

SURGICAL TECHNIQUE



VERTELIFT-C

Anterior Cervical
Corpectomy Cage



VERTELIFT-C

Anterior Cervical
Corpectomy Cage

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VERTELIFT-C

Anterior Cervical
Corpectomy Cage

INTRODUCTION

VERTELIFT-C Features

- Manufactured from Titanium Alloys
- Angled inferior and superior area allow a complete contact with vertebral surface and composed by one piece
- Allowing a complete contact with vertebral surface
- Provide a secure fixation with the feature of threaded surface
- Prevent any dislocation
- Efficient grafting space before distraction
- Provide one stage locking mechanism



VERTELIFT-C

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Corpectomy Cage

INTRODUCTION



Indications

Anterior cervical corpectomy and fusion is performed for patients with symptomatic, progressive cervical spinal stenosis and myelopathy. It is performed to remove the large, arthritic osteophytes (bone spurs) that are compressing the spinal cord and spinal nerves. However, in order to do so generally involves removing nearly the entire vertebral body and disc, which must be replaced with a piece of bone graft and mended (fused) together to maintain stability.

Contraindications

- Severe osteoporosis
- Reconstruction of more than three adjacent vertebral bodies



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SURGICAL TECHNIQUE

1

Patient positioning



Place the patient in a supine position. Proper positioning should be confirmed with a radiograph prior to draping. (Figure 1a)



Figure 1a

2

Exposure



Expose the vertebral bodies through a corresponding approach to the cervical spine. (Figure 2a)



Figure 2a

VERTELIFT-C

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SURGICAL TECHNIQUE

3

Perform Corpectomy



Figure 3a



Excise the disc material and the superficial layers of the cartilaginous parts of the adjacent endplates. Adequate cleaning of the endplate (especially in the peripheral parts) is important for the vascular supply. (Figure 3a)

VERTELIFT-C

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SURGICAL TECHNIQUE

4

Determine Implant Size



Figure 4a



The measurement should be confirmed in situ with an **Length Guide (CC005)**. It is recommended to measure in situ from the posterior aspect of the inferior endplate of the vertebral body above the affected level to the posterior aspect of the superior endplate of the vertebral body below the affected level. (Figure 5a,5b)



Figure 4b



Length Guide

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Anterior Cervical
Corpectomy Cage

SURGICAL TECHNIQUE

5

Implant Attachment (For One Sided)



Figure 5a



Cervical Corpectomy Holder (CC001) is attached left and right end pieces set screw holes. **Vertelift-C** cervical corpectomy cage is inserted in the area where to be implanted. (Figure 5a)



Figure 5b

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Anterior Cervical
Corpectomy Cage

SURGICAL TECHNIQUE

6

Distraction (For One Sided)



The **Opener (CC003)** is inserted into the rotation holes of the center piece. Distraction is achieved by turning the center piece as indicated by the arrows.

NOTE:

As soon as the blue portion becomes visible, the maximum distraction height is achieved.



Figure 6a



Figure 6b

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Anterior Cervical
Corpectomy Cage

SURGICAL TECHNIQUE

7

Implant Locking (For One Sided)



Figure 7a

After the correct position of the implant has been checked the end pieces are locked to the center piece using a **Lock Screw Fixer (CC002)**.



Figure 7b

VERTELIFT-C Surgical Technique Norm

VERTELIFT-C

Anterior Cervical
Corpectomy Cage

SURGICAL TECHNIQUE

5

Implant Attachment (Dual Distractible)



Figure 5a



Cervical Corpectomy Holder (CC001) is attached left and right end pieces set screw holes. **Vertelift-C** cervical corpectomy cage is inserted in the area where to be implanted. (Figure 5a)



Figure 5b

VERTELIFT-C

Anterior Cervical
Corpectomy Cage

SURGICAL TECHNIQUE

6

Distraction (**Dual Distractable**)



The **Opener (CC003)** is inserted into the rotation holes of the center piece. Distraction is achieved by turning the center piece as indicated by the arrows.

NOTE:

As soon as the blue portion becomes visible, the maximum distraction height is achieved.



