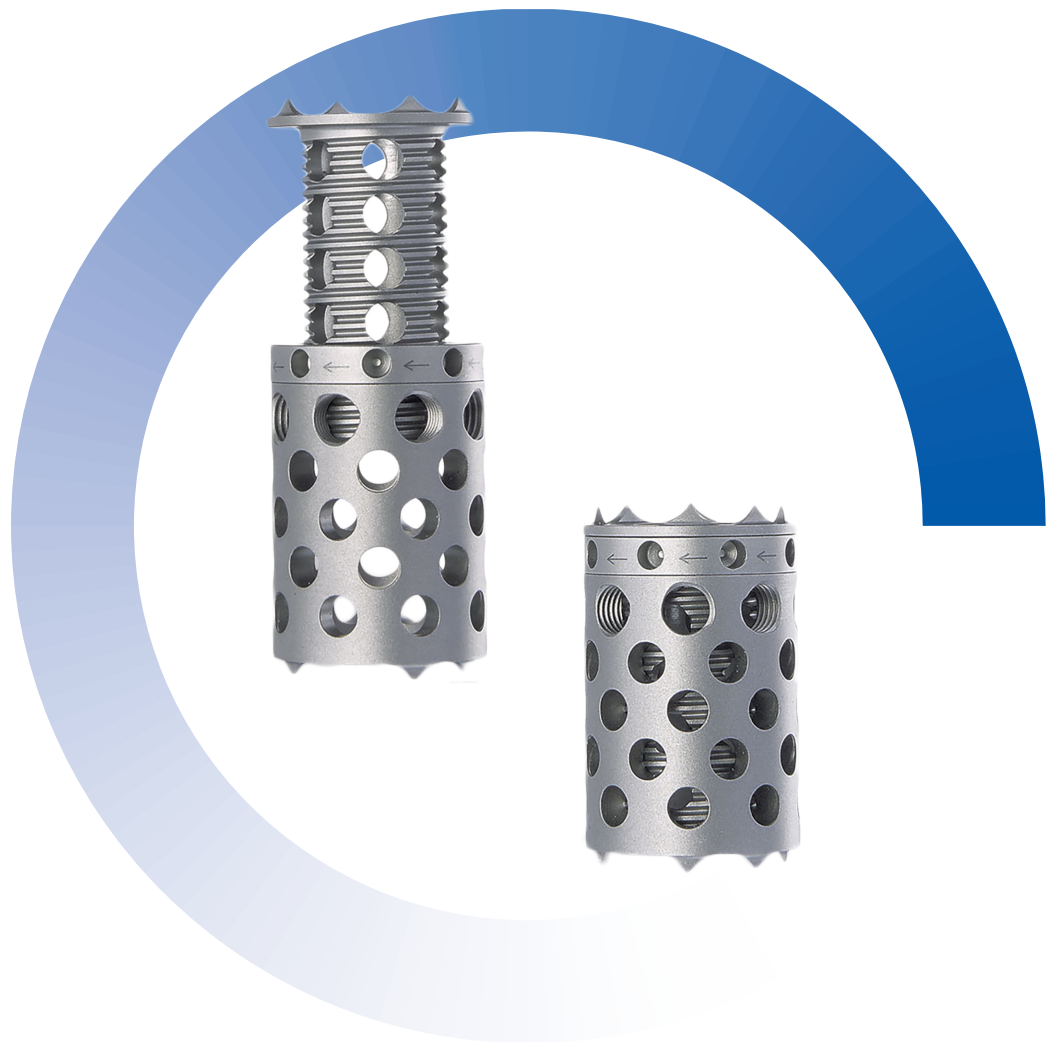


PRODUCT BROCHURE

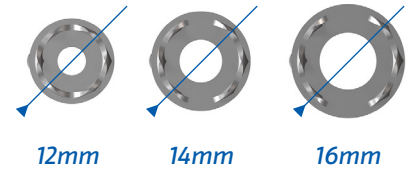
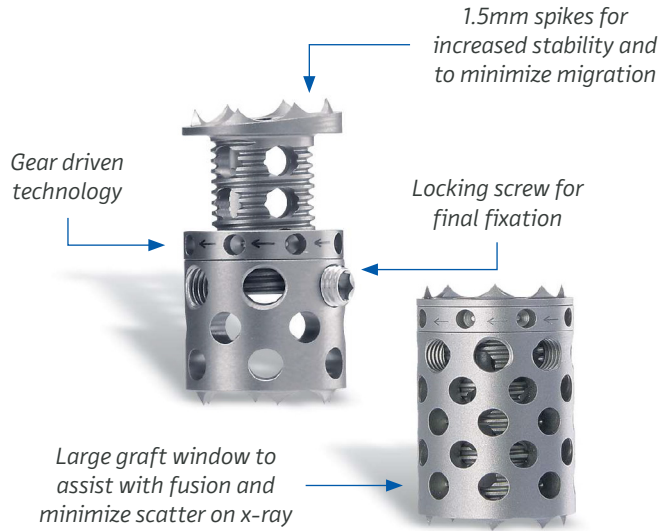
Small VBR[®]

Vertebral Body Replacement



System

The Small VBR is used for the surgical reconstruction of defects of the cervical (C2-T1) and thoracolumbar spine (T1-L5). With only a few basic instruments, a wide range of implants can be used to match patient anatomy and restore height and sagittal balance for spinal correction.



