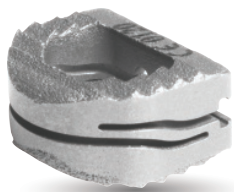
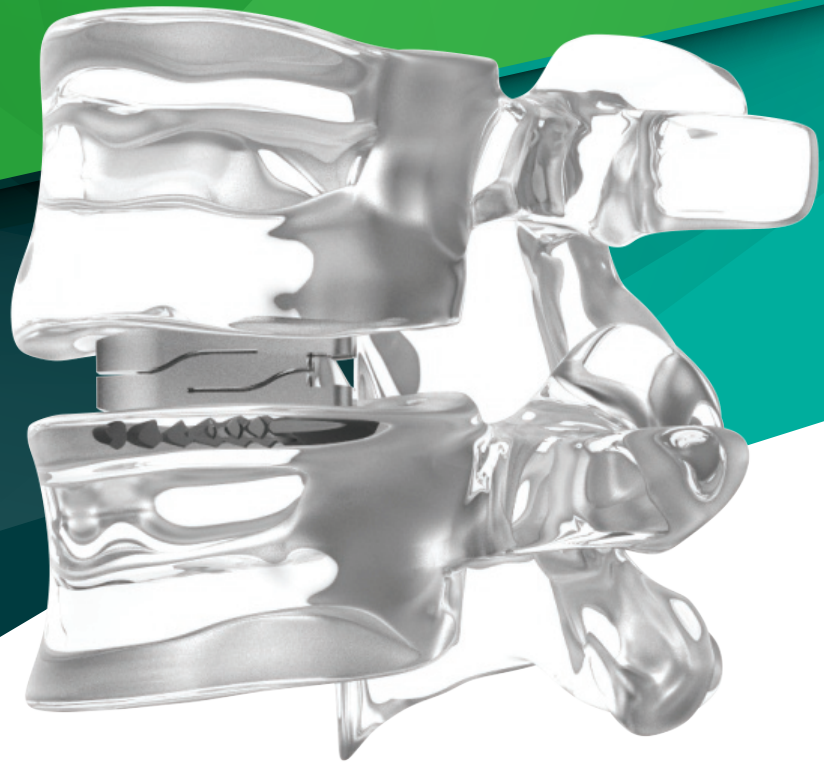


