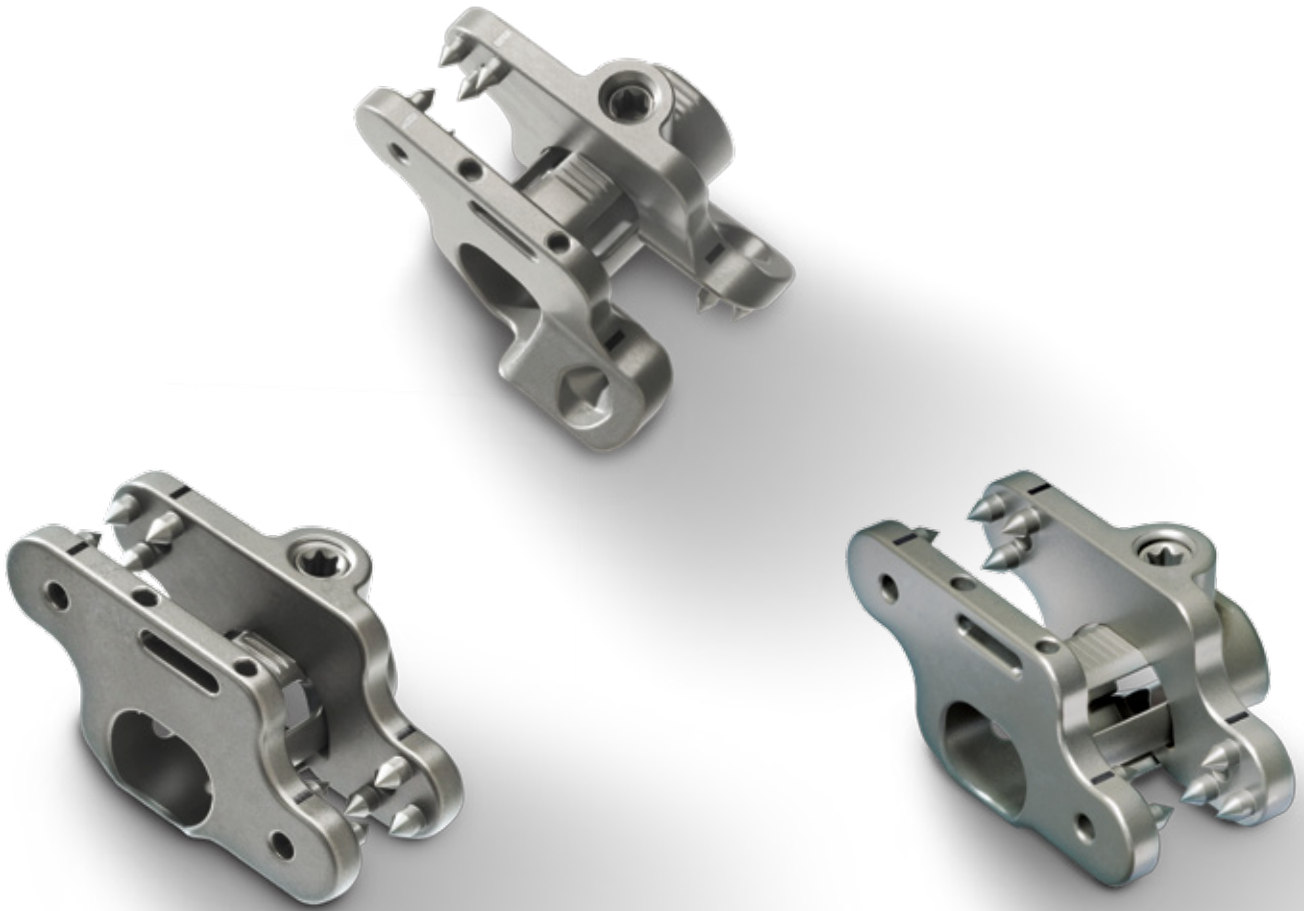




ZIMMER BIOMET

Your progress. Our promise.™

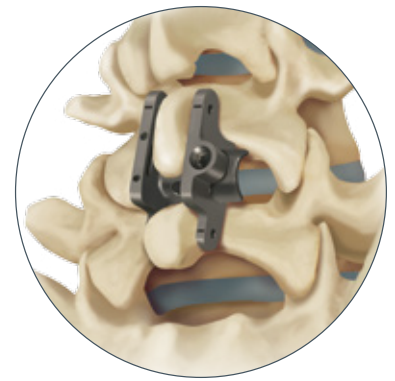
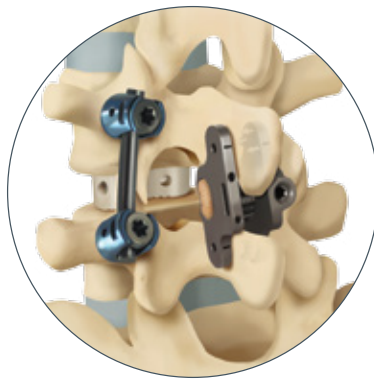


Thoracolumbar Solutions

Aspen[®]

MIS Fusion System

The Aspen System is a complete portfolio of spinous process fixation devices that offers a less invasive alternative to pedicle screws and facilitates interbody and posterior fusions.



Approach

YOUR MIS PROCEDURES WITH CONFIDENCE

As surgeons and patients increasingly demand minimally invasive alternatives to traditional pedicle screws, spinous process fixation has fulfilled an unmet clinical need in spinal fusion surgery. The Aspen System consists of a family of spinous process fixation devices designed for rigid, posterior fixation to promote fusion from T1 to S1.

ENGINEERED FOR PERFORMANCE



Proven Efficacy

- A randomized, controlled, multi-center clinical trial showed that the Aspen System could be a significantly faster and less invasive alternative to pedicle screw fixation in support of interbody fusion¹