Figure 6a



Figure 6b

VERTELIFT-C

Anterior Cervical
Corpectomy Cage

SURGICAL TECHNIQUE

7

Implant Locking (Dual Distractible)



Figure 7a

After the correct position of the implant has been checked the end pieces are locked to the center piece using a **Lock Screw Fixer (CC002)**.



Figure 7b

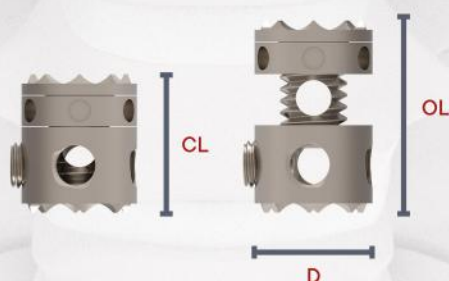


Figure 7c

VERTELIFT-C

Anterior Cervical
Corpectomy Cage

IMPLANT SIZES



VERTELIFT-C
CORPECTOMY CAGE

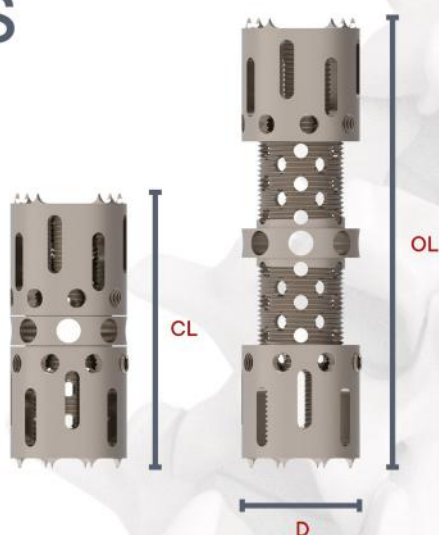
Catalogue No. Diameter Closed Length Open Length

NCTC101013	10 mm	10 mm	13 mm
NCTC101317	10 mm	13 mm	17 mm
NCTC121013	12 mm	10 mm	13 mm
NCTC121317	12 mm	13 mm	17 mm
NCTC141013	14 mm	10 mm	13 mm
NCTC141317	14 mm	13 mm	17 mm
NCTC161013	16 mm	10 mm	13 mm
NCTC161317	16 mm	13 mm	17 mm
NCTC201013	20 mm	10 mm	13 mm
NCTC201317	20 mm	13 mm	17 mm

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Anterior Cervical
Corpectomy Cage

IMPLANT SIZES



VERTELIFT-C
CORPECTOMY CAGE

Catalogue No. Diameter Closed Length Open Length Angle

NCTC101625	10 mm	16 mm	25 mm	
NCTC121625	12 mm	16mm	25 mm	
NCTC1216256	12 mm	16 mm	25 mm	6°
NCTC122440	12 mm	24 mm	40 mm	
NCTC1224406	12 mm	24 mm	40 mm	6°
NCTC123965	12 mm	39 mm	65 mm	
NCTC1239656	12 mm	39 mm	65 mm	6°
NCTC141625	14 mm	16 mm	25 mm	
NCTC1416256	14 mm	16 mm	25 mm	6°
NCTC142440	14 mm	24 mm	40 mm	
NCTC1424406	14 mm	24 mm	40 mm	6°
NCTC143965	14 mm	39 mm	65 mm	
NCTC1439656	14 mm	39 mm	65 mm	6°
NCTC161625	16 mm	16 mm	25 mm	
NCTC162440	16 mm	24mm	40 mm	
NCTC163965	16 mm	39 mm	65 mm	
NCTC201625	20 mm	16 mm	25 mm	