ZBrace

Intervertebral Fusion Device



Initial Stability Ready

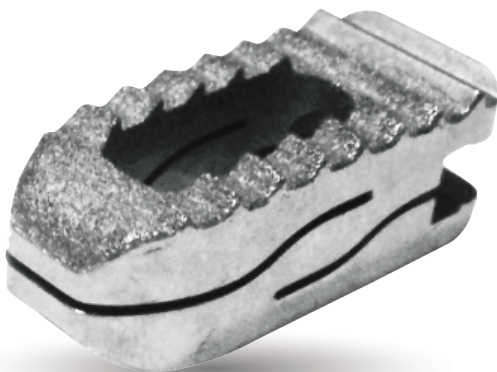
porous coating and the teeth

Load Sharing

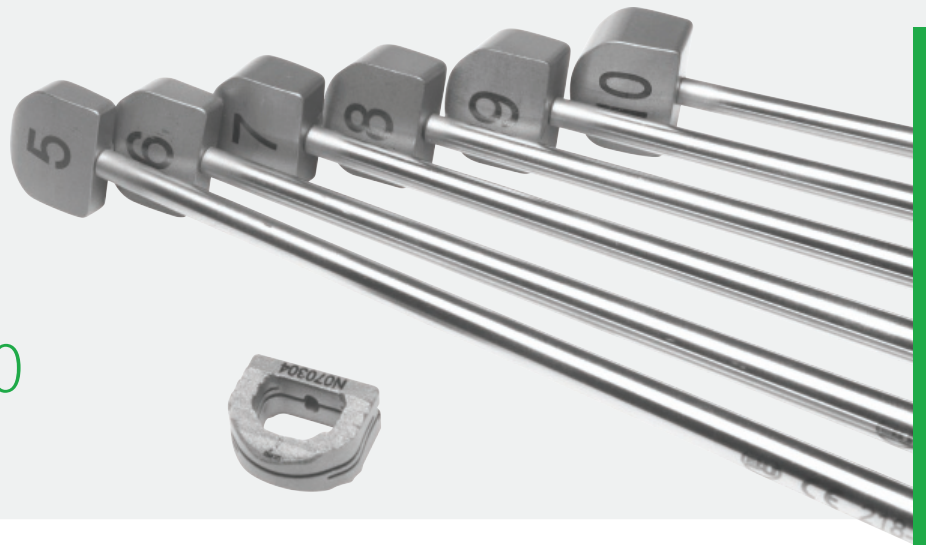
reduce adjacent level stress

Fusion Enhanced

micro-motion



5 6 7 8 9 10



Device Description

The ReBorn Essence Z-Brace Intervertebral Fusion Device System is designed for the treatment in spinal diseases. The Ti6Al4V material is known for better contact surfaces than PEEK. With porous coating, the contact surfaces provide a better stability. The ReBorn Essence Z-Brace Intervertebral Fusion Device System is able to provide a primary stability with a micro-motion to enhance fusion; meanwhile, reduce the stiffness of the spine. Please refer to indication stated in the manual of the ReBorn Essence Z-Brace Intervertebral Fusion Device System for further information.

Indication

The ReBorn Essence Z-Brace (Cervical) Intervertebral Fusion Device System is indicated for the use in skeletally mature patients with degenerative disc disease of the cervical spine. Degenerative disc disease is defined with the history and radiographic studies. Patients should have had 6 weeks of non-operative treatment, such as physiotherapy. The ReBorn Essence Z-Brace (Cervical) Intervertebral Fusion Device System shall be used in accompany with autograft or allograft.

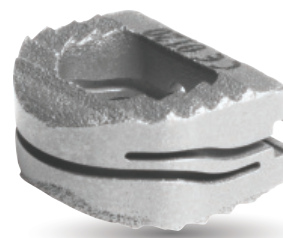
The ReBorn Essence Z-Brace (TLIF) Intervertebral Fusion Device System is indicated for the use in skeletally mature patients with degenerative disc disease, disc herniation, spondylolisthesis, instability of the anterior column in association with posterior pathology, fixation across the lumbosacral junction when a 360-degree fusion is desired. The ReBorn Essence Z-Brace (TLIF) must be used with posterior stabilization system.

The ReBorn Essence Z-Brace (PLIF) Intervertebral Fusion Device System is for the stabilization and fusion of the spine following the correction of adult spinal deformity. Other indication including foraminal stenosis, disc herniation, spondylolisthesis, retrolisthesis, scoliosis, failed previous fusions, discogenic low back pain, fractures, and trauma. The ReBorn Essence Z-Brace (PLIF) must be used with posterior stabilization system.

ReBorn Essence Z-Brace Cervical Intervertebral Cage

Z-Brace Cervical Intervertebral Cage

REF	Dia. (mm)	Length (mm)
848-05133	5	13
848-06133	6	13
848-07133	7	13
848-08133	8	13
848-09133	9	13
848-10133	10	13



Tools

Z-Brace Cervical Trial Remover
218-0641



Z-Brace Cervical Implant Driver
218-0817



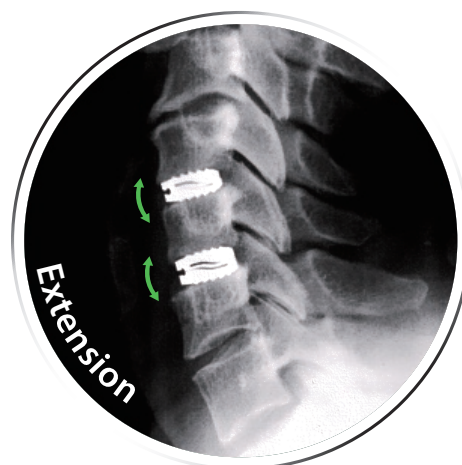
Z-Brace Cervical Trial
218-0645 ~ 218-0650



Contraindication

The ReBorn Essence Z-Brace (Cervical, TLIF, PLIF) Intervertebral Fusion Device System is not usable with the patients with severe osteoporosis, infection, metal allergy, severe metabolic bone disease, or any entity or condition that totally precludes the possibility of fusion.

