HumanTech Spine

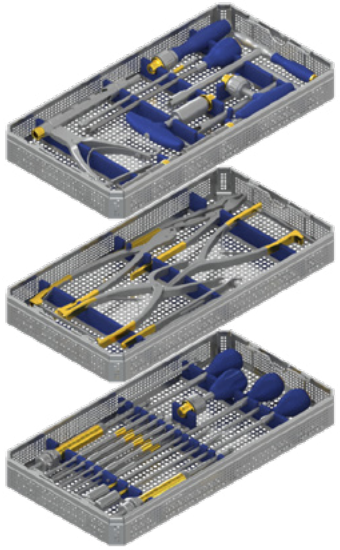
VENUS®
Scoliosis

Scoliosis Correction

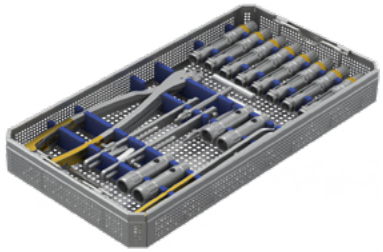
Brochure & Surgical Technique

Content

Made in Germany



VENUS® Fixation

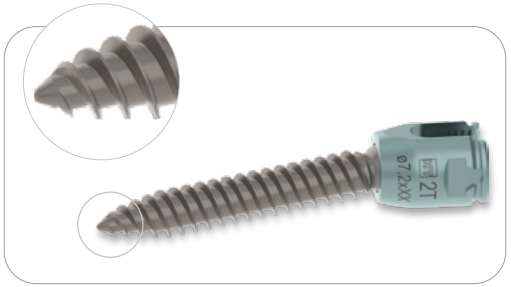


VENUS® Scoliosis

The VENUS® Scoliosis system is an additional kit for use with the VENUS® Fixation system.

Product-specific advantages

The VENUS® Scoliosis System instruments are designed to allow correction and reduction of three-dimensional deformities of the thoracolumbar spine from posterior. The system is designed to allow a correction and reduction of three-dimensional deformities. The correction can be performed on multiple levels in parallel.



Preparing the pedicle

Set the pedicle insertion point. Open the pedicle canal using the Awl.

Note:
The Awl is available with and without stop and also in cannulated form. The variants of the Awl without stop should be used only for the initial preparation of the pedicle. The deeper the preparation is carried out, the larger the core hole will be at the entry point.

Awling and probing

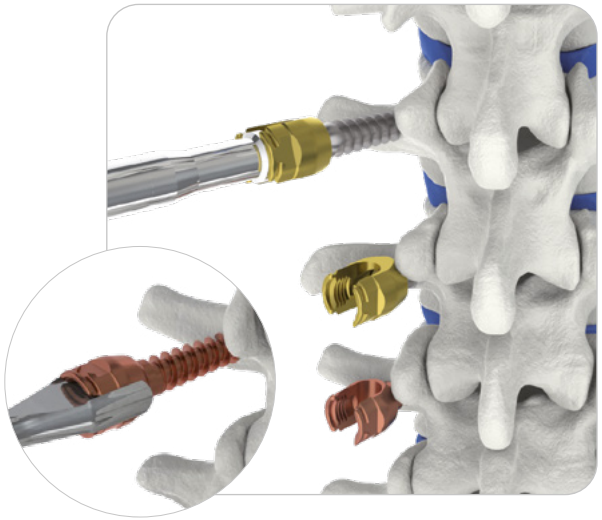
The pedicle canal is awled. Using light pressure, the Pedicle Probe is carefully advanced into the pedicle canal in half rotations.

Note:
There are two types of Pedicle Probe available: straight and curved.

Tapping

All pedicle screws are self-tapping. However, we recommend using taps in cases with dense bone structure. These are available for all screw diameters.

Note:
For 6T screws we offer special taps to prepare cancellous and cortical thread. We always recommend using the tap that corresponds to the diameter of the pedicle screw.

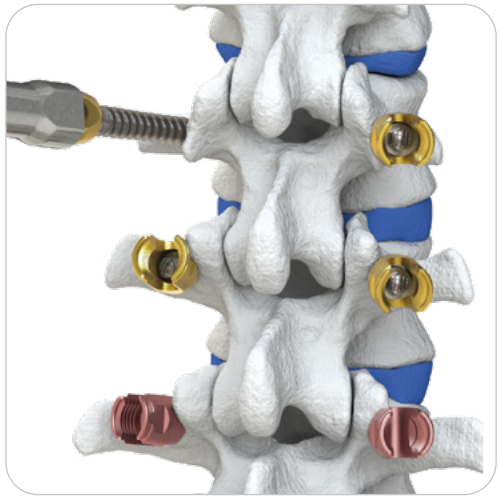


Inserting the pedicle screws I

Monoaxial screw:
The tip of the Monoaxial Screw Driver Ø 5,5 mm clicks into the screw head and secures the screw. The screw is screwed into the pedicle canal.

Note:
It has to be ensured that the recess in the screw head is oriented cranial/caudal in order to succesfully insert the rod.

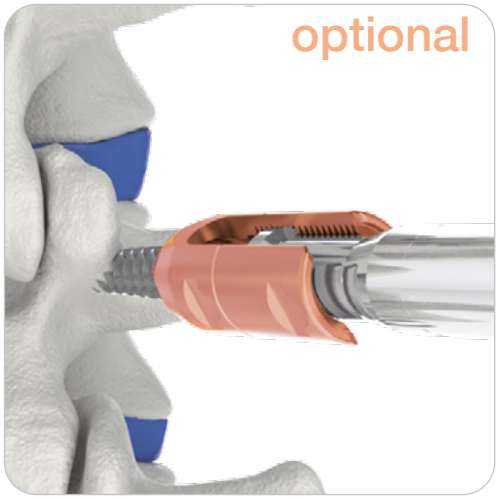
Polyaxial screw:
First, insert the tip of the Polyaxial Screw Driver (inner shaft) into the screw head and attach it to the outer hexagon of the thread shaft. Then connect the outer guide to the screw head by screwing it into the inner thread of the screw head.



Inserting the pedicle screws II

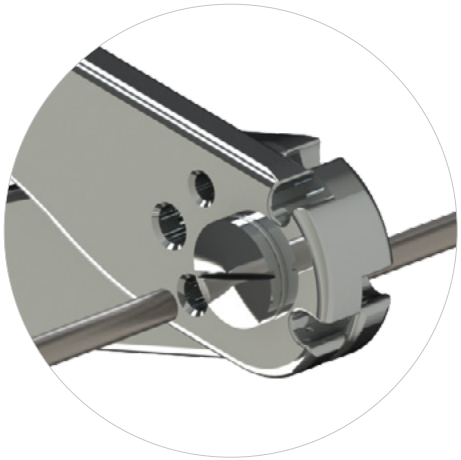
When using the Polyaxial Screw Driver, you must push the locking adapter forward and lock it into the connection geometry. You must also check the button of the locking adapter. (See user information of the Polyaxial Screw Driver.) When using the Polyaxial Screw Inserter, secure the pedicle screw and then feed the guide wire over the screw head. The screw is screwed into the pedicle canal.

