



**SURGICAL
INNOVATIONS**



CATALOG

MIS Z-PEDICLE SCREW SYSTEM



MIS Z-Pedicle Screw System

PRECISION - READY FOR SURGERY

The MIS Z-Pedicle Screw System offering surgeons an ideal solution for their indication specific needs. It includes pre-sterilized implants, only one instrument set and an innovative screw design enabling surgeons to efficiently and cost effectively address the most common pathologies. The pedicle screws with lengthening shaft in combination with the patented SnapOff-technique provide a rigid connection between the shaft and the implant and offer the possibility of a direct manipulation without an assembly of additional instruments. Z-Medical implants stand for precision, are single sterile packaged and ready for surgery.

Product Features

MIS Z-Pedicle Screws

The MIS Z-Pedicle Screws are color coded and available in different diameter, length and axialities: Polyaxial, Quattroaxial for fractures and Quattroaxial trans. for scoliosis application.

1. Slim multifunctional lengthening shaft

with only 12mm diameter. All screw types are preloaded and rigidly connected to the implant. With and through this, all surgical steps are performed. The rod can be inserted along the long guiding notch or through a separate incision.

2. Pre-assembled Ini (set screw)

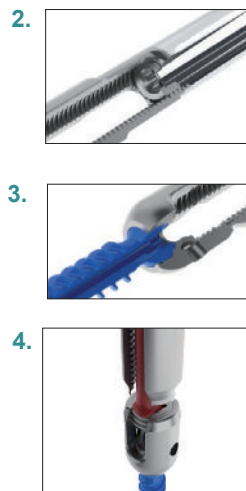
With the pre-assembled Ini (set screw), all manipulations are performed. A reduction of the rod, uprighting in fractures, or derotation of deformities is achieved directly with the Ini and the long reduction thread without additional instruments.

3. Screw Geometry

All screws are self-drilling and self-tapping due to it's unique tip and thread design. A multi conical double thread design increases stability in the pedicle and offers ease of insertion.

4. Patented Z-SnapOff-Technique

A secure and burr-free separation from the lengthening shaft is possible by a simple rotation of the Tulip Breaker.



Z-Medical | MIS Z-Pedicle Screw

Diameter [Ø]	5* / 6 / 7 / 8 mm
Length [mm]	35 / 40 / 45 / 50 / 55* mm
Screw Design	Multi-conical double thread, self drilling and self tapping
Axialities	Polyaxial, Quattroaxial, Quattroaxial trans.
Ini [set screw]	Pre-assembled
Reduction of rod	Via reduction thread, 45mm
Manipulation	Via lengthening shaft
Uprighting fractures	Via reduction thread
Derotation of deformities	Via reduction thread
Connection Implant / Shaft	Connected by Z-SnapOff technique
Break off Implant / Shaft	With patented Tulip Breaker



* Ø 5mm is not available in length 55mm

Indications

MIS Z-PEDICLE SCREW SYSTEM

The MIS Z-Pedicle Screw System is intended to provide immobilization and stabilization of spinal segments for posterior, non-cervical pedicle fixation in skeletally mature patients as an adjunct to fusion for the following indications:

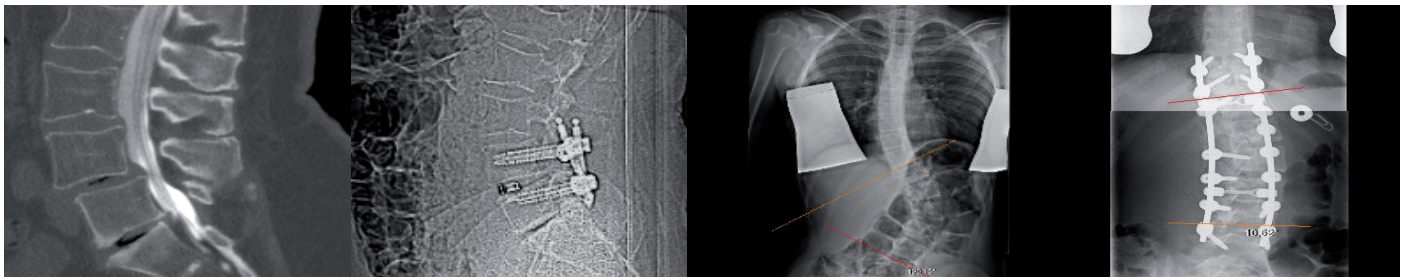
- degenerative disc disease (DDD) (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies)
- spondylolisthesis (grade 3 and 4) at L5-S1
- trauma (e.g. fracture or dislocation)
- spinal stenosis
- curvatures (e.g. scoliosis, kyphosis, and/or lordosis)
- tumor
- pseudoarthrosis
- failed previous fusion