- Biomechanical testing has demonstrated comparable stability of the Aspen System to pedicle screw fixation in support of both TLIF and ALIF^{3,4}



Versatile Design

- Spiked-plate design provides reliable bony fixation under both static and fatigue loading conditions
- The Z-shape of the Aspen implant allows it to contour to patient anatomy
- Integrated load sharing central barrel can retain 0.5cc to 3.0cc of bone graft material



Comprehensive Offering

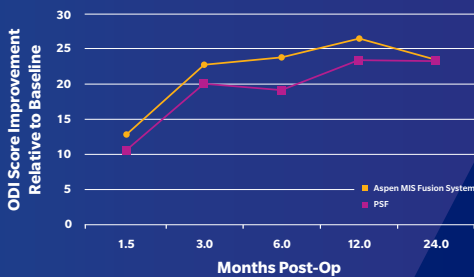
- Includes a flared plate option with 45° angle at one end for anatomical fit for L5–S1
- Small footprint ensures easy positioning for varying patient anatomy from T1–S1
- Offset plate allows for optimal placement in the strongest bone of the spinous process

RAPID RECOVERY: Patients treated with the Aspen System and interbody fusion (A/LLIF) have reported robust clinical improvement early in the post-operative period, including statistically significant improvement in ODI, SF-36, and ZCQ* scores at just six weeks.⁴

