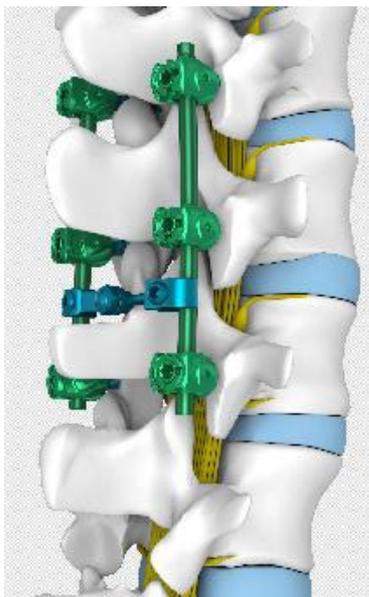
Solutions for Anterior and Posterior Thoracic-Lumbar



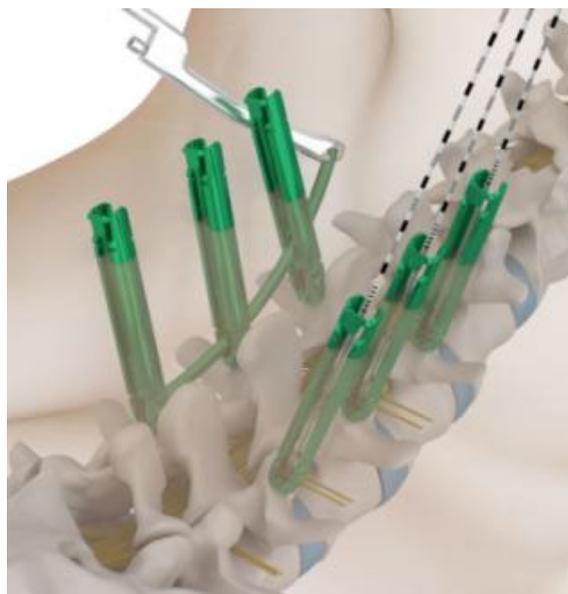
- Anterior Thoracic-Lumbar Spine System
- TINA Universal System
- TINA MIS System
- TINA Derotation System



