TITANIUM Advanced Materials. Engineered for Performance.

Titanium Grade 5 (Ti-6Al-4V)

Titanium | UNS: R56400 | EN: 3.7165 | ASTM: Grade 5

The most widely used titanium alloy, accounting for the majority of all titanium consumption. Roughly three times the strength of commercially pure titanium at the same density.



Stock status: Mill indent - Typical lead time: 4 - 8 weeks mill indent

Key features

- Highest strength-to-weight ratio in common use
- Aerospace and medical certified material available

Available forms & sizes

Form	Size range
Plates	1.5 - 100 mm thk, up to 2500 mm wide
Round Bars	6 - 500 mm dia
Blocks & Profiles	Forged blocks and discs

Chemical composition (%)

Element	Min	Max
Ti	-	Balance
Al	5.5	6.75
V	3.5	4.5
Fe	-	0.40

Mechanical properties

Property	Value	Unit
Yield Strength (0.2%)	828 min	MPa
Tensile Strength	895 min	MPa
Elongation	10 min	%

Physical properties

Property	Value	Unit
Density	4.43	g/cm3
Max Service Temperature	400	C

Standards

ASTM B265, ASTM B348, AMS 4911

Equivalent grades

3.7165, R56400, Ti-6Al-4V, TA6V

Industries served

Aerospace, Medical, Oil & Gas, Motorsport

Typical applications

- Aerospace structural components
- Subsea high pressure parts
- Medical implants and instruments
- High performance fasteners

Live datasheet