

## AMORPHOUS METALS FOR NEXT-GEN BIOMEDICAL APPLICATIONS

### Biocompatibility

acc. to DIN ISO 10993-5 / -12

### Material Properties

(e.g. AMLOY-ZR02)

Bending yield strength	2 GPa
Tensile yield strength	1.7 GPa
Young's modulus	89 GPa
Vickers hardness (HV5)	540
High corrosion resistance	
High abrasion resistance	

### Freedom of Design

- Manufacturability by means of injection molding and additive manufacturing
- Complex geometries
- Individualization
- Miniaturization
- Adjustable surface properties



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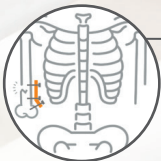
### SPINE

- Miniaturization
- Enhanced spring capability
- Dynamic fixation and stabilization



### TRAUMATOLOGY

- Low Young's modulus
- MRI compatibility
- Corrosion resistance



### CMF

- Strong lattice
- Cosmetic & reconstructive surgery
- Biomechanical properties



### DENTAL

- Design improvements
- Reliable strength
- Favorable bone-implant interaction



### INSTRUMENTS & TOOLS

- Fine structure replication
- High surface quality
- Wear resistance



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