TINA Spine System



TINA Universal System

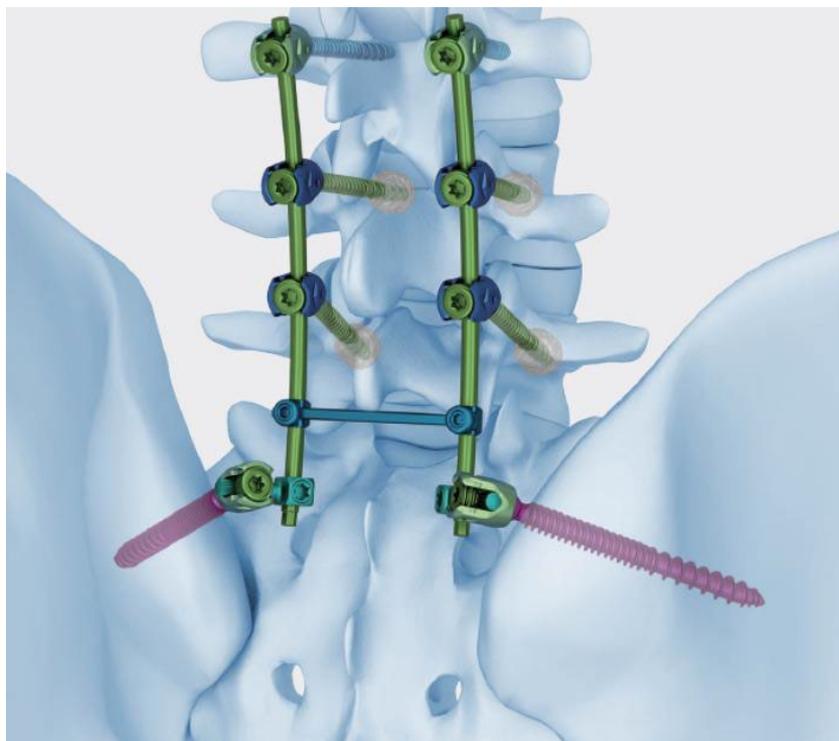


TINA MIS System



TINA Derotation System

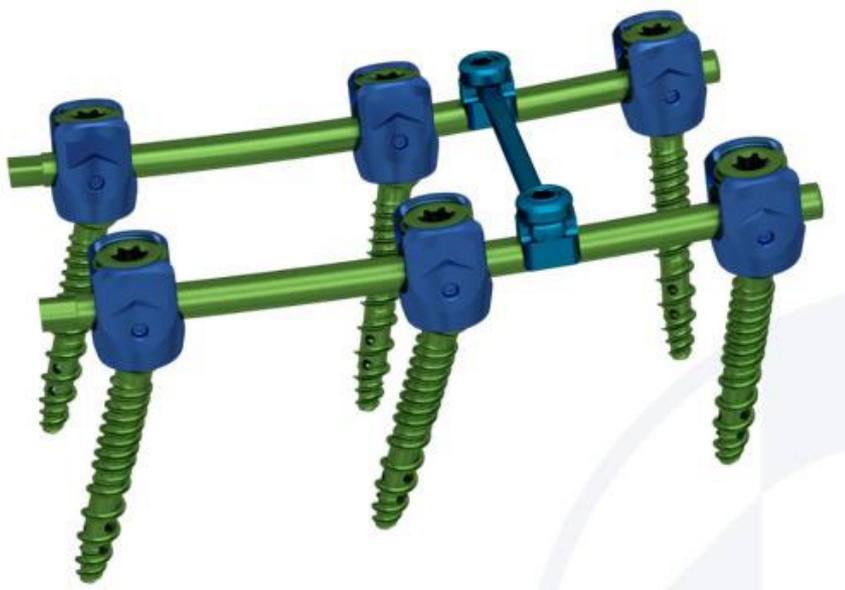
TINA Universal System 5.5/6.0



Indications

- Trauma
- Tumor
- Stenosis
- Deformities
- Pseudarthrosis
- Spondylolisthesis
- Failed previous fusion
- Degenerative disc disease

