

Pure Titanium Bar

Grade Options: Gr1, Gr2, Gr3, Gr4

Origin: Baoji, China

Payment Terms: T/T

Shipping Methods: Sea Freight/Air Freight

Trade Terms: FOB / CIF / FCA

Certifications: ISO9001 & AS9100

Pure Titanium Bars are made from 99% high-purity titanium, offering exceptional corrosion resistance and excellent machinability. Our range of titanium bars spans from Grade 1 to Grade 4, suitable for use in extreme environments ranging from -269°C to 350°C. These bars meet the needs of various industries such as chemical, marine, and medical sectors.

Why Choose Pure Titanium Bars? Core Advantages:

Excellent Machinability

They are easily processed through various methods like stamping, welding, and cutting, making them ideal for producing complex shapes and sizes.

Superior Corrosion Resistance

Excel in corrosive environments, such as exposure to air, seawater, and wet chlorine gas. Their oxidation resistance surpasses that of most materials, ensuring long-lasting durability.

Strength and Toughness

The strength of CP titanium bars is well-balanced with high plasticity and formability, which is especially beneficial in applications requiring good stamping performance.

Biocompatibility and Safety

With excellent compatibility with human tissues, pure titanium is widely used for making surgical implants, such as artificial joints and bone plates, as well as high-end food processing equipment.

Titanium Bar Specifications and Standards You Can Rely On

Category	Details
Product Forms	Pure Titanium Round Bars, Pure Titanium Square Bars, Pure Titanium Flat Bars, Custom Profiles
Diameter (Customizable)	- Wire: ϕ 0.1 mm – ϕ 7.0 mm - Round Bars: ϕ 7.0 mm – ϕ 500 mm - Square Bars: Edge Lengths 6.0 mm – 300 mm - Rectangular Bars: Thickness 10.0 mm – 500 mm, Width 10.0 mm – 1000 mm
Length	100 mm – 6000 mm
Surface Treatments	Machined Polish, Ground Polish, Sandblasting
Processing Techniques	Rolling, Forging, Drawing
Compliance Standards	- Chemical Composition: ASTM F67 - Bar Standards: ASTM B348 - Medical Standard: ISO 5832-2
Shipping Information	Lead Time: 1-2 weeks (Custom or complex orders may require additional time) Packaging: Export-quality wooden crates Inspection Reports: Chemical composition, mechanical properties, dimensional

Category	Details
	tolerances, surface quality
MOQ	50 kg

Industrial Pure Titanium Grades Comparison

Characteristic	Gr1 (TA1)	Gr2 (TA2)	Gr3 (TA3)	Gr4 (TA4)
Core Application	Best formability	Standard all-rounder	Medium strength	High strength
Key Features	Best for forming and cold working	Excellent balance of corrosion resistance and mechanical properties	Higher strength and corrosion resistance than Gr2	Highest strength and hardness, excellent wear resistance
Chemical Composition	$O \leq 0.18, Fe \leq 0.20$	$O \leq 0.25, Fe \leq 0.30$	$O \leq 0.35, Fe \leq 0.30$	$O \leq 0.40, Fe \leq 0.50$
Tensile Strength (min)	≥ 240 MPa	≥ 345 MPa	≥ 450 MPa	≥ 550 MPa
Elongation (min)	$\geq 24\%$	$\geq 20\%$	$\geq 18\%$	$\geq 15\%$
Preferred Applications	Deep drawn parts, complex shaped components	Heat exchangers, valves, pumps	Mechanical parts, fasteners, marine platform accessories	High-strength structural parts, shafts, load-bearing components

Frequently Asked Questions (FAQ)

Q1: What is the difference between Pure Titanium and Titanium Alloy Bar?

A: Pure Titanium Rod has at least 98% titanium, offering excellent corrosion resistance and formability. Titanium Alloy Bar contains alloying elements to enhance strength and heat resistance but may reduce corrosion resistance and formability.

Q2: Why choose Pure Titanium Rod over Stainless Steel?

A: Pure Titanium Rods offer superior corrosion resistance, especially in seawater and harsh environments. They also have better strength-to-weight ratio and biocompatibility, making them ideal for medical and aerospace applications.

Q3: Can Titanium Bars be customized to specific sizes?

A: Yes, we offer custom sizes, including diameter, length, shape, and surface treatments, to meet your specific requirements.

Contact Us for Custom Pure Titanium Bar Orders

We produce titanium bars that meet international standards, certified by **ISO 9001** and **AS9100**, ensuring the highest quality. With a robust supply chain and traceable production processes, you can rely on us for both standard and precision-engineered titanium products. Whether you need standard bars or fully machined parts based on your specifications, we can deliver.

Company Name: Baoji Zecheng Metal Materials Co., Ltd.

Phone/WhatsApp: +86-13809172622

Email: info@zctitanium.com