See IFU and the surgical technique before you use the implants and instruments!

Case Example

DEGENERATIVE / TRAUMA / DEFORMITY / TUMOR



The reduction in fracture- and the derotation in scoliosis treatments are achieved directly with the pre-assembled set screw, the long reduction thread and the especially designed quattroaxial and quattroaxial trans. pedicle screws respectively.

MIS Z-Pedicle Screw | Special Screws for Fracture and Deformity Treatments

Quattroaxial Pedicle Screw (Fracture)

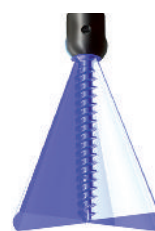


5° / 50°

The quattroaxial screws have the mobility of a polyaxial screw in the medial-lateral direction and of a monoaxial screw in the cranio-caudal direction.

This additional degree of freedom facilitates the rod insertion and minimizes undesired tension offering the surgeon the possibility of direct reduction.

Quattroaxial trans. Pedicle Screw (Deformity)



50° / 5°

The quattroaxial trans. screws have the mobility of a polyaxial screw in the cranio-caudal direction and of a monoaxial screw in the medial-lateral direction.

This additional degree of freedom facilitates the rod insertion and minimizes undesired tension offering the surgeon the possibility for derotation of the vertebrae.

Z-Medical | Patented Pedicle Screws

MIS Z-Pedicle Screw with pre-assembled set screw (Ini) and innovative SnapOff-technique provide a rigid connection between the shaft and the implant and offer the possibility of a direct manipulation without an assembly of additional instruments.

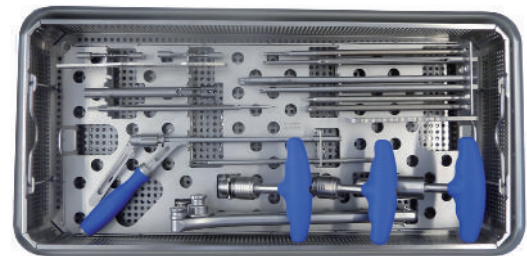
- + * **Polyaxial Pedicle Screw for degeneration**
- * **Quattroaxial Pedicle Screw for fractures**
- * **Quattroaxial trans. Pedicle Screw for deformities**



Z-Medical | Instrument Set

Only one instrument set and an innovative screw design enable surgeons to efficiently and cost effectively address the most common pathologies.

- + * **Optimal intra-operative control**
- * **Reduction of surgical steps**
- * **Extension & revision surgeries**



Z-Medical | Who we are

Z-Medical GmbH + Co. KG is a privately held and financed medical device company that designs, develops, manufactures and markets innovative implants and surgical instruments in the section of spine, hand & foot and arthroscopy. The company's U.S. subsidiary is based in Atlanta, Georgia.

INNOVATION

- * Own developments
- * In-house production
- * Fulfilling international standards
- * Patented internationally

TECHNOLOGY

- * CAD-Software including FEM-simulation
- * High-Tech CNC-technology
- * Implant assembly under controlled conditions
- * Made in Tuttlingen, Germany

INTEGRITY

- * Professional
- * Faithful with our customers and business partners

PRECISION

- * Engineered and manufactured
- * Single sterile packaged
- * Immediately available for surgery

Z-Medical | Indications

The implant and instrument system was designed for a minimally-invasive approach for less tissue disruption, blood loss and trauma.