TINA Universal System 5.5/6.0



Polyaxial
Pedicle Screw



Polyaxial
Reduction Screw

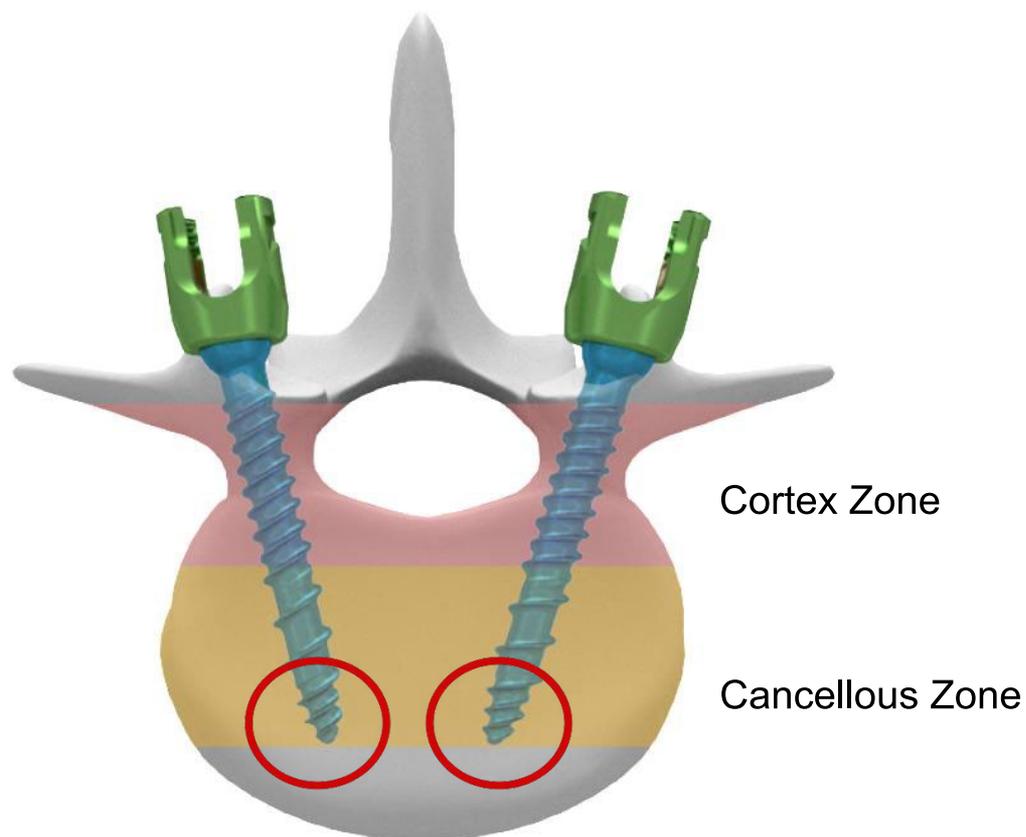


Monoaxial
Pedicle Screw



Monoaxial
Reduction Screw

TINA Universal System 5.5/6.0



Threaded tip achieves bicortical fixation.

TINA Universal System 5.5/6.0

- Total of 50° polyaxiality.



- Big concave groove for better instrument grip.



- Reverse angle design for better grasping.
- Saddle locking block with serrated thread enhances the holding force between rod and screw, and minimizes the cross threading.

TINA Universal System 5.5/6.0



One-step

- Allows for complete fixation in one step.



Two-step

- Outer nut locks angulation of head; inner nut locks rod to screw.



- The snap-on transconnector is a preassembled implant.
- The locking screw uses a SW3.5 hexagonal recess which minimizes drive stripping during final tightening.



- Provides more possibilities of treatments for surgeons in different cases.

