A Solution for Every Glenoid Challenge

Equinoxe® Laser Cage Glenoid

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You're Prepared. So Are We. A Solution for Every Challenge.

The Laser Cage Glenoid is the next-generation hybrid glenoid, tested in extreme fatigue loading conditions while seated 5mm proud. It was able to complete 200k cycles without failure, which is twice as many cycles as required by the ASTM standard.[6] Its predecessor, launched in 2011, the Cage glenoid at 50 months' mean follow-up, has demonstrated significantly fewer radiolucent line around the glenoid and a lower revision rate.[1]

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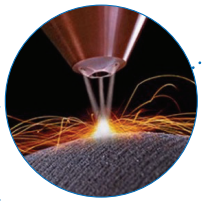
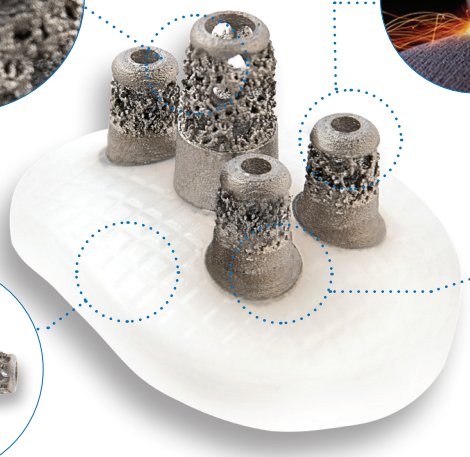
Key Benefits

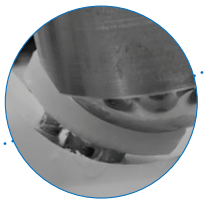
3D-Printed Porous Structure – Central Bone Cage & Peripheral Pegs



Laser Printed Bone Cage & Peripheral Pegs



Ultra-High-Molecular-Weight Polyethylene (UHMWPE)



Increased Mechanical Strength: 2x Peg Shear Resistance & 5x Peg Pull-Off[6]

3D-PRINTED POROUS STRUCTURE

- Unique laser 3D-printed central cage and peripheral pegs with porous regions optimized for pore size, count, and porosity to allow for bone through growth and biologic fixation.[6]
- Laser 3D-printing allowed for the creation of internal geometry in the central cage and peripheral pegs that the polyethylene could be molded into, vastly increasing the strength of the poly/metal interface in shear, axial pullout, and fatigue.[6]

STABILITY & FIXATION

- Press-fit central cage is designed for initial fixation.
- Increased mechanical strength: 2x peg shear resistance, 5x peg pull-off[6]
- Curved-back glenoids are more effective at resisting micromotion and provide better radiolucency scores than flat back glenoid designs.[2-3]
- 4X reduction in glenoid radiolucent lines (cage glenoids vs. all-poly glenoids at 50-months follow-up)[1]

INTRAOPERATIVE FLEXIBILITY

- 0-Degree and 8-Degree posterior augment glenoid options
- Innovative 3D-printed cage/pegs with direct compression molded, ultra-high molecular weight polyethylene, featuring a press-fit central cage and three cemented peripheral pegs

BONE CONSERVING

- Curved-back glenoid better matches the native glenoid anatomy curvature, resulting in less reaming.[7-8]
- 8-degree augment: Preserves bone to treat posterior erosion with minimal bone removal. It builds up the eroded side rather than reaming to correct the deficiency.[4]
- Wedge augment preserves 51% more bone than a step augmented glenoid design.[5]

REFERENCES

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4. **Roche, et al.** Biomechanical impact of posterior glenoid wear on anatomic total shoulder arthroplasty. *Bulletin of the Hospital for Joint Diseases* 2013;71(Suppl 2):S5-11.
5. **Kersten, et al.** Posterior augmented glenoid designs preserve more bone in biconcave glenoids *J Shoulder Elbow Surg.* 2015 Jul;24(7):1135-41.
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8. Data on file at Exactech.(Computer assessment of scapula cortical and cancellous bone removal when correcting a posterior defect using 3 different glenoid prosthesis designs. ORS 2013 abstract).

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