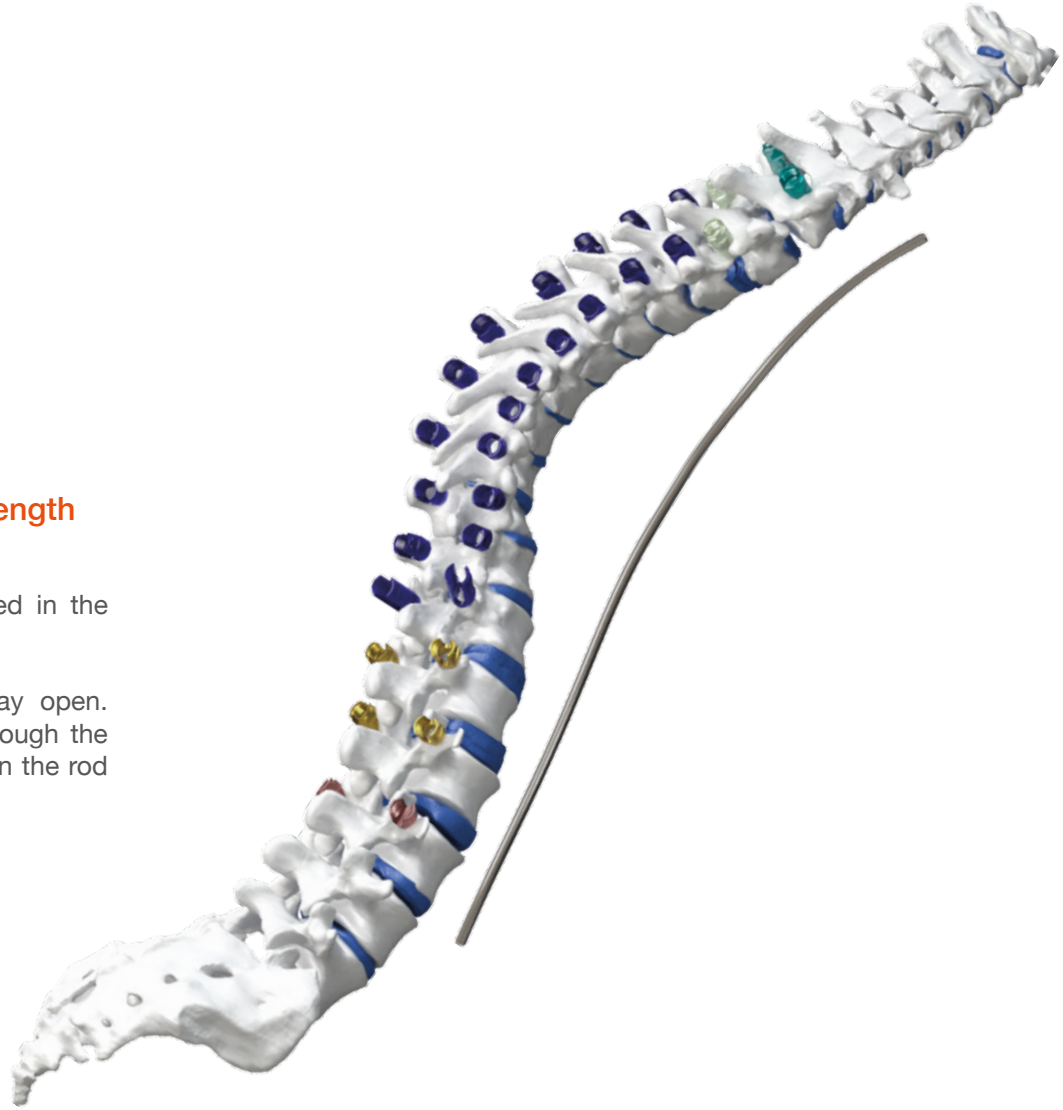
Note:
If desired, use the Reposition Screw Driver afterwards to correct the screw-in depth.



Inserting the long headed screws

In specific situations, such as spondylolisthesis, it might be indicated to use reduction screws. The extended screw head allows the reduction and facilitates the connection between rod and screw in difficult anatomic and surgical conditions. Insert the screws the same way as the standard pedicle screws.





Determining rod length and cutting rods to length

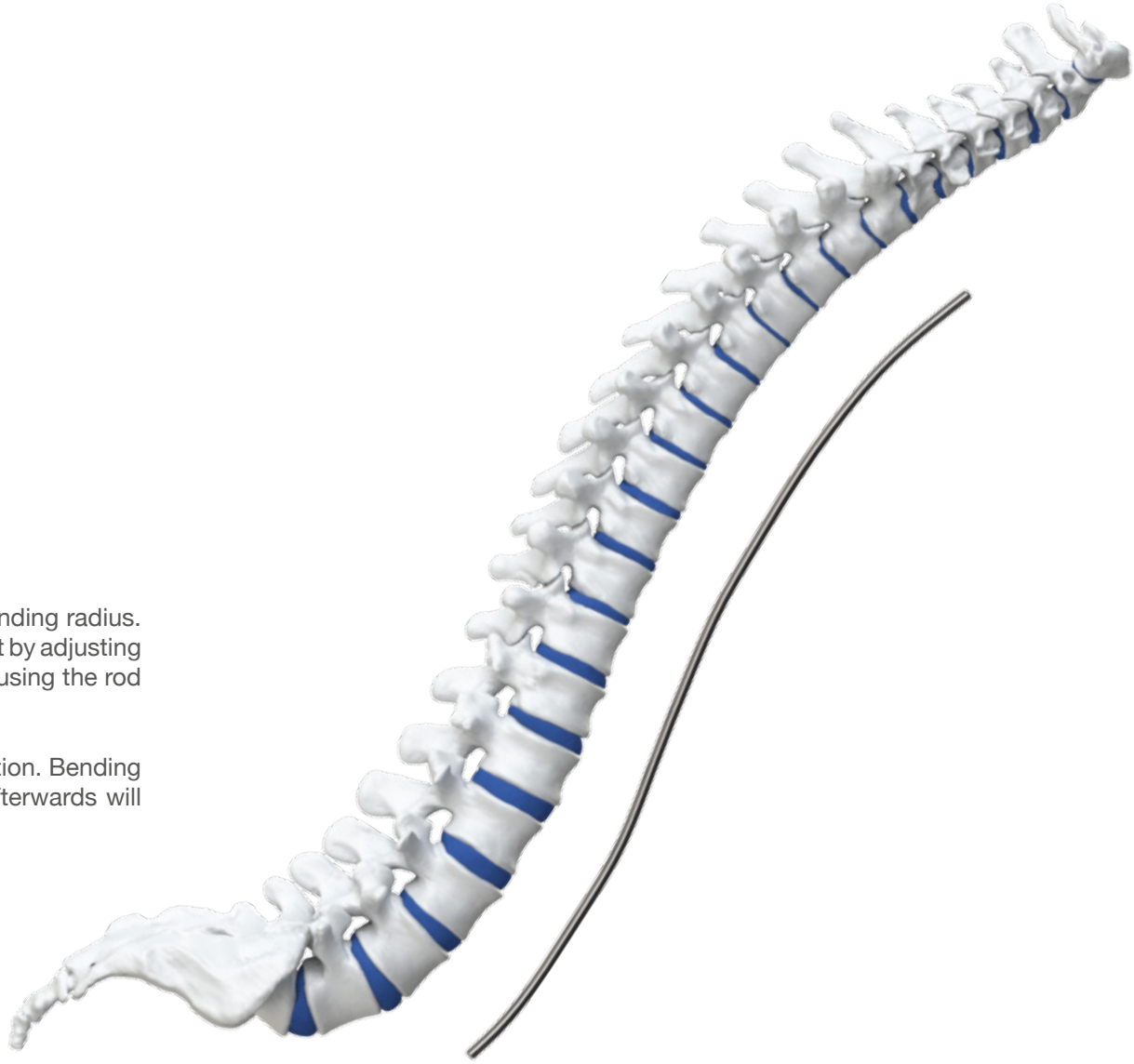
Determine the rod length. A phantom rod is included in the instruments to assist in determining the rod length.

Widen the Rod Cutter so that the rod holders stay open. Depending on the relative diameter, slide the rod through the appropriate holder. With short, sharp pressure, shorten the rod to the intended point.