In addition, some of the lifestyles of the patients, will be affecting the stress on the implants and causing the failure of the implantation, such as their occupation, overweight, mental illness, alcoholism, or drug abuse.



Introduction

Ti6Al4V is the most bio-compatible material among all the materials that are used for implants. With the hardness of Ti6Al4V, the material inventor has invented polyetheretherketone (refer as PEEK) for the material of cage. After years of studies, PEEK material has been discovered with low antibacterial effect, and titanium has better antibacterial effect due to its characteristic. In the study, titanium is found with 1.5-time antibacterial effect compared to PEEK¹. The rough surface of the titanium provides a better environment for the newly formed bones to grow onto the cages. Rough surface attracts bones and smooth surface attracts tissue¹.

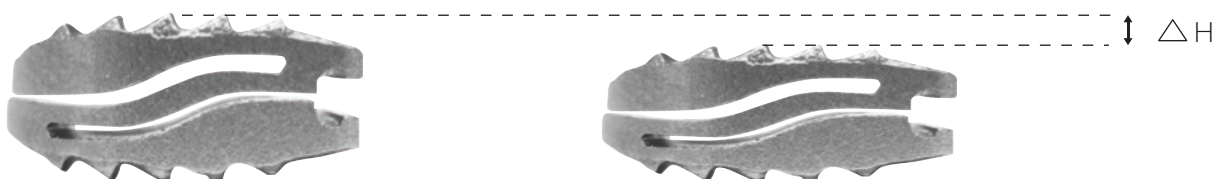
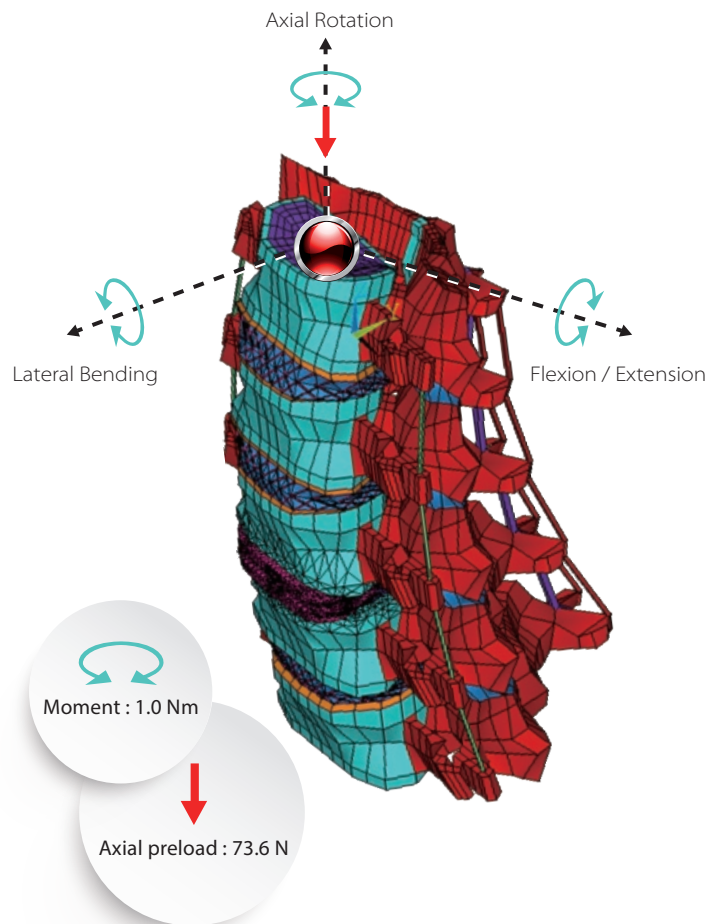
Reference :

1.T.J. Webster, A.A. Patel, M.N. Rahaman, B. Sonny Bal. Anti-infective and osteointegration properties of silicon nitride, poly(etheretherketone), and titanium implants. *Acta Biomaterialia* 2012, 8(12):4447-54.