- + * Minimally invasive and open surgeries
- * Approved for Degeneration, Deformity, Trauma and Tumor



Z-Medical | Sterile Packaging

All Z-Implants are single sterile packaged and ready for surgery. Surgeons / OR staff get more flexibility and additionally achieve a maximum of safety for themselves, the hospital and the patient.

- + * Reduces rate of infection
- * Cost effective
- * Meets compliance requirements



WebOps | Service and Logistic Partner

WebOps Logistics offers Z-Medical Warehousing, Distribution and Inventory Management solution as well as a web-based software platform to help streamline order initiation, asset tracking, inventory visibility and operations processes which ultimately leads to a high level of customer service for Z-Medical clients.

CUSTOMER SERVICE

- * Obtain Purchase Orders
- * Create Replenishments
- * Manage Inventory
- * Bookkeeping and Invoicing

INVENTORY MANAGEMENT

- * Inventory Traceability
- * Barcoding
- * Instrumentation Kit Assembly
- * Cycle Counts

DISTRIBUTION SERVICES

- * Shipping and Receiving
- * Order Fulfillment
- * Kit/Set Management
- * Instrument Inspection and Light Cleaning

STORAGE & SHIPPING

- * Climate Controlled Facility
- * Secure 24/7
- * Scalable storage space
- * International and Domestic Shipping

MIS Z-Pedicle Screws

STERILE, TITANIUM

Ø L	Polyaxial 50°	Quattroaxial 5°/50°	Quattroaxial trans. 50°/5°
5 x 35	A06 051_US	A06 151_US	A06 451_US
5 x 40	A06 052_US	A06 152_US	A06 452_US
5 x 45	A06 053_US	A06 153_US	A06 453_US
5 x 50	A06 054_US	A06 154_US	A06 454_US
6 x 35	A06 061_US	A06 161_US	A06 461_US
6 x 40	A06 062_US	A06 162_US	A06 462_US
6 x 45	A06 063_US	A06 163_US	A06 463_US
6 x 50	A06 064_US	A06 164_US	A06 464_US
6 x 55	A06 065_US	A06 165_US	A06 465_US
7 x 35	A06 071_US	A06 171_US	A06 471_US
7 x 40	A06 072_US	A06 172_US	A06 472_US
7 x 45	A06 073_US	A06 173_US	A06 473_US
7 x 50	A06 074_US	A06 174_US	A06 474_US
7 x 55	A06 075_US	A06 175_US	A06 475_US
8 x 35	A06 091_US	A06 191_US	A06 491_US
8 x 40	A06 092_US	A06 192_US	A06 492_US
8 x 45	A06 093_US	A06 193_US	A06 493_US
8 x 50	A06 094_US	A06 194_US	A06 494_US
8 x 55	A06 095_US	A06 195_US	A06 495_US


Z-Rods

STERILE, TITANIUM, Ø 5.5 mm

L.	pre-bent	L.	pre-bent
30	A06 350_US	85	A06 361_US
35	A06 351_US	90	A06 362_US
40	A06 352_US	95	A06 363_US
45	A06 353_US	100	A06 364_US
50	A06 354_US	110	A06 366_US
55	A06 355_US	120	A06 368_US
60	A06 356_US		
65	A06 357_US		
70	A06 358_US		
75	A06 359_US		
80	A06 360_US		