Bending the rod

Bend the rods with rod benders to fit the corresponding radius. The bending radius can also be set on the instrument by adjusting the bending roll. Insert the rod in the screw heads using the rod inserter, if necessary with manual support.

Note: Do bend a rod at one point only in one direction. Bending the rod at the same point to the other direction afterwards will weaken the rod notably or damage it.

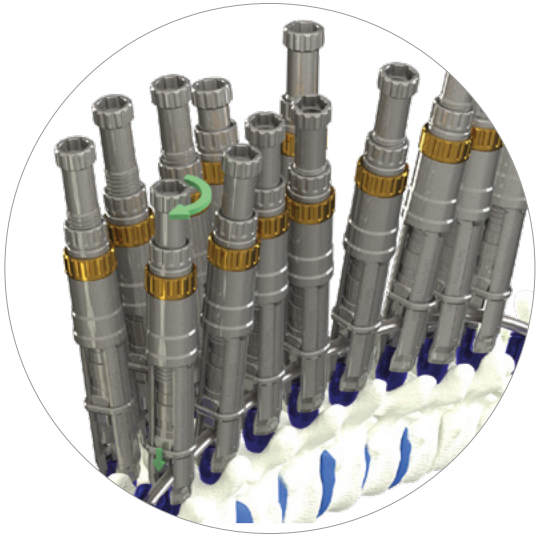


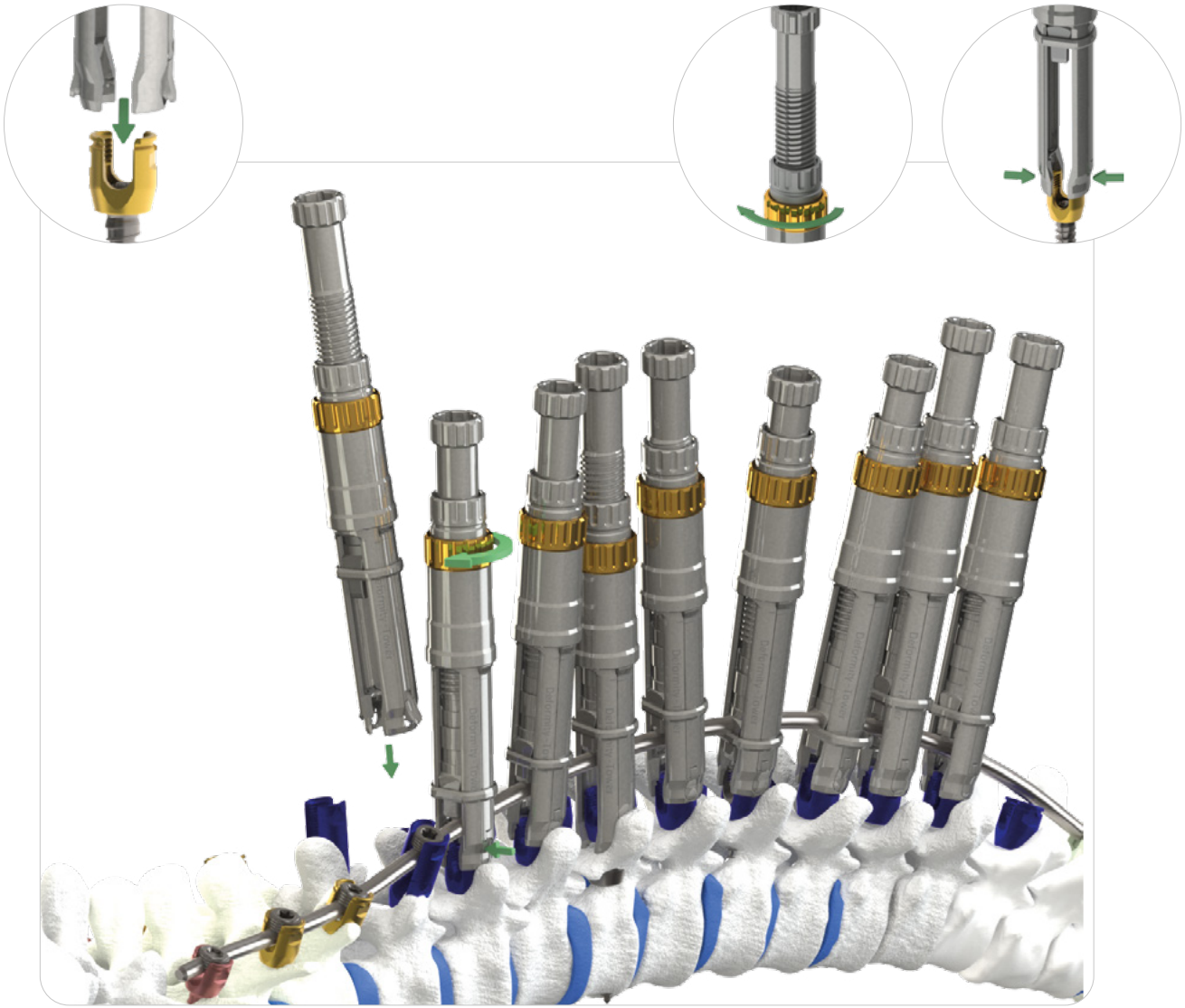
Using the Deformity-Tower

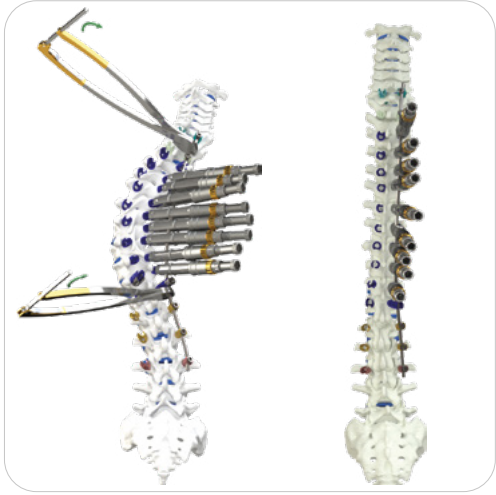
The Deformity-Tower is used for the gentle repositioning of individual segments or for pressing down the rod in the screw heads.
To place the implant, first open the gold fixing screw.

Guide the Deformity-Tower over the rod and implant head until distinct resistance is noticeable. Then lock the connection between the instrument and the implant by turning the golden fixing screw. The instrument is now firmly connected to the implant.

Now turn the transport screw clockwise to move the segment in the direction of the rod or to move the rod into the final position of the screw heads. The positioning of the rod can be performed in steps via multiple Deformity-Towers arranged side by side.



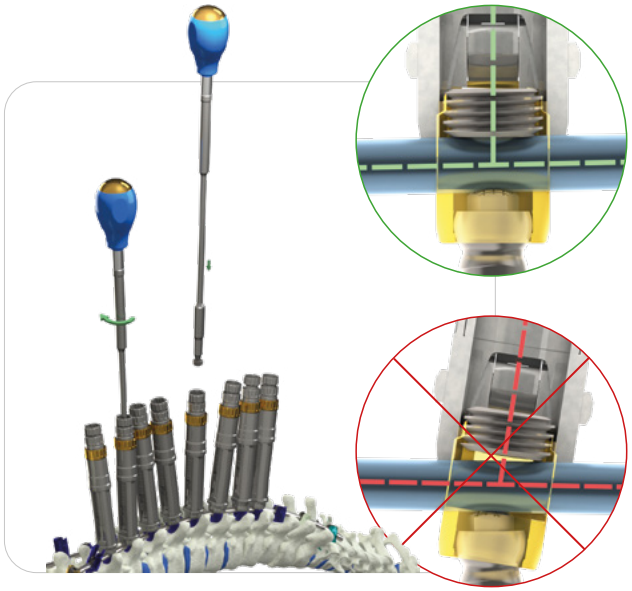




Derotation

The spine derotation can be performed by placing the Derotation Forceps directly at the rod. For this, the rod is inserted at approx. 90° to the final sagittal alignment. The rod is positioned in the cranial and caudal screw heads with the tightened transport screw of the Deformity-Tower. Thereafter, the derotation can be performed using Derotation Forceps.