TINA Universal System 5.5/6.0

Clinical Case



Pre-operation

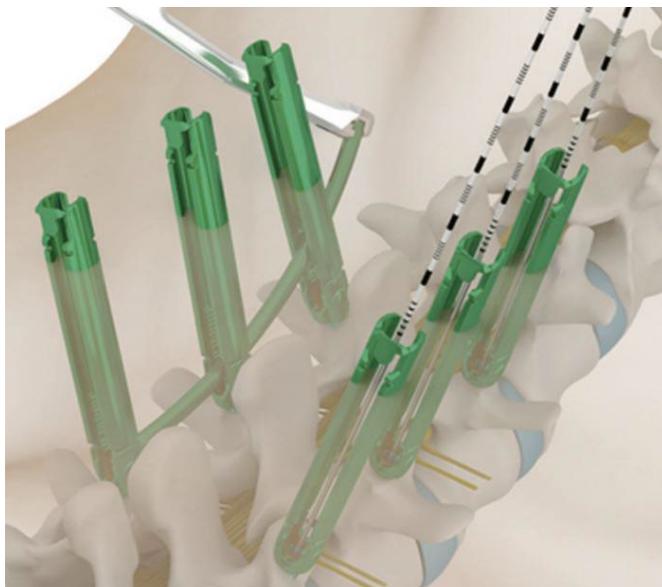
TINA Universal System 5.5/6.0

Clinical Case



Post-operation

TINA MIS System 5.5



One-step

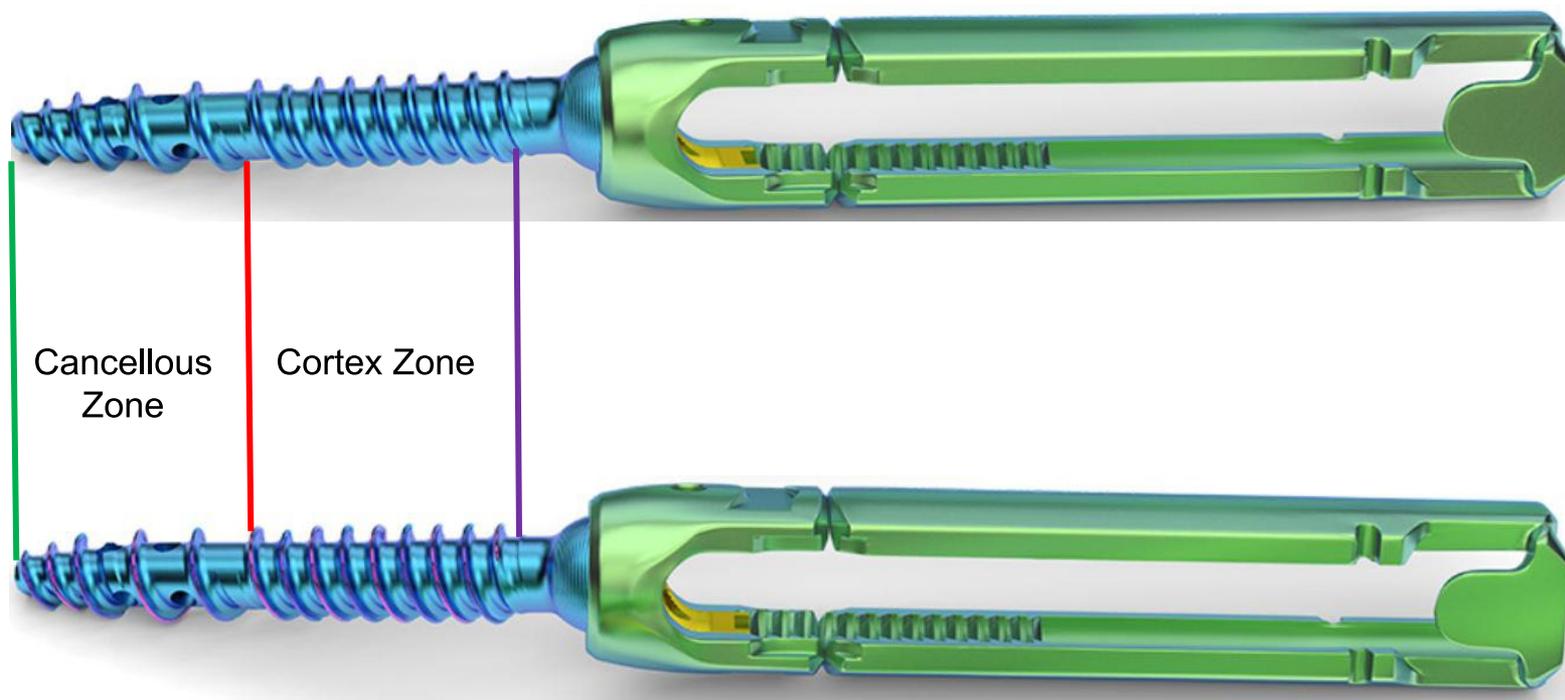


Two-step

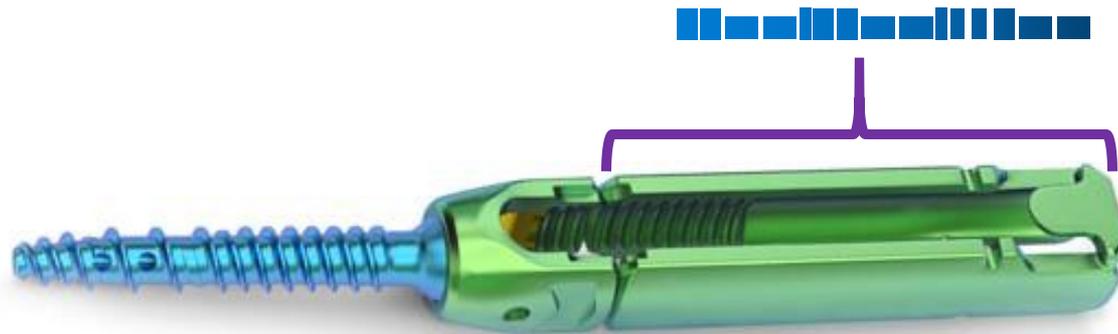
Indications

- Trauma: no nerve injury, thoracolumbar vertebral fracture that doesn't need laminectomy and indications for internal fixation of operation, including A, B1, B2 of AO classification
- Minimally invasive fixation of lower lumbar

