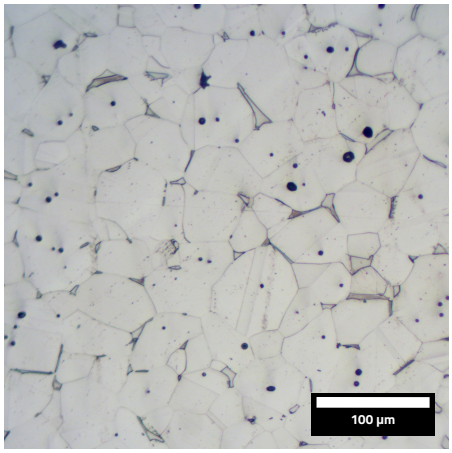
FEATURES

- Biocompatible
- High wear resistance
- High corrosion resistance
- Good machinability
- Good weldability

INDUSTRIES SERVED

- Medical & Dental
- Automotive
- Consumer Products
- Industrial Equipment
- Marine Environments

MICROSTRUCTURE



MATERIAL PROPERTIES

Austenitic stainless steel

	As-Sintered	MPIF 35-MIM Standards	Test Method
Ultimate Tensile Strength (MPa)	540	450-520	ASTM E8/ E8M
Yield Strength (MPa)	200	140-175	
Elongation (%)	70	40-50	
Hardness (HRB)	68	67	ASTM E18
Density (g/cm^3)	7.8	7.6	ASTM B962
Relative Density (TD%)	98%	-	
Surface Roughness (Ra, µm)	As-Sintered: 3.5 (140 µin) Abrasive Blasted: 2.8 (110 µin)	-	ASTM B946
$CuSO_4$ Corrosion Test	Pass	Pass	ASTM F1089

The performance characteristics of these materials may vary according to application, operating conditions, or end use. Each buyer is responsible for determining that the material is safe, lawful, and technically suitable for the intended application. 3DEO makes no warranties, expressed or implied, including, but not limited to, the warranties of merchantability, fitness for a particular use, or warranty against patent infringement. Product specifications are subject to change without notice.

COMPOSITION (wt%)

Element	Minimum	Maximum
Chromium (Cr)	16.0	18.00
Nickel (Ni)	10.0	14.00
Molybdenum (Mo)	2.0	3.00
Manganese (Mn)	-	2.00
Silicon (Si)	-	1.00
Carbon (C)	-	0.03
Phosphorus (P)	-	0.04
Sulfur (S)	-	0.03
Iron (Fe)	Balance	Balance

Other Elements: Total may not exceed 1.00% combined. Same chemical composition as the built parts. In accordance with MPIF Standard 35 MIM (2018 Edition) and ASTM A240.

MECHANICAL PROPERTIES