

TI-ALLOY GRADE 2 TUBING FOR SURGICAL IMPLANTS

Ti-Grade 2 Material Data acc. ASTM F 67 R50400

Chemical Composition

Nitrogen	_____	max. 0,03 wt.-%
Carbon	_____	max. 0,08 wt.-%
Hydrogen	_____	max. 0,015 wt.-%
Iron	_____	max. 0,03 wt.-%
Oxygen	_____	max. 0,25 wt.-%
Titanium	_____	balance

Physical Properties

Melting point	_____	1660° C
Density	_____	4,51 g/cm ³
Modulus of Elasticity	_____	103 x 10 ³ MPa
β-Transus-Temperatur	_____	ca. 910°C

Mechanical Properties (annealed)

Ultimate Tensile Strength	_____	min. 345 MPa
Yield Strength	_____	min. 275 MPa
Total Elongation	_____	min. 30%

Microstructure in fully annealed condition

Grain Size	_____	min. 4
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Comments

These values should only be used as guidelines for developing material specifications. Properties strongly depend on processing history. The values listed above are typical for uniaxial tension. Upon request, we can also deliver this material with other properties.