TINA MIS System 5.5



TINA MIS System 5.5

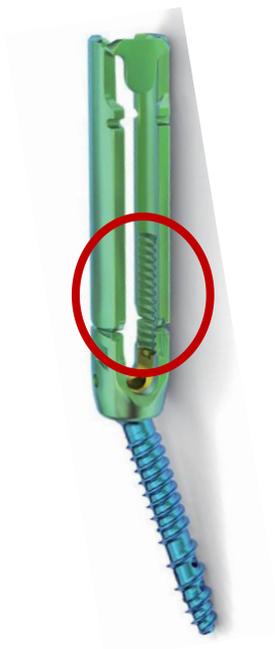


- APPLY TO PATIENTS WITH DIFFERENT **LONG TAP SIZES AS 50, 80, AND 110MM.**

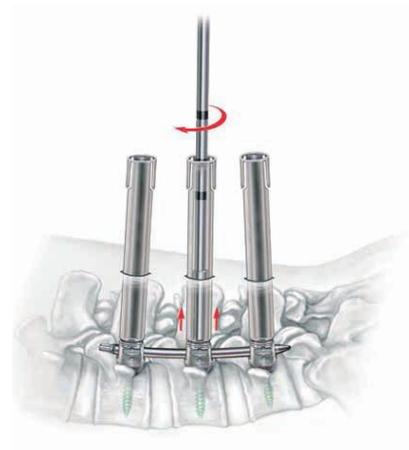
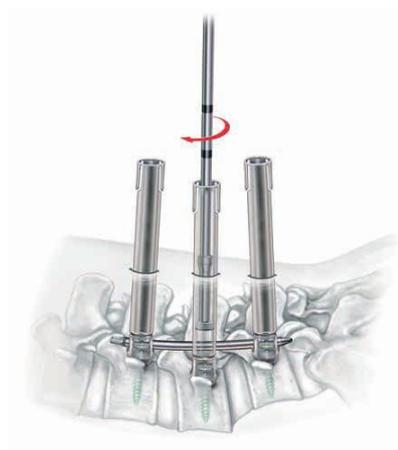


- 6 holes for bone cement and enhance fixation.

TINA MIS System 5.5



- 20mm distance for spondylolisthesis reduction.



- When inserting locking nut into the tap, it will naturally press the rod and achieve the reduction (reduction distance=20mm).

TINA MIS System 5.5

Clinical Case

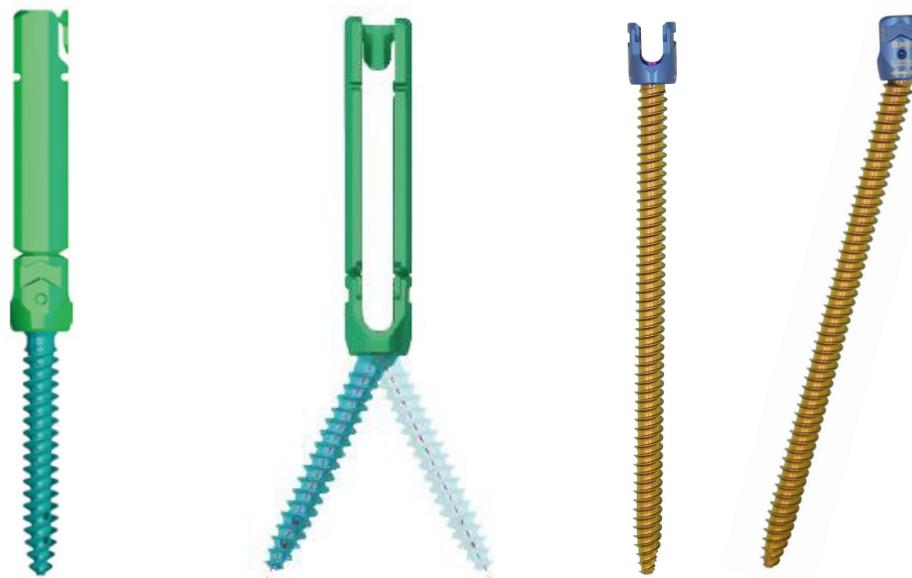


Pre-operation



Post-operation

Uni-Planar Pedicle Screw



Saggital Plane	fixed	variable
Horizontal Plane	variable	fixed
Purpose	rod insertion	derotation

TINA Derotation System



Features

- The great compatibility: offering the whole vertebra derotation, segmental derotation or combination of this two derotation.
- The excellent operation: easy and fast connect to anchor points, secure connect between linking instruments.