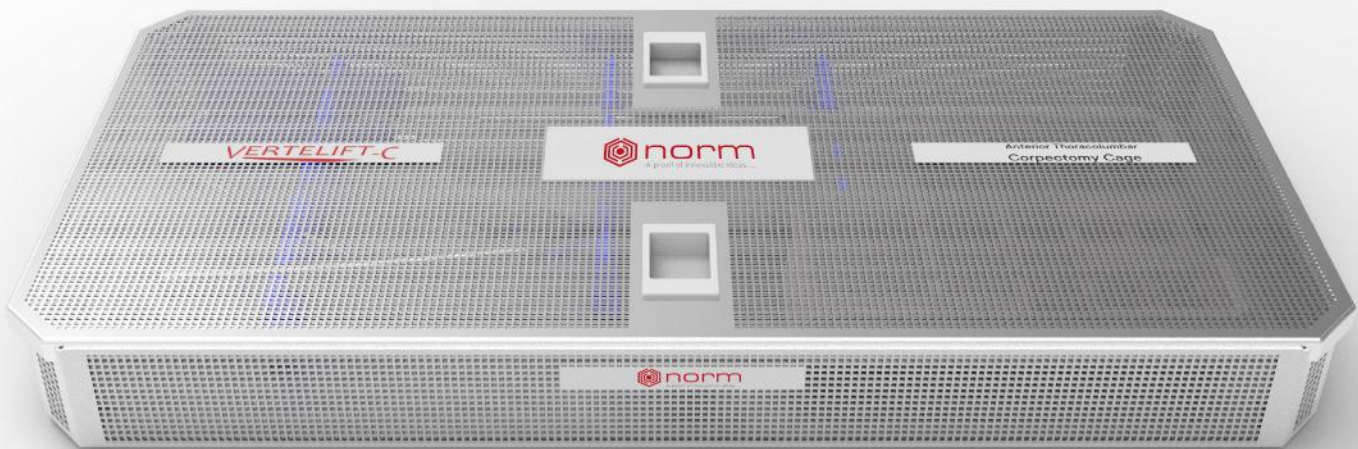
VERTELIFT-C

Anterior Cervical
Corpectomy Cage

INSTRUMENT CONTAINER



This container is made of wiremesh stainless steel. It has a high stability, low weight and good sterilization feature.