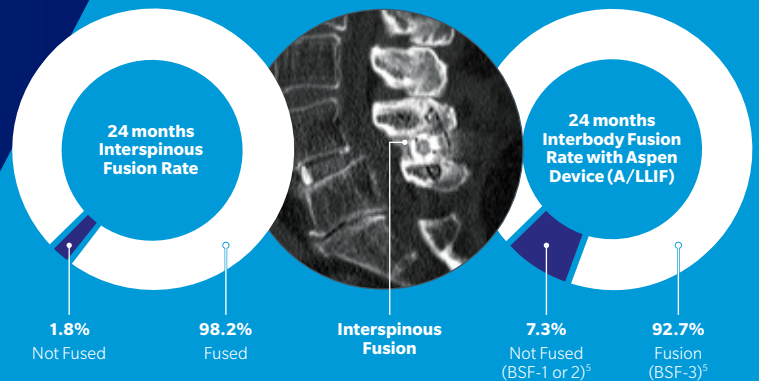
THE ASPEN IMPACT

Clinical Results^{1,2}

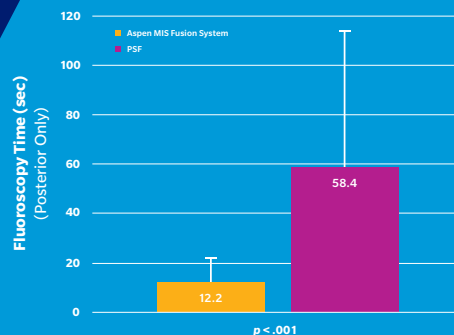
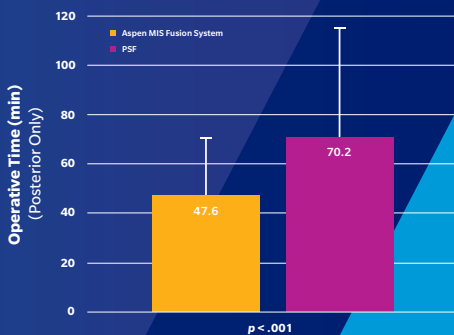
At 24 months, interspinous process fixation presents as a clinically effective adjunct to single-level interbody fusion (ALIF/LLIF).



Robust Fusion Rates^{1,2}



Intraoperative Outcomes¹



*ODI—Oswestry Disability Index; SF-36 - Short Form Health Survey; ZCQ—Zurich Claudication Questionnaire

OPTIMAL CUSTOMIZATION



Standard

BARREL DIAMETER	BARREL LENGTH	PLATE A/P DEPTH	PLATE LENGTH
8mm 10mm	21mm	16mm	35mm
12mm 14mm			(ø16=37mm;
16mm 18mm			ø18=39mm)



Medium

BARREL DIAMETER	BARREL LENGTH	PLATE A/P DEPTH	PLATE LENGTH
8mm 10mm	18mm	16mm	35mm
12mm 14mm			



Flared

BARREL DIAMETER	BARREL LENGTH	PLATE A/P DEPTH	PLATE LENGTH
8mm 10mm	21mm	16mm	35mm
12mm 14mm			(ø16=37mm;
16mm 18mm			ø18=39mm)



LPlate™

POST HEIGHT	POST LENGTH	PLATE A/P DEPTH	PLATE LENGTH
8mm*	21mm	16mm	30mm 35mm 45mm
			(26mm and 55mm**)

*The interspinous post is 8mm cranial/caudal, but thin in the A/P dimension; Fortis® ISP interlaminar bone block may be used for supplemental load sharing.

**Order separately



Fortis ISP

HEIGHT	LENGTH
8mm 10mm 12mm 14mm 16mm 18mm	30mm

References:

1. Kim K, et al. Interspinous Process Fixation versus Pedicle Screw Fixation in Circumferential Fusion: Outcomes from a Prospective Randomized Multi-Center Trial. North American Spine Society (NASS) Annual Meeting, Oct 2016. Boston, MA. Podium Presentation.
2. Data on File.
3. Karahalios DG, et al. Biomechanics of a lumbar interspinous anchor with anterior lumbar interbody fusion. *J Neurosurg Spine*. 2010;12(4):372–380.
4. Kaibara T, et al. Biomechanics of a lumbar interspinous anchor with transforaminal lumbar interbody fusion. *World Neurosurg*. 2010;(73)5:572–77.
5. Fogel GR, Toohy JS, Neidre A, Brantigan JW. Fusion assessment of posterior lumbar interbody fusion using radiolucent cages: X-ray films and helical computed tomography scans compared with surgical exploration of fusion. *Spine J*. 2008;8:570–7.



ZIMMER BIOMET
Your progress. Our promise.™

800.447.3625/zimmerbiomet.com

©2017 Zimmer Biomet Spine, Inc. All rights reserved.

All content herein is protected by copyright, trademarks and other intellectual property rights, as applicable, owned by or licensed to Zimmer Biomet Spine, Inc. or its affiliates unless otherwise indicated, and must not be redistributed, duplicated or disclosed, in whole or in part, without the express written consent of Zimmer Biomet Spine. This material is intended for health care professionals, the Zimmer Biomet Spine sales force and authorized representatives. Distribution to any other recipient is prohibited.

For product information, including indications, contraindications, warnings, precautions, potential adverse effects and patient counseling information, see the package insert and www.zimmerbiomet.com.

0635.1-US-en-REV0417