

Diameter Range: Φ6mm - Φ800mm (Custom Sizes Available)

Length: 1000mm - 6000mm (Standard Length)

Supply Condition: Hot Worked (Hot Rolled/Hot Forged), Cold Worked, Annealed

Surface Finish: Turned, Polished, Pickled (Custom Finishes Available)

#### Ti Grade 2 Bar

Ti Grade 2 Rods (commercially pure titanium) is a metallic material primarily composed of titanium, possessing excellent corrosion resistance, good machinability, and high specific strength. As the most commonly used grade of commercially pure titanium, Grade 2 titanium rods are widely used in chemical, marine, medical, and other fields. It provides superior performance as an economical solution for applications requiring a balance of corrosion resistance and moderate strength.

#### Key Features of Grade 2 Titanium Bar

**Excellent Weldability:** Supports a variety of welding methods such as TIG welding, plasma welding, and more.

**Superior Machinability:** Easy to bend, form, and assemble.

**Lightweight & Biocompatible:** With a density of 4.51 g/cm<sup>3</sup>, titanium offers superior strength-to-weight ratio.

**Non-toxic and Non-magnetic:** Compliant with medical implant material standards for biocompatibility.

#### Ti Grade 2 Bar – Standards & Certifications

ASTM B348 (General industrial use)

ASTM F67 (Medical implants)

ISO 5832-2 (Medical-grade pure titanium)

Grade: Grade 2, Grade 2H

Universal Material Grade: UNS R50400

#### Shipping Information for Ti Grade 2 Bar

- Lead Time: In-stock items are available for immediate dispatch.
- Custom Orders: Delivery times depend on complexity and order quantity.
- Packaging: Export-grade wooden crates, or customized packaging upon request.
- Payment Terms: T/T (Telegraphic Transfer)

#### Grade 2 Titanium Bar Chemical Composition:

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Carbon (C)	Oxygen (O)	Nitrogen (N)	Hydrogen (H)	Iron (Fe)	Titanium (Ti)
Max 0.08%	Max 0.25%	Max 0.03%	Max 0.015%	Max 0.30%	Balance

#### Mechanical Properties of Ti Grade 2 vs. Grade 2H:

Comparing the Mechanical Properties of Grade 2 and Grade 2H Titanium

Tensile Requirements	Grade 2 Titanium Bar	Grade 2H Titanium Bar
Tensile Strength	min 345 MPa	min 400 MPa
Yield Strength	min 275 MPa	min 275 MPa
Elongation	min 20%	min 20%
Reduction of Area	min 30%	min 30%

Common Sizes and Weights of Ti Grade 2 Rods

Diameter (Inches)	Diameter (mm)	Length (mm)	Weight (kg)	Tolerance Standard
1/4	6.350	1000	0.14	AMS 2241S / H/h
1/2	12.700	1000	0.57	AMS 2241S / H/h
3/4	19.050	1000	1.29	AMS 2241S / H/h
1	25.400	1000	2.29	AMS 2241S / H/h
1 1/4	31.750	1000	3.57	AMS 2241S / H/h
1 1/2	38.100	1000	5.14	AMS 2241S / H/h
2	50.800	1000	9.14	AMS 2241S / H/h
3	76.200	1000	20.57	AMS 2241S / H/h
4	101.600	1000	36.56	AMS 2241S / H/h
5	127.000	1000	57.13	AMS 2241S / H/h
6	152.400	1000	82.27	AMS 2241S / H/h

Why Opt for Our Ti Grade 2 Rods?

Comprehensive Quality Assurance:

- All production steps are fully traceable, with Material Test Certificates (MTC) provided for every batch.
- We adhere to ISO 9001 and AS9100 quality management systems to ensure product reliability.
- Non-destructive testing, such as ultrasonic and penetrant testing, is available for additional assurance.

Tailored Customization for Specific Needs:

- We offer custom sizes, lengths, finishes, and supply conditions to meet your unique specifications.
- Surface treatment options are available to enhance product durability and performance.

Dedicated Technical Support & Fast Turnaround:

- Receive expert material selection advice at no extra cost.
- Specialized machining services, including cutting, drilling, bending, and precision fabrication.
- Quick sample service to ensure rapid response times to your requirements.