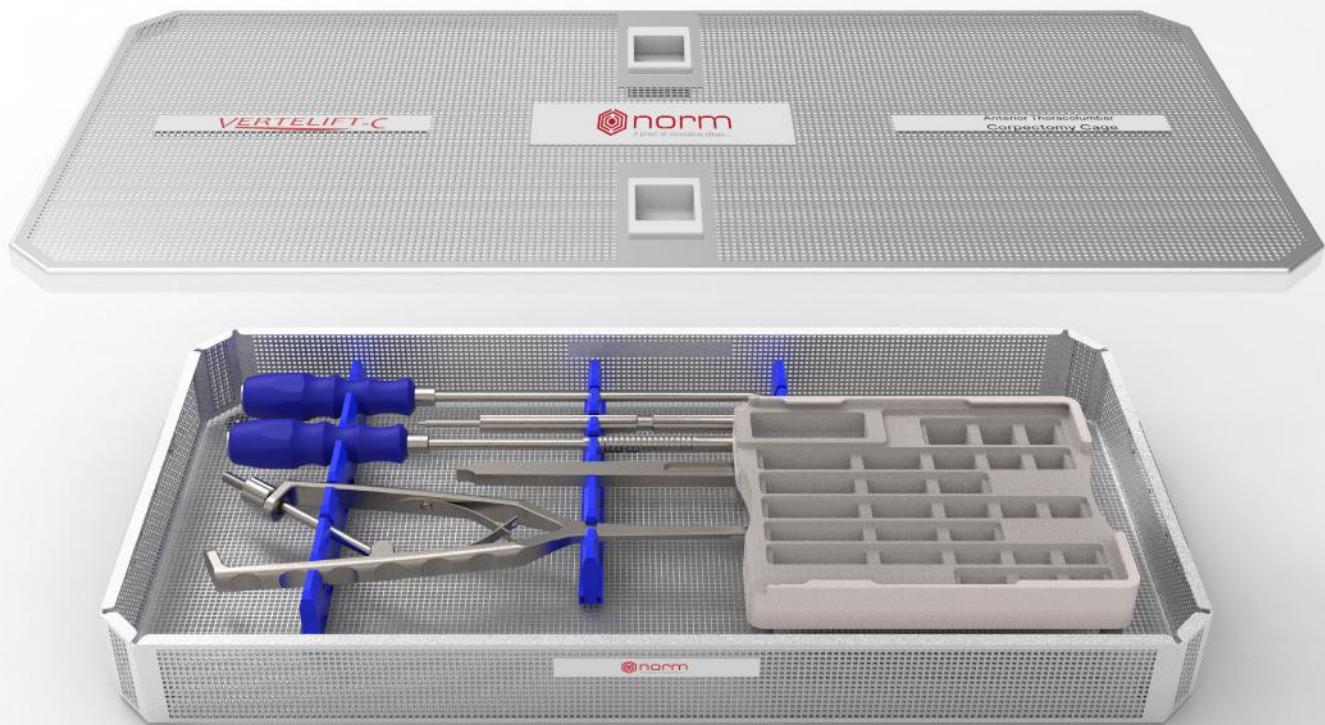


Container

VERTELIFT-C

Anterior Cervical
Corpectomy Cage

INSTRUMENT CONTAINER

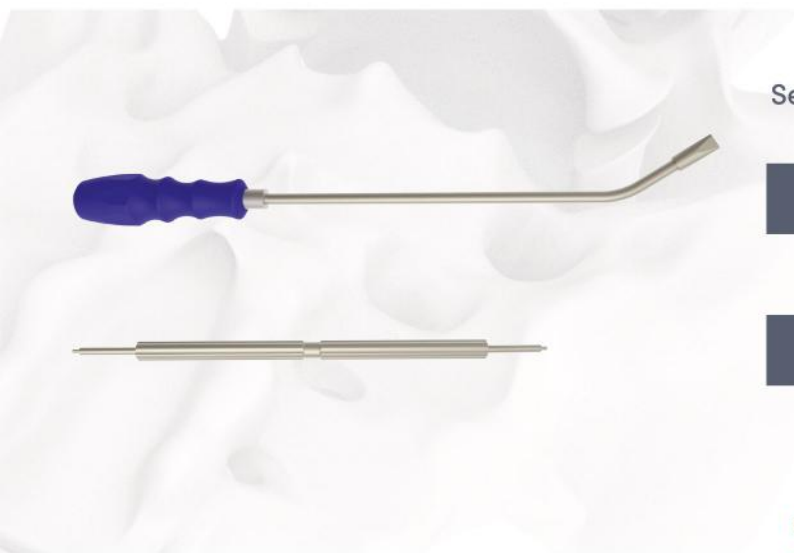
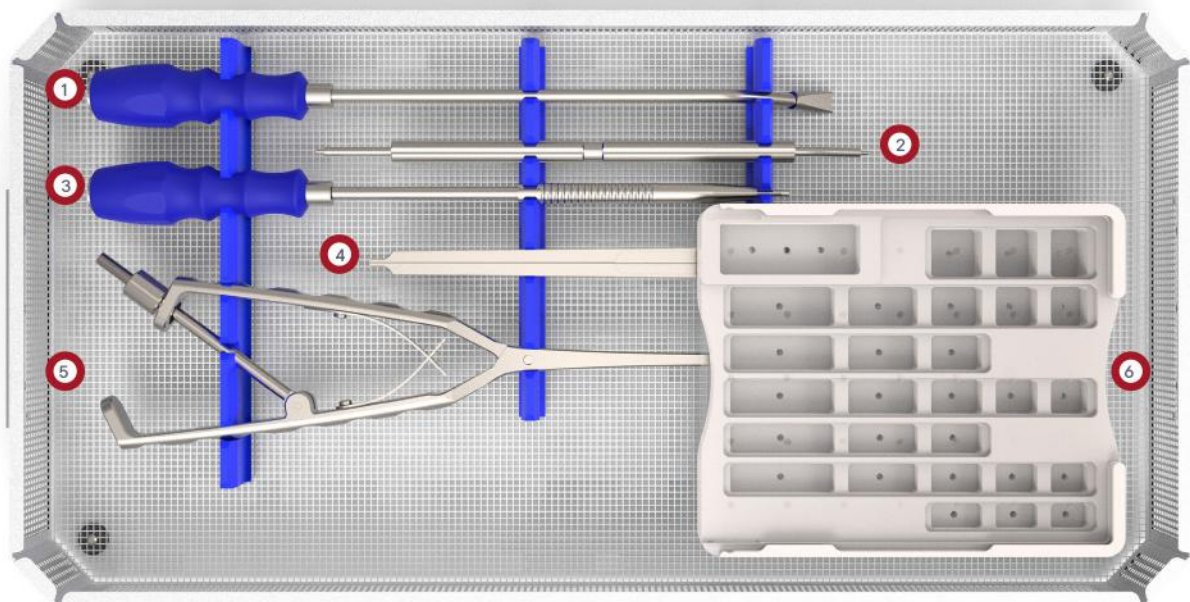