Instruments

STERILE, STAINLESS STEEL Ø 1.5

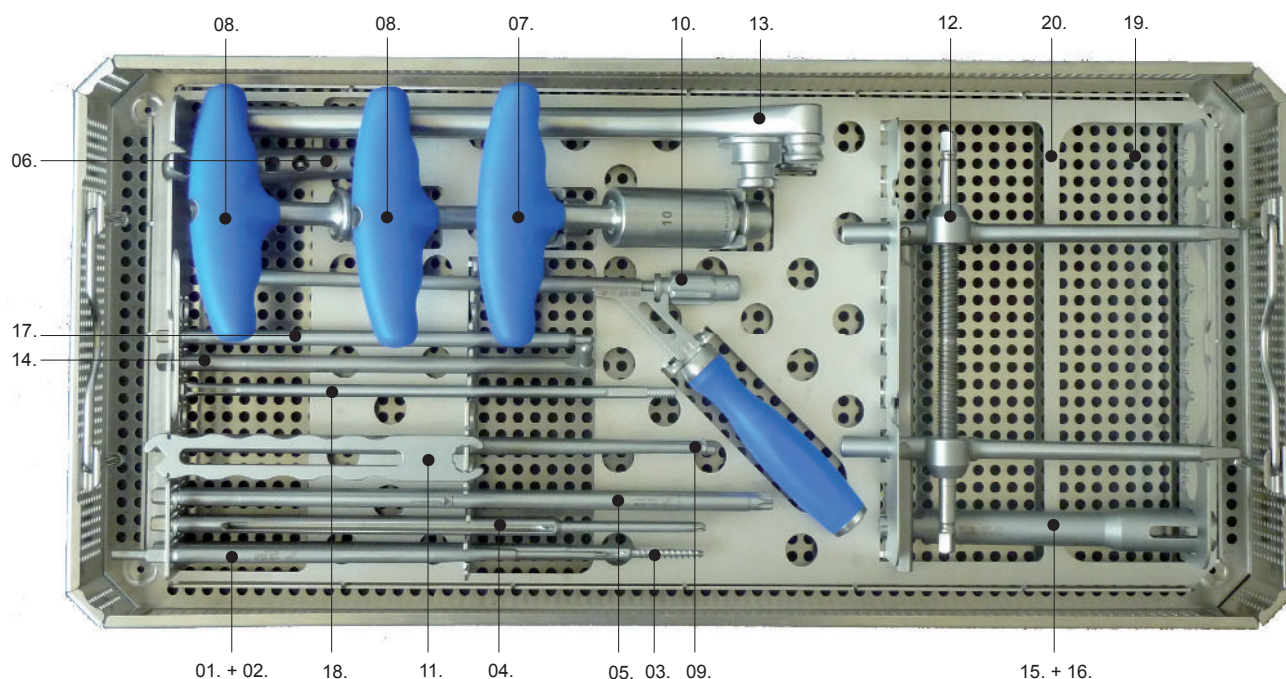
	Art. No.	Description	Q
	A06 081 S	Z-Guide Wire, round / round, single use	2

L. = Length in mm
 Ø = Diameter in mm
 Art. No. = Article Number
 Q = Packaging unit

L.	straight
130	A06 390_US
140	A06 391_US
150	A06 392_US
160	A06 393_US
180	A06 394_US
200	A06 395_US
220	A06 396_US
240	A06 397_US
260	A06 398_US
280	A06 399_US
300	A06 400_US

L. = Length in mm
 Ø = Diameter in mm
 Art. No. = Article Number
 Q = Packaging unit

Instrument Set OVERVIEW



Basic Instruments		Art. No.	Quantity
01.	Awl	A06 383	2
02.	Awl Inner Part	A06 309	2
03.	Thread Drill	A06 380	1
04.	Screwdriver Pedicle Screw	A06 006	2
05.	Screwdriver Ini	A06 005	2
06.	Screwdriver Handle	C07 909	1
07.	T-handle with Torque Limiter	A06 007	1
08.	T-handle with Ratchet	A06 374	2
09.	Tulip Breaker	A06 370	2
10.	Rodinserter	A06 300	2
11.	Counter Support	A06 373	2
12.	Distraction- and Compression Instrument (Dico)	A06 500	1
13.	Rodbender	A06 381	1
Revision Instruments			
14.	Screwdriver Revision	A06 310	1
15.	Tulipadapter	A06 306	1
16.	Clamping Tube	A06 389	1
17.	Revision Instrument Inner Part	A06 384	1
18.	Chuck Rod	A06 385	1
Container			
19.	Rack	A06 508	1
20.	Perforated Container	A06 488	1



Warehousing, Distribution and Inventory Management



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