Note:
For derotation, the relevant segments must be sufficiently mobilised.



Pre-fixing the rod

After correction of the misalignment, fix the rod in the screw heads with the Setscrew using the Set Screw inserter.

Caution:
The Deformity-Tower should be pre-fixed at a right angle to the rod. Cross-threading can result in loosening of the screw-rod connection! The final torque is applied using the MIS Set Screw Driver and the Torque Driver - 13,5.

Using the Approximator Clamp Ø 5.5mm

Optionally, in addition to the Deformity-Tower, the Approximator Clamp Ø 5.5mm can also be used to push the rod into the screw head. The instrument is driven through the implant head until distinct resistance is noticeable. Lock the instrument onto the implant by tilting the locking lever in the direction of the handle cage. Carefully turn the handle clockwise. Reduction of the segment, if necessary, with X-ray checks. Insert the Setscrews and fix the rod in the screw head.

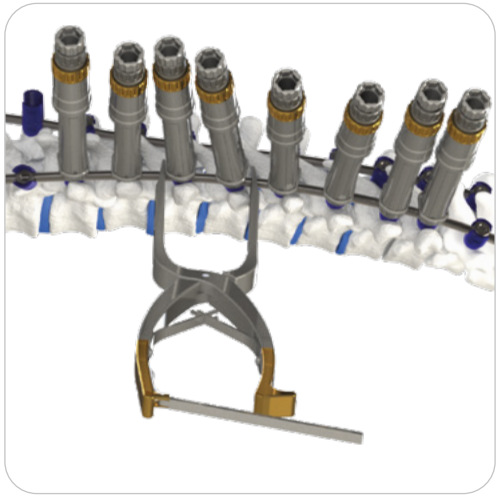
Note:
The Approximator Clamp Ø 5.5mm and the screw head must then be connected gently and without force. If in doubt, remove the Approximator Clamp Ø 5.5mm and reposition it. Ensure that the implant rod, when using the Approximator Clamp Ø 5.5mm, overlaps on the screw head on both sides by at least 5 mm, so that the reduction forks are in full contact with the rod.

Using the Persuader Forceps Style

If required, the Persuader Forceps Style can also be used to reposition the spine or to position the rod in the screw head. The instrument is engaged through the implant head until distinct resistance is noticeable. Press the handle to lock the instrument onto the implant. Connection is guaranteed as soon as the first tooth of the toothed rod is locked onto the anterior handle. Pressing the handle further repositions the spine and positions the rod into the screw head rod holder. The position is maintained by the toothed rod. Ensure that the implant rod, when using the persuader, overlaps on both sides of the screw head by at least 5 mm, so that the reduction fork is in full contact with the rod.

Using the Rocker Ø 5.5mm

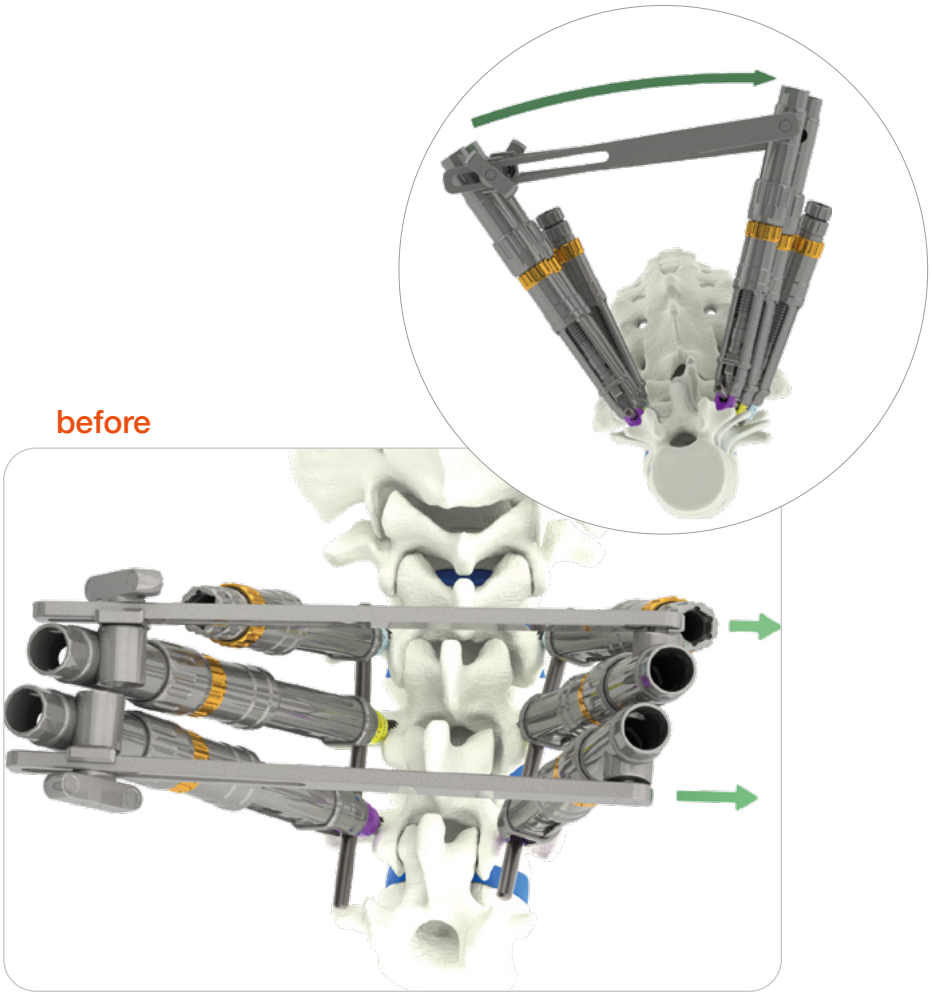
Using the Rocker Ø 5.5mm the rod can be guided into the rod notches of the implant. The Rocker Ø 5.5mm is positioned on the screw head by inserting the fork ends into the lateral grooves of the screw head.
Crank the shaft until it sits on the rod. Then continue to crank it carefully, making visual and, if necessary, X-ray checks until the rod and the screw head are interlocked.
Now insert the Polyaxial/Monoaxial Setscrew and fix the rod in the screw head.