Container

VERTELIFT-C

Anterior Cervical
Corpectomy Cage

INSTRUMENT TYPES




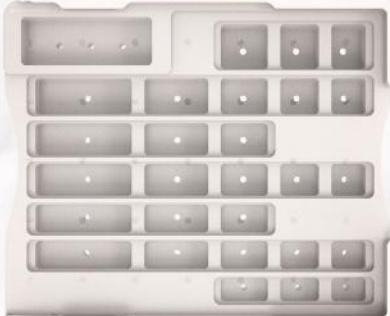


Set No.	Catalogue No.	Description	Piece
01	CC004	Corpectomy Pusher	1
02	CC003	Opener	1

VERTELIFT-C

Anterior Cervical
Corpectomy Cage

INSTRUMENT TYPES

	Set No.	Catalogue No.	Description	Piece
	03	CC002	Lock Screw Fixer	1
	04	CC005	Length Guide	1
	05	CC001	Cervical Corpectomy Holder	1
	06	CC006	Cervical Corpectomy Cage Box	1

VERTELIFT-C

Anterior Cervical
Corpectomy Cage

CONTACT



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Revision Date: -, Revision No: 00

VERTELIFT-C Surgical Technique Norm

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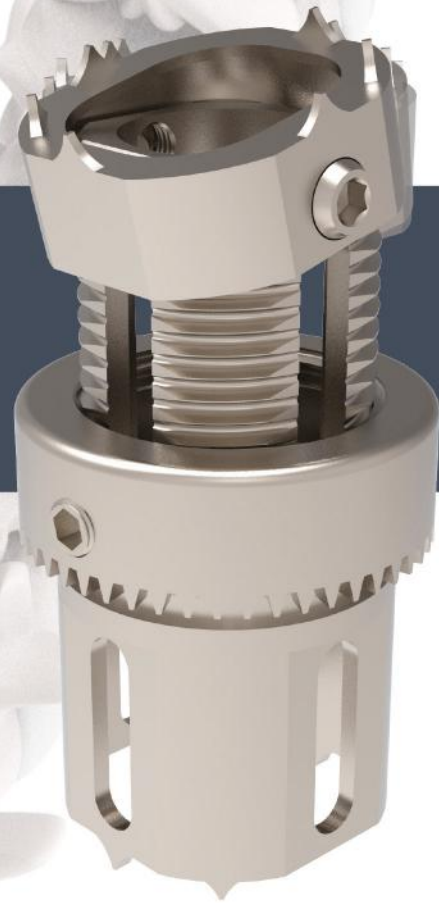


norm
A proof of innovative ideas ...

SURGICAL TECHNIQUE

ZEK

Anterior Thoracolumbar
Corpectomy Cage





Anterior Thoracolumbar
Corpectomy Cage

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Anterior Thoracolumbar
Corpectomy Cage

INTRODUCTION

ZEK Features

- Full contact, full fusion through unique movable head technology
- Fit with the anatomy of patient
- Adjustable easily with threaded mechanism
- Adjustable easily with threaded surface
- Include a pre-assembled locking screw which can be engaged after distraction to lock mechanism
- Vertebral body replacement system to replace vertebral body





Anterior Thoracolumbar
Corpectomy Cage

INTRODUCTION



Indications

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- Reconstruction of more than three adjacent vertebral bodies





Anterior Thoracolumbar
Corpectomy Cage

SURGICAL TECHNIQUE

1

Patient positioning



Place the patient in a supine position. Proper positioning should be confirmed with a radiograph prior to draping. (Figure 1a)