Indication

- Scoliosis

TINA Derotation System



Reduction Instrument

- Reduction handle can insert rods into end of the screw through derotation quick stick.

Derotation Quick Stick

- Connects to TINA Screws, providing fulcrum for derotation operation.
- When derotation instrument needs to connect with screws, derotation quick stick can be used.
- After connecting, derotation operation can be done on one spiral segment or more.



TINA Derotation System



Derotation Quick Stick Frame

- Fix derotation instrument on derotation modular clamp.

Derotation Alignment Fork

• Quick connection of derotation instrument and spiral alignment can be achieved at the initial stage. This connection method allows slight movement of derotation instrument on sagittal plane.



TINA Derotation System

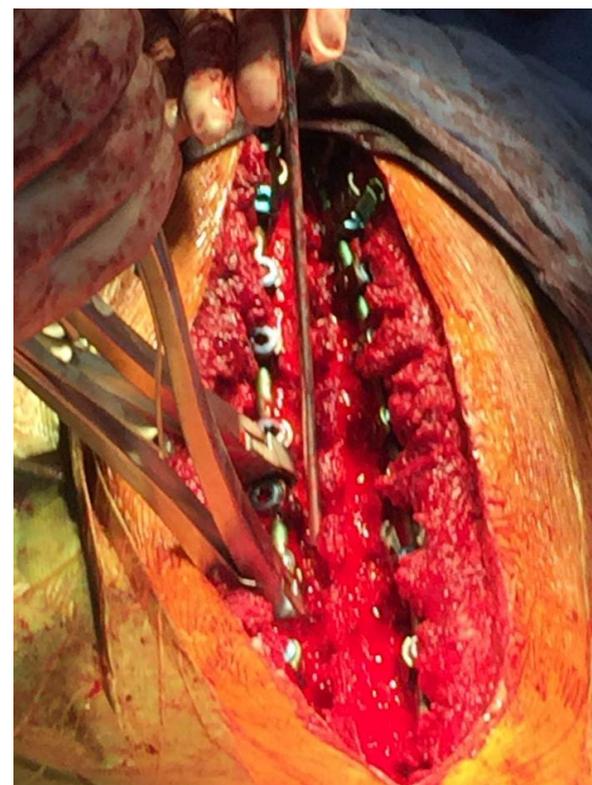
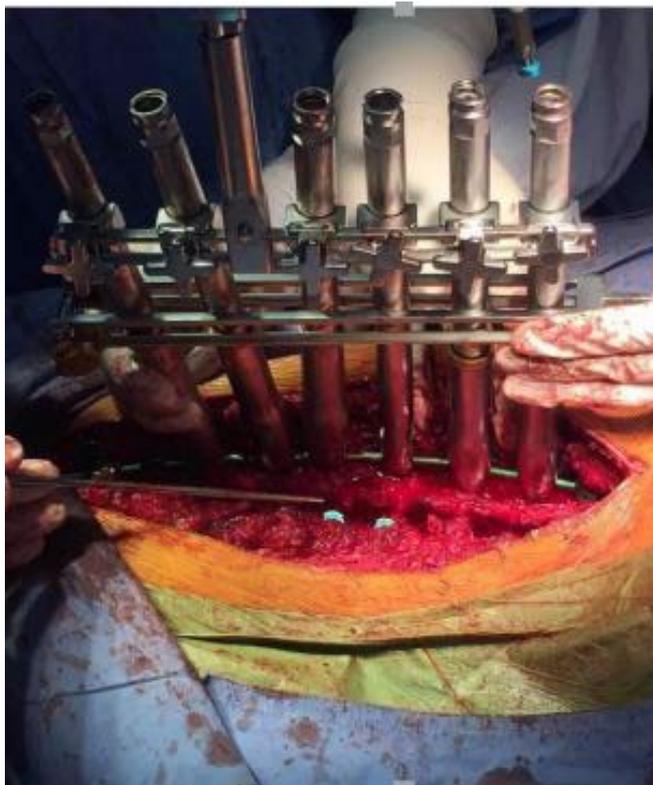
Clinical Case



Pre-operation

TINA Derotation System

Clinical Case



Intra-operation

TINA Derotation System

Clinical Case



Post-operation

We are doing more...



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