

Grade 9 Titanium Bar

Material: Titanium Alloy

Dimensions: Diameter Φ 6-300mm, Length $\leq$ 6000mm (Custom sizes available upon request)

Standards: ASTM B348, ASME SB348, GB/T2965

Production Condition: Hot Working (R), Cold Working (Y), Annealed (M)

Shipping Method: Air freight for small orders, Sea freight for larger sizes

Payment Terms: T/T

Minimum Order Quantity: 20kg

Grade 9 Titanium Bar Overview

Titanium Grade 9 Bar, also known as Ti-3Al-2.5V, is a versatile α - β titanium alloy that bridges the gap between industrial pure titanium and Ti-6Al-4V. This medium-strength alloy offers a balance of excellent properties such as low density, high strength-to-weight ratio, superior corrosion resistance, and low thermal expansion. These qualities make it highly suitable for critical applications in aerospace, high-end transportation equipment, sports equipment, and high-performance industries.

1. **High Strength and Toughness:** Performs reliably in high-temperature and high-pressure environments, ideal for aerospace and critical applications.
2. **Superior Corrosion Resistance:** Resistant to seawater, saltwater, and chemicals, perfect for marine and chemical industries.
3. **Excellent Weldability:** Supports various welding methods for easy manufacturing of complex components.
4. **Lightweight and Low Density:** At 4.48 g/cm³, it reduces weight, enhancing structural efficiency and energy savings.

Gr9 Titanium Bar – Chemical Composition & Mechanical Properties

Chemical composition

Carbon(max): 0.08

Oxygen(range or max): 0.15

Nitrogen(max): 0.03

Hydrogen(max): 0.015

Iron(range or max): 0.25

Aluminum: 2.5-3.5

Vanadium: 2.0-3.0

Other Elements(max. each): 0.1

Other Elements(max. total): 0.4

Titanium: balance

Mechanical properties

Tensile Strength, min		Yield Strength(0.2% Offset) min or range		Elongation in 4D, min, %	Reduction of Area, min %
ksi	MPa	ksi	MPa		
90	620	70	483	15	25

Note: The above values are typical for the annealed condition per ASTM B348 / ASME SB348.

Please refer to the factory-issued test report for specific values before shipment.

Why Choose Grade 9 Titanium Rod? Key Specifications Explained.

Technical Parameters

Density	4.48 g/cm ³
Long-term Working Temperature	Less than 315°C
Standard Stock	Round bars from Φ10mm to Φ80mm, shipped within 5 days
Custom Production Lead Time	15-25 days for non-standard sizes (depending on processing complexity)
Packaging	Export-quality wooden crates
Inspection Items	Spectral analysis, mechanical properties, ultrasonic testing (UT), metallographic testing
Reports Available	Material Test Report (MTR), Third-party professional testing reports
Applications	
Aerospace	Aircraft structural brackets and engine components
Sports & High-Performance	High-end bicycle frames and racing parts
Industrial	Heat exchangers, reactors, corrosion-resistant pumps and valves

How to Request a Grade 9 Titanium Bar Sample and Formal Quote

- **Inquiries:** Provide detailed specifications (grade, condition, dimensions, standards, quantity) and commercial terms (trade terms, destination port).
- **Samples:** We offer free small samples for material certification purposes (customer covers shipping costs). Samples will include material certificates.
- **Formal Quote:** After receiving a clear inquiry, we will provide a formal quote with pricing, delivery time, payment terms, and other details within 24 hours.

Frequently Asked Questions About Grade 9 Titanium Rod?

1. What is the difference between Grade 9 and Grade 5 (Ti-6Al-4V)?

Grade 9 has a tensile strength of 620 MPa, lower than Grade 5's 895 MPa. However, Grade 9 offers superior formability and weldability, making it more suitable for complex bending and welding applications.

2. Why is Grade 9 chosen over pure titanium (Grade 2) for applications requiring good formability?

Grade 9 offers a 50% increase in strength over pure titanium while maintaining excellent formability and weldability, making it ideal for high-pressure, lightweight designs.

3. Can Grade 9 Titanium Rod be supplied in other forms besides bars?

Yes, we also provide Grade 9 in forgings, tubes, wire, and custom-shaped preforms.

4. How can I buy discount Grade 9 Titanium Bar ?

As a direct manufacturer based in Baoji, China, we offer competitive prices by eliminating middlemen, ensuring better value for our customers.

Get a Fast Quote and Order Gr9 Titanium Bar Today

Contact us now with your specifications (dimensions, condition, quantity) and we will quickly provide a detailed quote. Let us offer the best solution for your Gr9 Titanium Bar needs.