Figure 1a

2

Exposure



Expose the vertebral bodies through a corresponding approach to the cervical spine. (Figure 2a)



Figure 2a



Anterior Thoracolumbar
Corpectomy Cage

SURGICAL TECHNIQUE

3

Perform Corpectomy



Figure 3a



Excise the disc material and the superficial layers of the cartilaginous parts of the adjacent endplates. Adequate cleaning of the endplate (especially in the peripheral parts) is important for the vascular supply. (Figure 3a)



Anterior Thoracolumbar
Corpectomy Cage

SURGICAL TECHNIQUE

4

Determine Implant Size



Figure 4a



The measurement should be confirmed in situ with an **Length Guide (LC003)**. It is recommended to measure in situ from the posterior aspect of the inferior endplate of the vertebral body above the affected level to the posterior aspect of the superior endplate of the vertebral body below the affected level. (Figure 5a,5b)

Length Guide

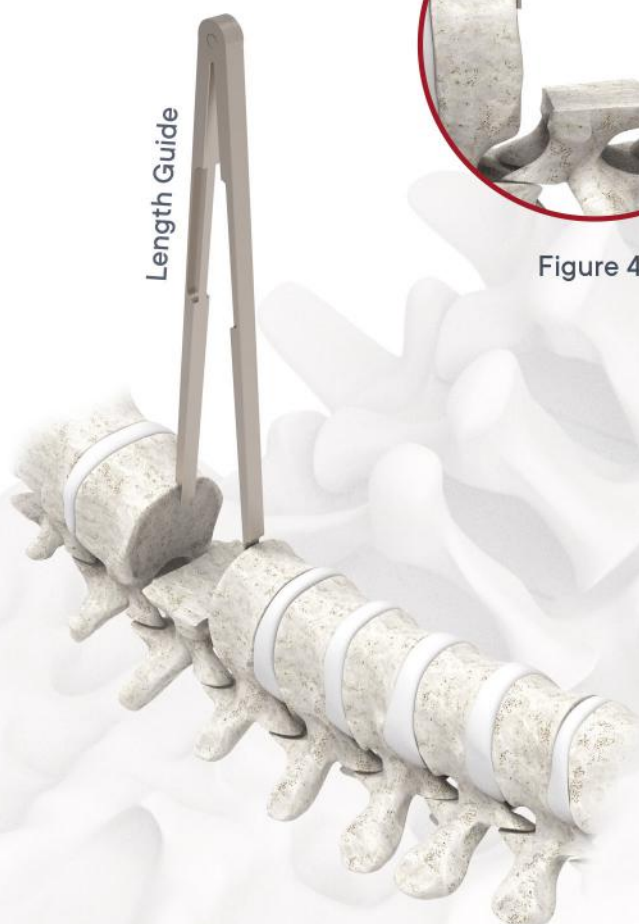


Figure 4b



Length Guide



Anterior Thoracolumbar
Corpectomy Cage

SURGICAL TECHNIQUE

5

Implant Attachment



Zek Corpectomy Holder
(ALC001) is attached left and
right end pieces set screw holes.
Zek corpectomy cage is inserted
in the area where to be
implanted.



Figure 5a



Figure 5b



Anterior Thoracolumbar
Corpectomy Cage

SURGICAL TECHNIQUE

6

Implant Placement



The **Zek** corpectomy cage is brought into the correct position with the **Corpectomy Pusher** (LC004).



Figure 6a

Corpectomy Pusher



Figure 6b



Anterior Thoracolumbar
Corpectomy Cage

SURGICAL TECHNIQUE

7

Distraction



The **Zek Corpectomy Holder (ALC001)** is inserted into the rotation holes of the center piece. Distraction is achieved by turning the turning the end of instrument. (Figure 7a,7b)



Step 2:

Figure 7b

Step 1:

Figure 7a



Anterior Thoracolumbar
Corpectomy Cage

SURGICAL TECHNIQUE

8

Locking The Implant



After the correct position of the implant has been checked the end pieces are locked to the center piece using a **Lock Screw Fixer (LC002)**.



