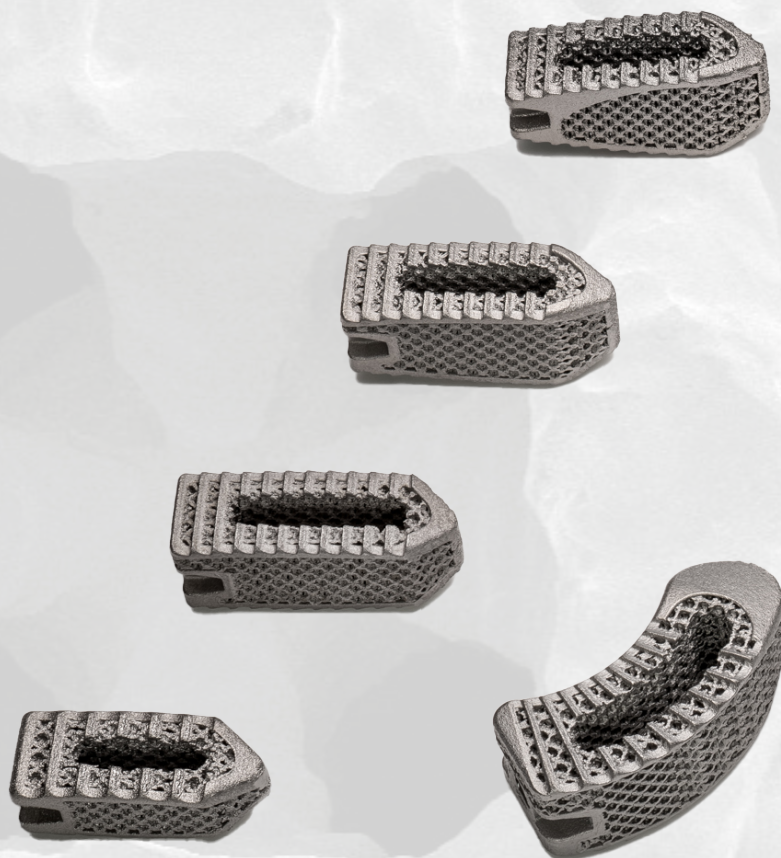


THE HIVE™ PRODUCT PORTFOLIO

FEATURING SOFT TITANIUM® TECHNOLOGY

HIVE PL INTERBODY SYSTEM

HIVE TL INTERBODY SYSTEM

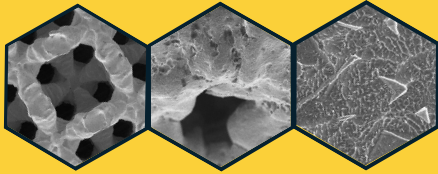


A BETTER FUSION SOLUTION

The HIVE PL and TL Interbody Systems include a range of implant sizes to accommodate vertebral anatomy and incorporate a Soft Titanium lattice structure to deliver maximum durability while optimizing visualization.

THE HIVE SOFT TITANIUM TECHNOLOGY

BONE ONGROWTH



- Proprietary NanoHive® acid etch surface treatment drives increased osteoblast recruitment, as compared to untreated surfaces [1]
- Rapid bone attachment seen at endplates and throughout the lattice [2]
- Macro, micro and nano-scale features on all surfaces, as well as each member of the internal cell structure, are designed to support osteoblast adhesion and optimize the environment for bony on-growth [1,3]

IMPROVED VISUALIZATION



- Low density lattice designed to allow visualization of endplate fusion and bone growth through the cage
- CT/MRI scatter and interference reduced

REDUCED IMPLANT STIFFNESS

- Patented rhombic dodecahedron lattice with independent endplates reduces the need for stress shielding design features found in other implants
- Soft Titanium lattice allows bone cells growing within the implant walls to experience natural loads, significantly increasing bone strength per Wolff's law



BONE INGROWTH

- Interconnected 300-900 micron pores shown to be optimal for new bone ingrowth, allows flow of cells and signals
- 70% porous, allowing bony ingrowth
- Bone growth observed within the lattice before being observed in the packed lumen [2]

IMPLANT SIZES

PL Straight:

- 9x22mm, 0°, 7-13mm
- 9x22mm, 8°, 8-13mm
- 9x26mm, 0°, 6-15mm
- 9x26mm, 8°, 8-14mm
- 9x26mm, 18°, 11, 13mm
- 10x30mm, 10°, 10-15mm
- 11x28mm, 0°, 7-15mm

TL Curved:

- 11x32mm, 8°, 7-15mm

IMPLANTS AND INSTRUMENTS

- Streamlined instrumentation for disc preparation and implant insertion accommodates a variety of anatomical conditions and approaches
- Bulleted nose facilitates direct insertion
- PL System instrumentation and cage design allow for in-situ rotation

[1] N. J. Bassous, C. L. Jones and T. J. Webster, 3-D printed Ti-6Al-4V scaffolds for supporting osteoblast and restricting bacterial functions without using drugs: Predictive equations and experiments, Acta Biomaterialia 96 (2019) 662-673, <https://doi.org/10.1016/j.actbio.2019.06.055>.

[2] CL Jones, D Bichara, J Toy, J Tinley, (2018) "Bone In Growth with 3D-Printed Soft Titanium® Scaffold." [White Paper], NanoHive Medical, LLC.

[3] Ejiofor J., et al, Bone Cell Adhesion on Titanium Implants with Nanoscale Surface Features, International Journal of Powder Metallurgy, 40(2), 43-53.