Technical Datasheet
3.7165-ELI

Characteristics and scope of application

- Supplied with Extra Low Interstitial solved elements inside microstructure especially used for medical and dental application, secure biocompatible* and long-term implantable alloy.
- High-tech alloy with enormous resistance against impact strength cracks and high compression-tension fatigue limits.
- MRI compatible (non magnetic behaviour).
- EU-Melt source for highest quality standards and secure supply chain.

Standard designations

- DN Meditech designation 3.7165/70 Ti6Al4V-ELI
- Alloy number / UNS 3.7165-ELI / R56401
- Specifications ASTM F136, ASTM F1472, ISO 5832-3
- Typical chemical composition **N** 0.050% **C** 0.08% **H** <0.012% **Al** 5.50 – 6.50% **V** 3.50 – 4.50%

Physical properties

Density	Temperature liquidus line	Electrical resistivity	Mean coefficient of thermal expansion
kg/dm³	°C	Ohm mm²/m	10^{-6}/K | RT to 100°C
4.43	1606	1.710	8.6

Mechanical properties

Ultimate tensile strength	Yield strength	Elongation
MPa	MPa	%
860 *	795 *	10 *

*ASTM F981 Practice for Assessment of Compatibility of Biomaterials for Surgical Implants with Respect to Effect of Materials on Muscle and Bone

*annealed

DN Meditech

All data for information only