Figure 8a



Figure 8b

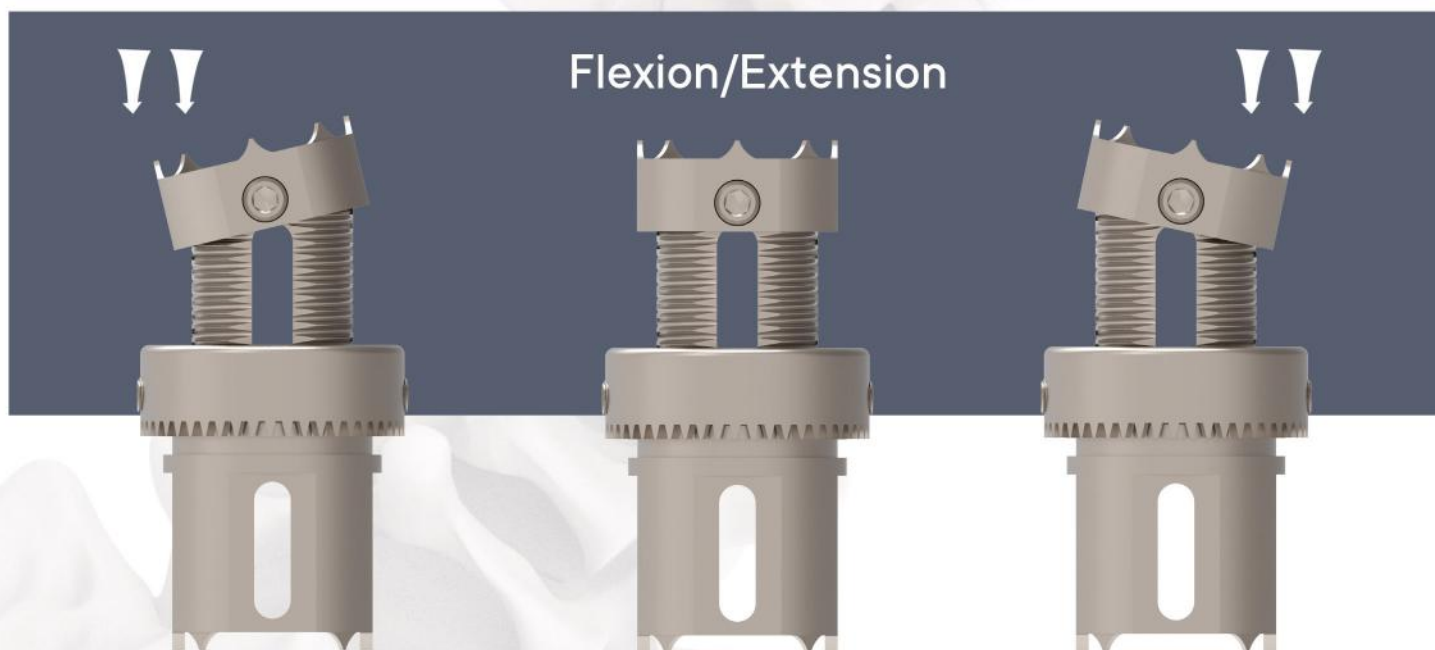
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Corpectomy Cage

KINEMATICS



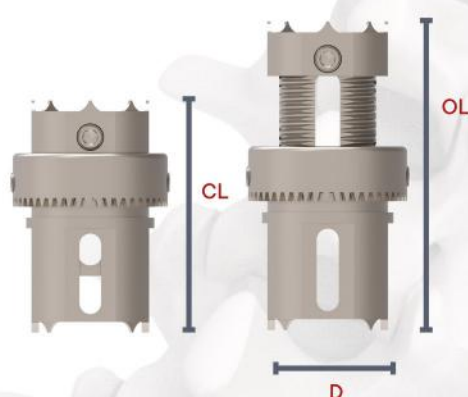
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CORPECTOMY CAGE