Diameter	Expansion Range
12mm	10 - 65mm
14mm	10 - 65mm
16mm	10 - 65mm

Angle Options: 0°, 6°

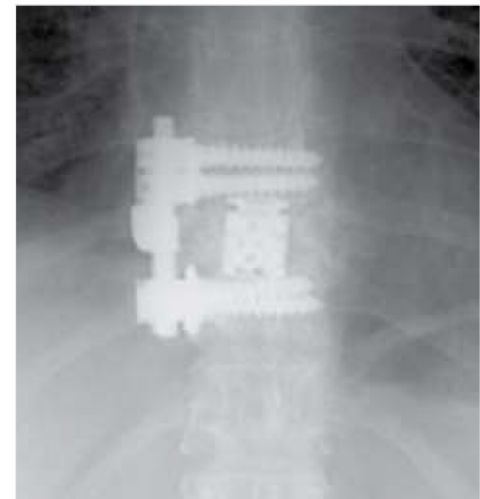
Indications

The Small VBR is intended for use in skeletally mature patients in the cervical spine (C2-T1) and in the thoracolumbar spine (T1-L5) to replace a collapsed, damaged, or unstable vertebral body due to tumor, osteomyelitis, trauma (i.e. fracture), or for reconstruction following corpectomy performed to achieve decompression of the spinal cord and neural tissues in degenerative disorders.

The Small VBR is also intended to restore the integrity of the spinal column even in the absence of fusion for a limited time period in patients with advanced stage tumors involving the cervical, thoracic, and lumbar spine in whom life expectancy is of insufficient duration to permit achievement of fusion, with bone graft used at the surgeon's discretion.

The Small VBR is intended to be used with supplemental spinal fixation systems cleared for use in the cervical, thoracic, and/or lumbar spine. The use of bone grafting material with the Small VBR is optional.

Note: The 10mm height implants (CS 2250-12-10, CS 2250-14-10, CS 2250-16-10) are not intended for use in the cervical spine.



T8-T10 anterior stabilization with Small VBR

Department of Neurosurgery,
Washington University, St. Louis, MO

Advantages

The Small VBR may be continuously expanded in situ, allowing for easy placement and bridging of the defect. The implant is anchored safely between the adjacent vertebral bodies.

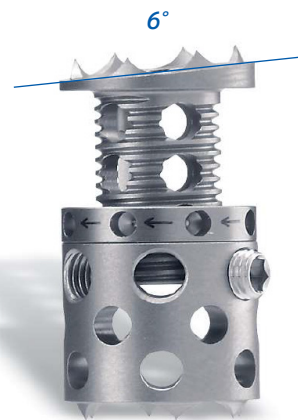
The implants are designed with large contact areas and fixed end caps with spikes to safely engage the vertebral end plates to minimize migration and subsidence.

All implants may be filled with bone graft before and after insertion. Additional application of bone graft outside the implant may enhance the fusion mass.

- **Easy, gear driven expansion**
- **Adjustable to match anatomy**
- **Simple, limited instrumentation**
- **Three diameters, two angles**
- **Fillable with bone graft or substitute**
- **Disposable, single-use cassette heads**
- **Titanium alloy**



Easy-to-use distractor



Components

Implant	Expansion Range	Angle	Product Number
Small VBR, Ø 12mm	10-13mm	0°	CS 2250-12-10
Small VBR, Ø 12mm	12-17mm	0°	CS 2250-12-12
Small VBR, Ø 12mm	16-25mm	0°	CS 2250-12-16
Small VBR, Ø 12mm	16-25mm	6°	CS 2250-12-166
Small VBR, Ø 12mm	24-40mm	0°	CS 2250-12-24
Small VBR, Ø 12mm	24-40mm	6°	CS 2250-12-246
Small VBR, Ø 12mm	39-65mm	0°	CS 2250-12-39
Small VBR, Ø 12mm	39-65mm	6°	CS 2250-12-396
Small VBR, Ø 14mm	10-13mm	0°	CS 2250-14-10
Small VBR, Ø 14mm	12-17mm	0°	CS 2250-14-12
Small VBR, Ø 14mm	16-25mm	0°	CS 2250-14-16
Small VBR, Ø 14mm	16-25mm	6°	CS 2250-14-166
Small VBR, Ø 14mm	24-40mm	0°	CS 2250-14-24
Small VBR, Ø 14mm	24-40mm	6°	CS 2250-14-246
Small VBR, Ø 14mm	39-65mm	0°	CS 2250-14-39
Small VBR, Ø 14mm	39-65mm	6°	CS 2250-14-396
Small VBR, Ø 16mm	10-13mm	0°	CS 2250-16-10
Small VBR, Ø 16mm	12-17mm	0°	CS 2250-16-12
Small VBR, Ø 16mm	16-25mm	0°	CS 2250-16-16
Small VBR, Ø 16mm	16-25mm	6°	CS 2250-16-166
Small VBR, Ø 16mm	24-40mm	0°	CS 2250-16-24
Small VBR, Ø 16mm	24-40mm	6°	CS 2250-16-246
Small VBR, Ø 16mm	39-65mm	0°	CS 2250-16-39
Locking screw	-	-	CS 2259

Instruments	Product Number
Manual expansion instrument	CS 2252
Insertor for small heights	CS 2255-1
Insertor for large heights	CS 2255-2
Handle	CS 2256-01
Assist handle	CS 2256-02
Outer shaft	CS 2256-20
Inner shaft	CS 2256-21
Implant releasing rod	CS 2256-22
Screwdriver with holder, hex 2.5mm	CS 2261
Lollipop trial, Ø 12-14mm	CS 2265-1
Lollipop trial, Ø 16-20mm	CS 2265-2
Measuring template for Small VBR	CS 2266-3
Impactor, straight, height 8mm	CS 2274-2
Measuring caliper	CS 5788
12mm disposable cassette head	CS 2256-12
14mm disposable cassette head	CS 2256-14
16mm disposable cassette head	CS 2256-16