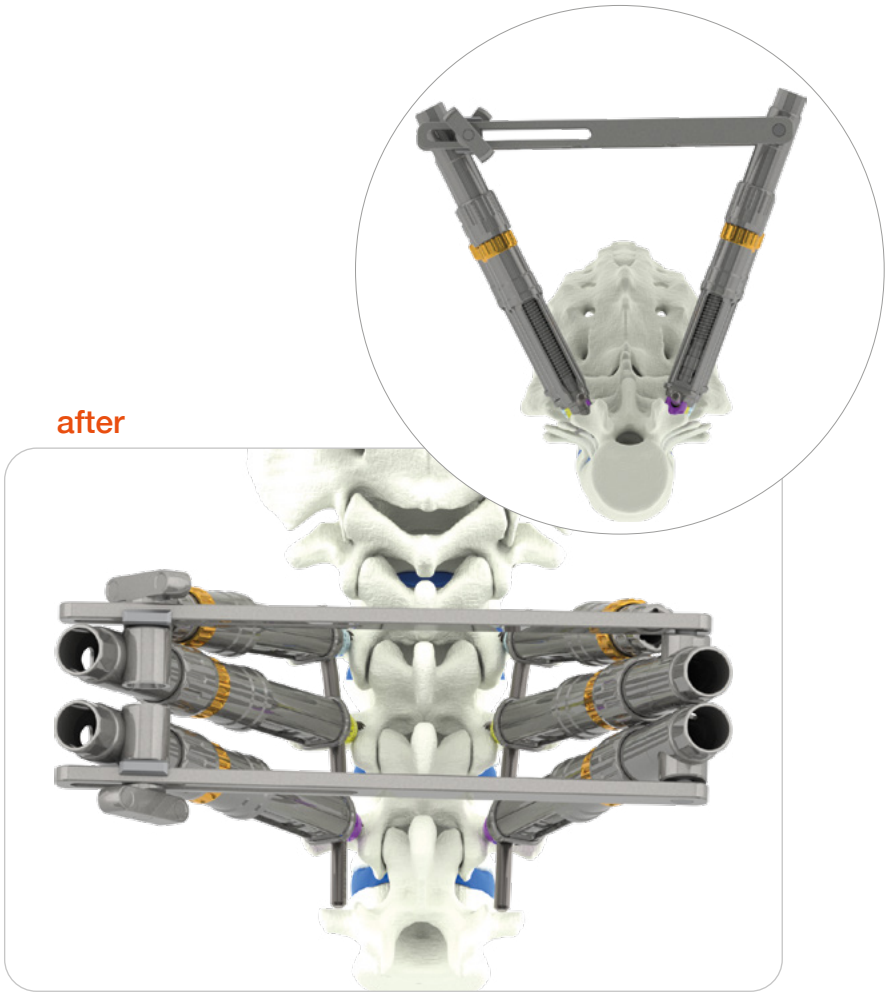


Compression / Distraction

Position the Compressor or Distractor on the screw heads or placed Deformity-Towers and carry out the compression or distraction procedure until the desired position has been achieved.
Insert the Polyaxial/Monoaxial Setscrews using the Set Screw Inserter. To ensure the compression or distraction result, tighten with the MIS Set Screw Driver.

Note:
The Polyaxial/Monoaxial Setscrews must not be fully tightened during this manoeuvre. If necessary, carefully loosen the Polyaxial/Monoaxial Setscrews using the MIS Set Screw Driver.





Using the Derotation Extension DT

With the Derotation Extension DT the vertebrae can be derotated in sections.
The mobility of the Polyaxial screwheads in the transversal plane is blocked, allowing for a derotation of the vertebrae by carefully turning the construct.

Caution:
Excessive force can damage soft tissue structures and/or blood vessels, if necessary, also pull out and/or break up the screws from the pedicles.

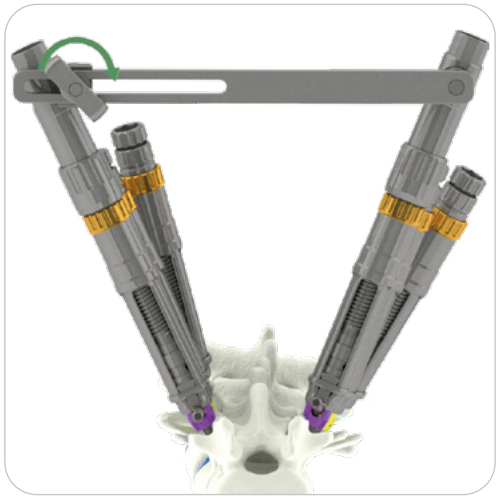
Fitting the Derotation Sleeve DT

Fully attach the Derotation Sleeve DT (and Derotation Sleeve w/joint DT on the opposite site) over the transport screw of the Deformity-Tower. Afterwards lock them by turning the stop sleeves in a clockwise direction.

Caution:
Before placing the Derotation Sleeve DT on the Deformity-Tower, the stop sleeve must be opened (turn counterclockwise).

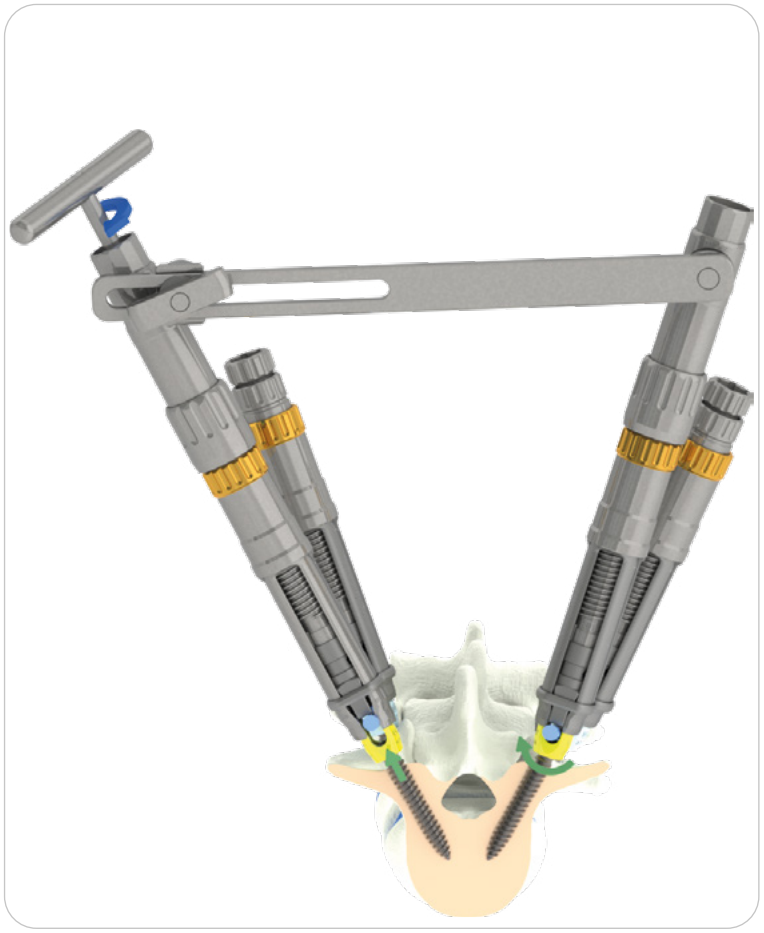
Fitting the Connector Rail DT

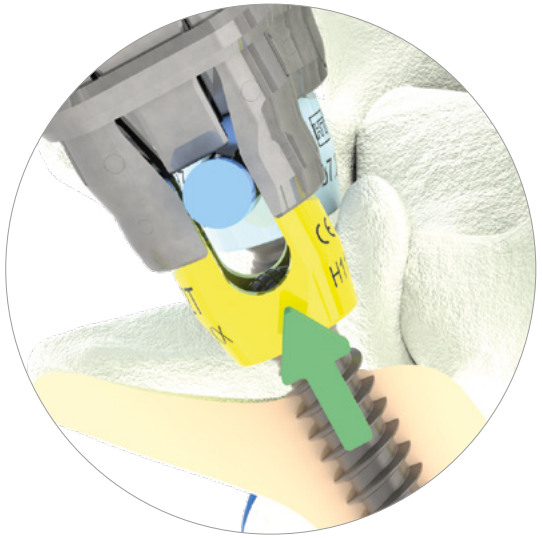
The axially aligned Connector Rail DT must be guided into the Derotation Sleeve w/ joint DT and turned in the direction opposite the Derotation Sleeve DT. By twisting, the Connector Rail DT is secured against accidental loosening. Screw the wing screw into the holder in a clockwise direction.