Anterior Thoracolumbar
Corpectomy Cage

IMPLANT SIZES



ZEK
CORPECTOMY CAGE

Catalogue No. Diameter Closed Length Open Length

NVTCZ202534	20 mm	25 mm	34 mm
NVTCZ203244	20 mm	32 mm	44 mm
NVTCZ204258	20 mm	42 mm	58 mm
NVTCZ205684	20 mm	56 mm	84 mm
NVTCZ242329	24 mm	23 mm	29 mm
NVTCZ242840	24 mm	28 mm	40 mm
NVTCZ243854	24 mm	38 mm	54 mm
NVTCZ245276	24 mm	52 mm	76 mm
NVTCZ2474114	24 mm	74 mm	114 mm
NVTCZ283244	28 mm	32 mm	44 mm
NVTCZ284258	28 mm	42 mm	58 mm
NVTCZ285684	28 mm	56 mm	84 mm

ZEK

Anterior Thoracolumbar
Corpectomy Cage

INSTRUMENT CONTAINER



This container is made of wiremesh stainless steel. It has a high stability, low weight and good sterilization feature.



Container

ZEK

Anterior Thoracolumbar
Corpectomy Cage

INSTRUMENT CONTAINER

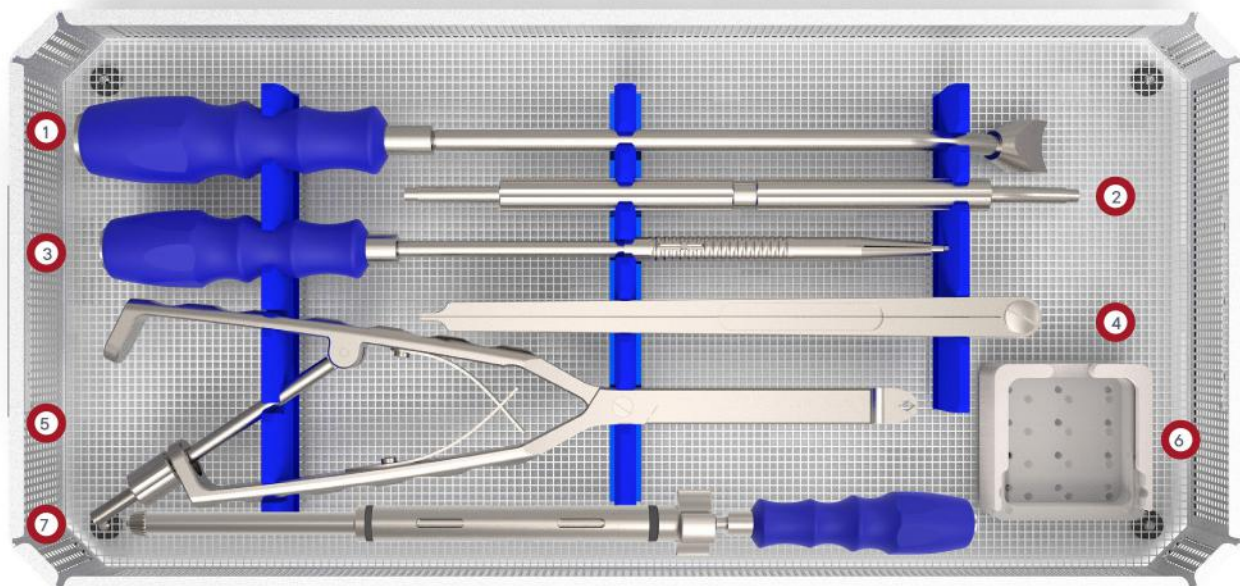


Container



Anterior Thoracolumbar
Corpectomy Cage

INSTRUMENT TYPES



Set No.	Catalogue No.	Description	Piece
01	LC004	Corpectomy Pusher	1
02	LC005	Opener	1



Anterior Thoracolumbar
Corpectomy Cage

INSTRUMENT TYPES

	Set No.	Catalogue No.	Description	Piece
	03	LC002	Lock Screw Fixer	1
	04	LC003	Length Guide	1
	05	LC001	Lumbar Corpectomy Holder	1
	06	CSK58x25	Corpectomy Screw Box	1
	07	ALC001	Zek Corpectomy Holder	1

ZEK

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