



# Trabecular Metal™ Glenoid



The Natural Solution to Glenoid Fixation



# Designed for strength, stability and longevity.

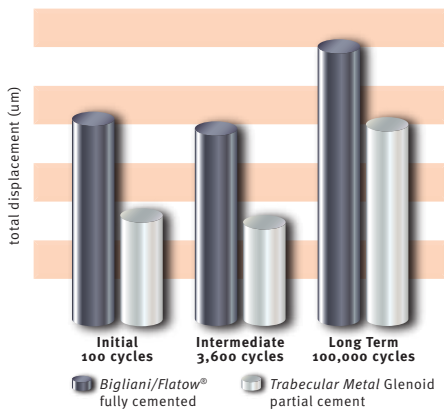
Zimmer offers surgeons the first glenoid component to hold the hope of enduring fixation. The high friction coefficient of *Trabecular Metal*<sup>™</sup> Material plus strength and flexibility provide initial stability. *Trabecular Metal* Material's osteoconductive properties support vascularization<sup>1</sup> that allows for more normal bone formation and maintenance.



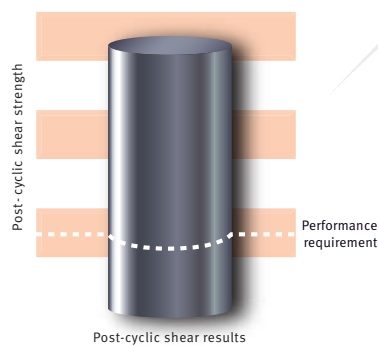
## Strength and stability designed to facilitate long-term survivorship

Initial stability comparable to an all-polyethylene cemented glenoid

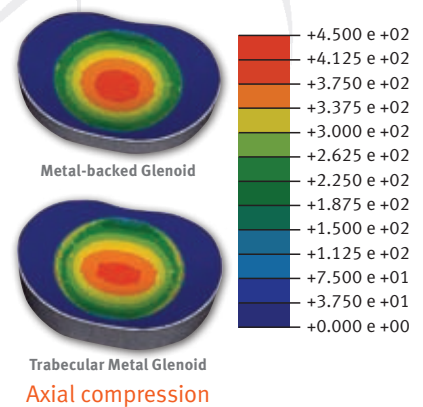
Strength and flexibility to distribute contact forces



Stability test results



Strength result was 3.5 times the test benchmark.<sup>2</sup>



Finite element analysis shows that contact stresses

# Combines the proven heritage of the *Bigliani/Flatow* shoulder system with the innovation of *Trabecular Metal* Material

Compatible with both *Bigliani/Flatow* and *Trabecular Metal* Humeral stems and heads

Variable conformity of glenoid articular surface:

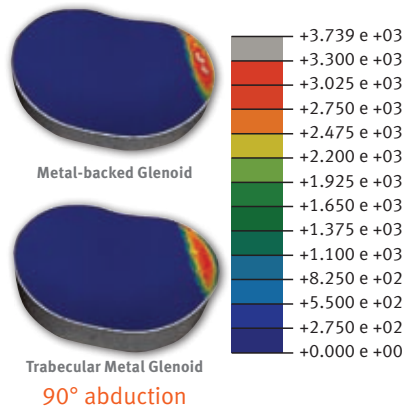
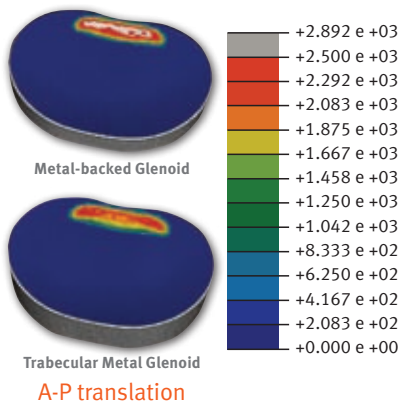
- Reduces the likelihood of edge loading (“rocking horse” effect) and polyethylene wear
- Joint stability through range of motion

The variable-conformity articular surface “behaves similarly to the natural joint” and may “control rim loading under eccentric loads when compared with a conforming glenoid.”<sup>3</sup>



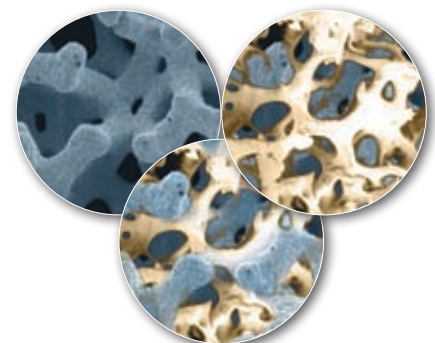
Trabecular Metal Humeral Stem

Bigliani/Flatow Shoulder System



Biologic in-growth achieved through *Trabecular Metal* Material properties:

- Vascularization
- Osteoconductivity
- Promotion of more normal glenoid bone biology



Trabecular Metal properties include up to 80% porosity and completely open pores that promote biologic ingrowth.

*of the Trabecular Metal Glenoid were equivalent or lower than a solid metal-backed glenoid.*<sup>4</sup>

# 350%



**Strength and stability designed to facilitate long-term survivorship**

**Combines the proven heritage of the Bigliani/Flatow shoulder system with the innovation of Trabecular Metal Material**

1. Karageorgion, V. and Kablan, D.  
"Porosity of 3D Biomaterial Scaffolds and Osteogenesis"  
Biomaterials, 26(27):5474-91, September 2005
2. Mroczkowski, M.  
"Performance Evaluation of the Trabecular Metal Glenoid" 2009.
3. Wang et al. Biomechanical evaluation of a novel glenoid design in total shoulder arthroplasty.  
J Shoulder Elbow Surg 2005;14:129S-140S.
4. Data on file at Zimmer.

Contact your Zimmer representative or visit us at [www.zimmer.com](http://www.zimmer.com)



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