Using the Derotation Extension DT

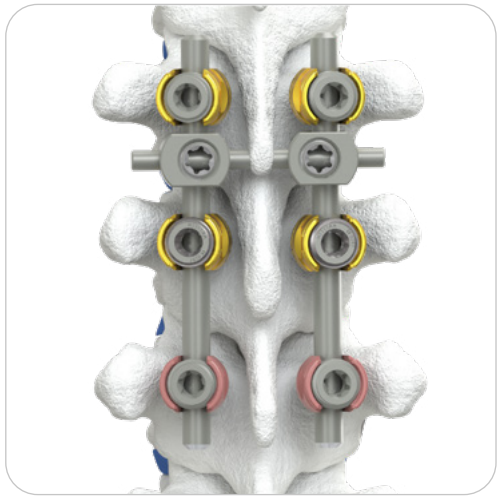
Using the wing screw, the mobility of the connector rail can be locked and released. Align the sleeves and tighten the wing screw! The vertebrae can now be derotated by carefully rotating the Derotation Sleeve DT and Derotation Sleeve w/joint DT.





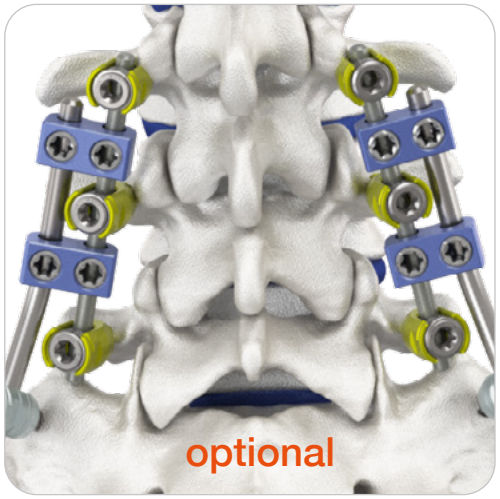
Using the Key Deformity Tower

Insert the Key Deformity Tower from posterior through the Derotation Sleeve DT or Derotation Sleeve w/joint DT into the torx profile of the transport screw in the Deformity-Tower. By turning the Key Deformity Tower clockwise, the segment can be moved in the direction of the rod or the rod can be moved into the final position in the screw head. This way, the derotation of individual segments is supported by pressing down the rod or pulling on the polyaxial screw. The entire structure, including the vertebrae is rotated over the counter bearing (rod on the opposite side). The derotation or the reduction can be performed stepwise with multiple Deformity-Towers arranged side by side.



Transverse Connector

Attach a Transverse Connector Ø5,5 mm V2 with the help of the Transverse Connector Inserter. Connect the second hook with the Transverse Connector Rod which is inserted via the Transverse Connector Rod Holder and attach it to the opposite rod. Align the implants and connect the Transverse Connector Ø5,5 mm V2 using the Transverse Connector Rod. Screw the Setscrews all the way into the Transverse Connector Ø5,5 mm V2 using the MIS Setscrew Driver.



Special structures

The use of additional implants (Lateral Connector, Domino Connector, Parallel Connector) allows special structures for specific requirements, e.g. an ilium screw joint.

Note:
In order to ensure the stability of the overall structure, at least two of these implants must be inserted on each side when using the Parallel Connector.

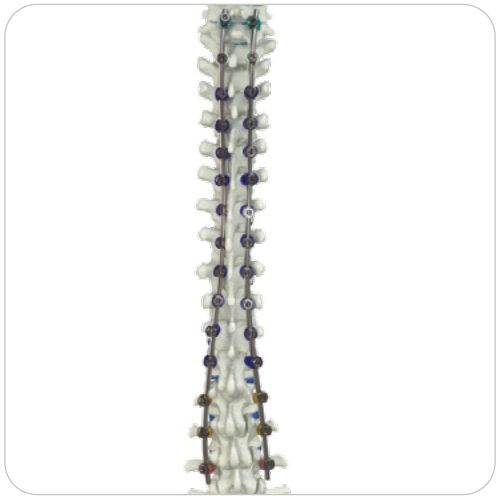
Subsequent tightening

The Counter Holder Ø 5,5mm is guided over the screw head and pushed all the way onto the rod. Ensure that the notches at the distal end of the Counter Holder Ø 5,5mm are placed over the inserted rod. Couple the Torque Driver - 13,5 and MIS Setscrew Driver. Place the combined instruments through the fitted Counter Holder Ø 5,5mm. Tighten the Setscrew in a clockwise direction. Follow the same approach for all other Setscrews.

Note:
The full torque of 13,5 Nm is reached when you hear a clicking sound in the Torque Driver - 13,5. To achieve maximum stability ensure that the final torque is only applied with the Torque Driver - 13,5, once all reduction and correction manoeuvres have been completed.

Final check

Final check of the structure with X-ray control images taken in two planes.



Final structure

Cleanse the surgical area and close the wound.

Monoaxial Screws

Item no. non-sterile	Item no. sterile	Description	
VL-MS-5-4830	sterile version not available	Monoaxial Screw Ø4.8 mm x 30 mm	Ø 4.8
VL-MS-5-4835		Monoaxial Screw Ø4.8 mm x 35 mm	
VL-MS-5-4840		Monoaxial Screw Ø4.8 mm x 40 mm	
VL-MS-5-4845		Monoaxial Screw Ø4.8 mm x 45 mm	
VL-MS-5-5525		Monoaxial Screw Ø5.5 mm x 25 mm	Ø 5.5
VL-MS-5-5530		Monoaxial Screw Ø5.5 mm x 30 mm	
VL-MS-5-5535		Monoaxial Screw Ø5.5 mm x 35 mm	
VL-MS-5-5540		Monoaxial Screw Ø5.5 mm x 40 mm	
VL-MS-5-5545		Monoaxial Screw Ø5.5 mm x 45 mm	
VL-MS-5-5550		Monoaxial Screw Ø5.5 mm x 50 mm	
VL-MS-5-5555		Monoaxial Screw Ø5.5 mm x 55 mm	
VL-MS-5-6535		Monoaxial Screw Ø6.5 mm x 35 mm	Ø 6.5
VL-MS-5-6540		Monoaxial Screw Ø6.5 mm x 40 mm	
VL-MS-5-6545		Monoaxial Screw Ø6.5 mm x 45 mm	
VL-MS-5-6550		Monoaxial Screw Ø6.5 mm x 50 mm	
VL-MS-5-6555		Monoaxial Screw Ø6.5 mm x 55 mm	
VL-MS-5-7240		Monoaxial Screw Ø7.2 mm x 40 mm	Ø 7.2
VL-MS-5-7245		Monoaxial Screw Ø7.2 mm x 45 mm	
VL-MS-5-7250		Monoaxial Screw Ø7.2 mm x 50 mm	
VL-MS-5-7255		Monoaxial Screw Ø7.2 mm x 55 mm	
VL-MS-5-7260		Monoaxial Screw Ø7.2 mm x 60 mm	

Notice
When ordering all kind of sterile implants, add "sterile" to the end of the article description!
Example: **XX XXX XXXXXXXX Screw Ø5.5x40mm sterile**
Or use our current order forms.

