

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.

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

Typical Applications



AXICOR DWC LLC

Technical Data Sheet

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

Industries Served

Aerospace, Medical, Oil & Gas, Motorsport