

### Key Features

- Excellent corrosion resistance
- High strength
- Low density
- Heat treatment

### Common Applications

- Aero-engine components
- Airframe components
- Marine equipment
- Offshore oil & gas equipment
- Power generation industry
- Autosport components
- Medical equipment

### Material Description

Titanium Grade 5, also known as Ti-6Al-4V, is an titanium alloy characterized by its high strength, low density, and excellent corrosion resistance. Titanium Grade 5 offers exceptional strength-to-weight ratio, making it ideal for aerospace, automotive, and marine applications where lightweight, high-strength materials are required. It also exhibits good biocompatibility, making it suitable for medical implants and surgical instruments. Titanium Grade 5 can be easily welded and fabricated using conventional methods, making it a versatile choice for a wide range of applications..

### Chemical Composition (%)

	Ti	C	H	Fe	N	O	Al	V			
Min.							5.5	3.5			
Max.	90	0.08	0.015	0.40	0.05	0.20	6.75	4.5			

### Mechanical Properties

Ultimate Tensile Strength	138,000 PSI
Tensile Yield Strength	128,000 PSI
Hardness	Rockwell C36
Elongation at Break	14%

### Physical Properties

Density	0.16 lb/in <sup>3</sup> (4.43 g/cm <sup>3</sup> )
Thermal Conductivity	6.7W/m.K
Modulus of Elasticity	16,500 KSI (113.8 GPa)
Melting Point	2,920-3,020°F (1,604-1,660 °C)

### Technical Assistance

Our knowledgeable staff, supported by our in-house team of expert metallurgists and engineers, is ready to assist you with any technical inquiries.

### InstaVoxel™ – On-Demand Manufacturing Expert

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InstaVoxel's quality control system is ISO-9001 certified, and all our partners hold relevant certifications.



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