2T Polyaxial Screws

Item no. non-sterile	Item no. sterile	Description	
4000024825	4000024825-S	2T Polyaxial Screw Ø4.8x25mm	Ø 4.8
4000024830	4000024830-S	2T Polyaxial Screw Ø4.8x30mm	
4000024835	4000024835-S	2T Polyaxial Screw Ø4.8x35mm	
4000024840	4000024840-S	2T Polyaxial Screw Ø4.8x40mm	
4000024845	4000024845-S	2T Polyaxial Screw Ø4.8x45mm	
4000025525	4000025525-S	2T Polyaxial Screw Ø5.5x25mm	Ø 5.5
4000025530	4000025530-S	2T Polyaxial Screw Ø5.5x30mm	
4000025535	4000025535-S	2T Polyaxial Screw Ø5.5x35mm	
4000025540	4000025540-S	2T Polyaxial Screw Ø5.5x40mm	
4000025545	4000025545-S	2T Polyaxial Screw Ø5.5x45mm	
4000025550	4000025550-S	2T Polyaxial Screw Ø5.5x50mm	
4000025555	4000025555-S	2T Polyaxial Screw Ø5.5x55mm	
4000026525	4000026525-S	2T Polyaxial Screw Ø6.5x25mm	Ø 6.5
4000026530	4000026530-S	2T Polyaxial Screw Ø6.5x30mm	
4000026535	4000026535-S	2T Polyaxial Screw Ø6.5x35mm	
4000026540	4000026540-S	2T Polyaxial Screw Ø6.5x40mm	
4000026545	4000026545-S	2T Polyaxial Screw Ø6.5x45mm	
4000026550	4000026550-S	2T Polyaxial Screw Ø6.5x50mm	
4000026555	4000026555-S	2T Polyaxial Screw Ø6.5x55mm	
4000027235	4000027235-S	2T Polyaxial Screw Ø7.2x35mm	Ø 7.2
4000027240	4000027240-S	2T Polyaxial Screw Ø7.2x40mm	
4000027245	4000027245-S	2T Polyaxial Screw Ø7.2x45mm	
4000027250	4000027250-S	2T Polyaxial Screw Ø7.2x50mm	
4000027255	4000027255-S	2T Polyaxial Screw Ø7.2x55mm	
4000027260	4000027260-S	2T Polyaxial Screw Ø7.2x60mm	

6T Polyaxial Screws

Item no. non-sterile	Item no. sterile	Description	
VL-PS2-5-4825	VL-PS2-5-4825-S	Polyaxial Screw 6T 4.8 x 25 mm	Ø 4.8
VL-PS2-5-4830	VL-PS2-5-4830-S	Polyaxial Screw 6T 4.8 x 30 mm	
VL-PS2-5-4835	VL-PS2-5-4835-S	Polyaxial Screw 6T 4.8 x 35 mm	
VL-PS2-5-4840	VL-PS2-5-4840-S	Polyaxial Screw 6T 4.8 x 40 mm	
VL-PS2-5-5525	VL-PS2-5-5525-S	Polyaxial Screw 6T 5.5 x 25 mm	Ø 5.5
VL-PS2-5-5530	VL-PS2-5-5530-S	Polyaxial Screw 6T 5.5 x 30 mm	
VL-PS2-5-5535	VL-PS2-5-5535-S	Polyaxial Screw 6T 5.5 x 35 mm	
VL-PS2-5-5540	VL-PS2-5-5540-S	Polyaxial Screw 6T 5.5 x 40 mm	
VL-PS2-5-5545	VL-PS2-5-5545-S	Polyaxial Screw 6T 5.5 x 45 mm	
VL-PS2-5-5550	VL-PS2-5-5550-S	Polyaxial Screw 6T 5.5 x 50 mm	
VL-PS2-5-5555	VL-PS2-5-5555-S	Polyaxial Screw 6T 5.5 x 55 mm	
VL-PS2-5-6525	VL-PS2-5-6525-S	Polyaxial Screw 6T 6.5 x 25 mm	Ø 6.5
VL-PS2-5-6530	VL-PS2-5-6530-S	Polyaxial Screw 6T 6.5 x 30 mm	
VL-PS2-5-6535	VL-PS2-5-6535-S	Polyaxial Screw 6T 6.5 x 35 mm	
VL-PS2-5-6540	VL-PS2-5-6540-S	Polyaxial Screw 6T 6.5 x 40 mm	
VL-PS2-5-6545	VL-PS2-5-6545-S	Polyaxial Screw 6T 6.5 x 45 mm	
VL-PS2-5-6550	VL-PS2-5-6550-S	Polyaxial Screw 6T 6.5 x 50 mm	
VL-PS2-5-6555	VL-PS2-5-6555-S	Polyaxial Screw 6T 6.5 x 55 mm	
VL-PS2-5-7240	VL-PS2-5-7240-S	Polyaxial Screw 6T 7.2 x 40 mm	Ø 7.2
VL-PS2-5-7245	VL-PS2-5-7245-S	Polyaxial Screw 6T 7,2 x 45 mm	
VL-PS2-5-7250	VL-PS2-5-7250-S	Polyaxial Screw 6T 7.2 x 50 mm	
VL-PS2-5-7255	VL-PS2-5-7255-S	Polyaxial Screw 6T 7.2 x 55 mm	
VL-PS2-5-7260	VL-PS2-5-7260-S	Polyaxial Screw 6T 7.2 x 60 mm	

Rods

Item no. non-sterile	Item no. sterile	Description
VL-RS-5-4	VL-RS-5-4-S	Rod Ø5.5 mm / 40 mm straight
VL-RS-5-5	VL-RS-5-5-S	Rod Ø5.5 mm / 50 mm, straight
VL-RS-5-7	VL-RS-5-7-S	Rod Ø5.5 mm / 70 mm, straight
VL-RS-5-9	VL-RS-5-9-S	Rod Ø5.5 mm / 90 mm straight
VL-RS-5-10	VL-RS-5-10-S	Rod Ø5.5 mm / 100 mm, straight
VL-RS-5-11	VL-RS-5-11-S	Rod Ø5.5 mm / 110 mm, straight
VL-RS-5-13	VL-RS-5-13-S	Rod Ø5.5 mm / 130 mm, straight
VL-RS-5-15	VL-RS-5-15-S	Rod Ø5.5 mm / 150 mm, straight
VL-RS-5-20	VL-RS-5-20-S	Rod Ø5.5 mm / 200 mm, straight
VL-RS-5-25	VL-RS-5-25-S	Rod Ø5.5 mm / 250 mm, straight
VL-RS-5-30	VL-RS-5-30-S	Rod Ø5.5 mm / 300 mm, straight
VL-RS-5-35	VL-RS-5-35-S	Rod Ø5.5 mm / 350 mm, straight
VL-RS-5-40	VL-RS-5-40-S	Rod Ø5.5 mm / 400 mm, straight
VL-RS-5-45	VL-RS-5-45-S	Rod Ø5.5 mm / 450 mm, straight
VL-RS-5-60	sterile version not available	Rod Ø5.5 mm / 600 mm, straight

Scoliosis Rods

The higher level of rigidity of the cobalt-chrome bar compared to the titanium rod allows for better correction options, for example in cases of major deformities.

CoCr - Rods

Item no. non-sterile	Item no. sterile	Description
1001090145	1001090145-S	CoCr Rod 450 mm

Transverse Connector

Item no. non-sterile	Item no. sterile	Description
VL-PMS	sterile version not available	Polyaxial / Monoaxial Setscrew
VL-PMS-M3	sterile version not available	Polyaxial / Monoaxial Setscrew M3
1001050500	1001050500-S	Transverse Connector Ø5,5 mm V2
VL-TR-50	VL-TR-50-S	Transverse Connector Rod 50mm
VL-TR-60	VL-TR-60-S	Transverse Connector Rod 60mm
VL-TR-70	VL-TR-70-S	Transverse Connector Rod 70mm
VL-TR-80	VL-TR-80-S	Transverse Connector Rod 80mm
VL-TR-90	VL-TR-90-S	Transverse Connector Rod 90mm
VL-TR-100	VL-TR-100-S	Transverse Connector Rod 100mm