Design Rationale

Following the Wolff's Law, the ReBorn Essence Z-Brace Intervertebral Fusion Device, is designed to enhance fusion with the capability of maintaining the height of the intervertebral disc space. A titanium compound with a Z-shape cut provides micro-motion, which enhances the fusion by giving the flexural load towards the segment needed to be fused.

As for the micro-motion provided by the cage, it releases the intradiscal pressure by the means of decreasing the chance of adjacent segment disease from happening. With the technology of surface treatment, the ReBorn Essence Z-Brace Intervertebral Fusion Device provides greater surface contact and creates an ideal growth environment for bone formation.



Unique Tools

The ReBorn Essence Z-Brace Intervertebral Fusion Device comes with an unique implanting tool. Prior to the installation of the drivers, the device sustains the normal position. After the driver is installed, the device will then become more bullet shape, which will be easier for users to implant the device. When the device is in position, the driver can be released. The tip of the cage will create a distraction of the intervertebral area.



ReBorn Essence Z-Brace Lumbar Intervertebral Cage

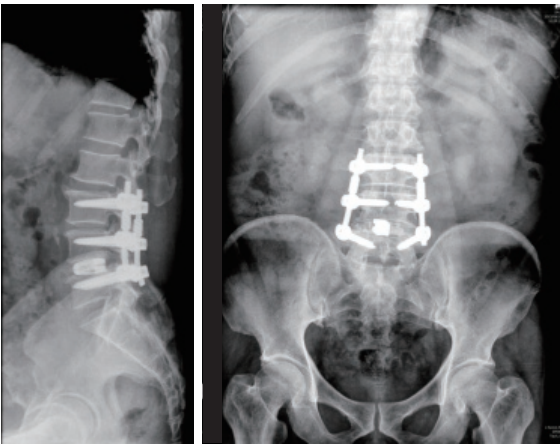
Z-Brace Lumbar Intervertebral Cage



REF	Dia. (mm)	Length (mm)
948-08243	8	24
948-09243	9	24
948-10243	10	24
948-11243	11	24
948-12243	12	24
948-13243	13	24
948-14243	14	24
948-08283	8	28
948-09283	9	28
948-10283	10	28
948-11283	11	28
948-12283	12	28
948-13283	13	28
948-14283	14	28
948-08303	8	30
948-09303	9	30
948-10303	10	30
948-11303	11	30
948-12303	12	30
948-13303	13	30
948-14303	14	30

Conclusion

ReBorn Essence Z-Brace Intervertebral Fusion Device is the most advanced fusion device system on the market. With the ability of micro-motion and the osteoconduction through the material, the treatment of degenerative disc disease becomes easier, which provides a better lifestyle for the patients.



BAUI Biotech is an innovative company with the passion to improve and discover new ways for treating spine diseases. Z-Brace is the most advanced type of cage that is unprecedented in the world.

Tools

Square Shaver
420-1106



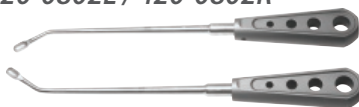
T - shape Driver
420-1720



Lumbar Bone Graft Template
420-3203



Shaver
420-0802L / 420-0802R



L - shape Driver type 1
420-1721



Bone Graft Impactor
420-3304



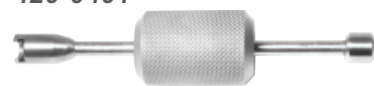
5mm / 8mm Dura Retractor
420-3501 / 420-3502



L - shape Driver type 2
420-1723



Sliding Hammer
420-0401



7mm ~ 13mm Shaver
420-0807A ~ 420-0813A



Angulation Impactor
406-3203



T-Handle
406-0101



8mm ~ 14mm Trail
420-0408A ~ 420-0414A



Z-Brace Final Impactor
420-3307



Impacting Cap
420-1720-9