Iliac Screws

Item no. non-sterile	Item no. sterile	Description	
1006117270	1006117270-S	Polyaxial Iliac Screw Ø 7.2mm x 70mm	Ø 7.2
1006117280	1006117280-S	Polyaxial Iliac Screw Ø 7.2mm x 80mm	
1006117290	1006117290-S	Polyaxial Iliac Screw Ø 7.2mm x 90mm	
10061172100	10061172100-S	Polyaxial Iliac Screw Ø 7.2mm x 100mm	
1006118570	1006118570-S	Polyaxial Iliac Screw Ø 8.5mm x 70mm	Ø 8.5
1006118580	1006118580-S	Polyaxial Iliac Screw Ø 8.5mm x 80mm	
1006118590	1006118590-S	Polyaxial Iliac Screw Ø 8.5mm x 90mm	
10061185100	10061185100-S	Polyaxial Iliac Screw Ø 8.5mm x 100mm	
10061185120	10061185120-S	Polyaxial Iliac Screw Ø 8.5mm x 120mm	

2T Fenestrated Revision Screws

Item no. non-sterile	Item no. sterile	Description	
4000068545	4000068545-S	2T Fen. Rev. Screw 8,5x45mm	Ø 8.5
4000068550	4000068550-S	2T Fen. Rev. Screw 8,5x50mm	
4000068555	4000068555-S	2T Fen. Rev. Screw 8,5x55mm	
4000069545	4000069545-S	2T Fen. Rev. Screw 9,5x45mm	Ø 9.5
4000069550	4000069550-S	2T Fen. Rev. Screw 9,5x50mm	
4000069555	4000069555-S	2T Fen. Rev. Screw 9,5x55mm	
4000061045	4000061045-S	2T Fen. Rev. Screw 10,5x45mm	Ø 10.5
4000061050	4000061050-S	2T Fen. Rev. Screw 10,5x50mm	
4000061055	4000061055-S	2T Fen. Rev. Screw 10,5x55mm	

Notice
When ordering all kind of sterile implants, add "sterile" to the end of the article description!
Example: XX XXX XXXXXXXX Screw Ø5.5x40mm sterile
Or use our current order forms.

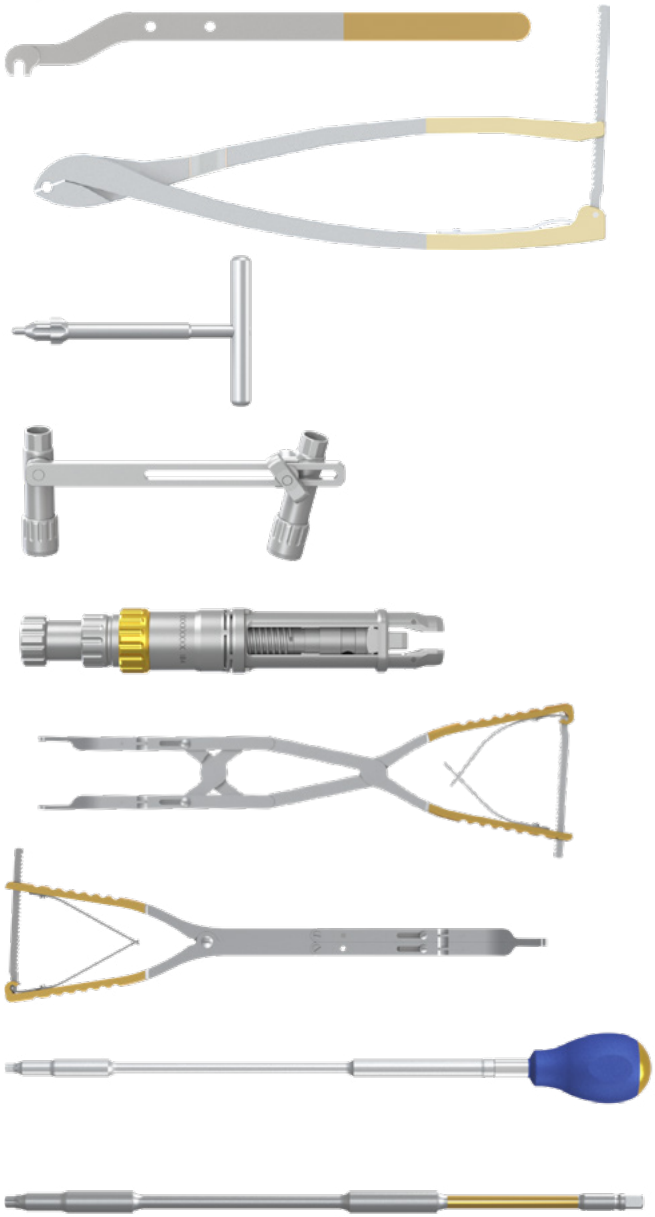
6T Cannulated Revision Screws

Item no. non-sterile	Item no. sterile	Description	
1006098535	1006098535-S	Cannulated Revision 6T Ø 8.5 mm x 35 mm	Ø 8.5
1006098540	1006098540-S	Cannulated Revision 6T Ø 8.5 mm x 40 mm	
1006098545	1006098545-S	Cannulated Revision 6T Ø 8.5 mm x 45 mm	
1006098550	1006098550-S	Cannulated Revision 6T Ø 8.5 mm x 50 mm	
1006098555	1006098555-S	Cannulated Revision 6T Ø 8.5 mm x 55 mm	
1006098560	1006098560-S	Cannulated Revision 6T Ø 8.5 mm x 60 mm	
1006098570	1006098570-S	Cannulated Revision 6T Ø 8.5 mm x 70 mm	
1006098580	1006098580-S	Cannulated Revision 6T Ø 8.5 mm x 80 mm	
1006098590	1006098590-S	Cannulated Revision 6T Ø 8.5 mm x 90 mm	
10060985100	10060985100-S	Cannulated Revision 6T Ø 8.5 mm x 100 mm	

2T Reduction Screws

Item no. non-sterile	Item no. sterile	Description	
4000034830	4000034830-S	2T Reduction Screw Ø4.8x30mm	Ø 4.8
4000034835	4000034835-S	2T Reduction Screw Ø4.8x35mm	
4000034840	4000034840-S	2T Reduction Screw Ø4.8x40mm	
4000034845	4000034845-S	2T Reduction Screw Ø4.8x45mm	
4000035530	4000035530-S	2T Reduction Screw Ø5.5x30mm	Ø 5.5
4000035535	4000035535-S	2T Reduction Screw Ø5.5x35mm	
4000035540	4000035540-S	2T Reduction Screw Ø5.5x40mm	
4000035545	4000035545-S	2T Reduction Screw Ø5.5x45mm	
4000035550	4000035550-S	2T Reduction Screw Ø5.5x50mm	
4000035555	4000035555-S	2T Reduction Screw Ø5.5x55mm	
4000036535	4000036535-S	2T Reduction Screw Ø6.5x35mm	Ø 6.5
4000036540	4000036540-S	2T Reduction Screw Ø6.5x40mm	
4000036545	4000036545-S	2T Reduction Screw Ø6.5x45mm	
4000036550	4000036550-S	2T Reduction Screw Ø6.5x50mm	
4000036555	4000036555-S	2T Reduction Screw Ø6.5x55mm	
4000037240	4000037240-S	2T Reduction Screw Ø7.2x40mm	Ø 7.2
4000037245	4000037245-S	2T Reduction Screw Ø7.2x45mm	
4000037250	4000037250-S	2T Reduction Screw Ø7.2x50mm	
4000037255	4000037255-S	2T Reduction Screw Ø7.2x55mm	
4000037260	4000037260-S	2T Reduction Screw Ø7.2x60mm	

Item no.	Description
055083	Bending Iron Ø 5,5 mm
055325	Derotation Forceps
1016200000	Key Deformity Tower
1016100000	Derotation Extension DT
1016000000	Deformity-Tower
055293	Parallel Compressor AT
055294	Parallel Distractor AT
055065	Set Screw Inserter
1008010014	MIS Setscrew Driver



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