

Grade 3 Titanium bar

Grade 3 Titanium is a high-performance material known for its outstanding strength and excellent corrosion resistance. It offers superior strength compared to **Grade 1 Titanium Bars** and **Grade 2 Titanium Bars**, while maintaining good ductility. This makes it suitable for demanding applications, even though its formability is slightly reduced.

Why Choose Gr3 Titanium Bars? Benefits and Advantages

- **Lightweight:** With a density of 4.51g/cm³, **titanium bars** combine high strength with a low weight, making them ideal for lightweight structural components.
- **Machinability:** Grade 3 titanium offers excellent machinability, perfect for custom specifications and unique design needs.
- **Versatile Applications:** **titanium Grade 3 bars** are used across industries, including medical, marine, and chemical sectors, making them a highly versatile material.

Product Specifications for Grade 3 Titanium Bars

- **Product Name:** Titanium Grade 3 Bars, Titanium Grade 3 Rods
- **Material Composition:** Pure Titanium, Titanium Content $\geq 99.5\%$
- **Density:** Approximately 4.51g/cm³
- **Available Sizes:** Diameter ranging from 3mm to 300mm (custom sizes available upon request)
- **Standard Lengths:** 1m to 6m, customizable based on specific needs
- **Tolerance:**
- **Diameter tolerance:** AMS2241S or shaft size tolerance H/h series
- **Length Tolerance:** $\pm 5\text{mm}$ (adjustable per customer specifications)
- **Shapes Available:** Grade 3 titanium round bars, Grade 3 titanium square bars, Grade 3 titanium hollow bars, etc.
- **Delivery Condition:** Hot working (R), Cold working (Y), Annealed (M), customized as per needs
- **Compliance Standards:** Meets ASTM B348, ASTM F67, ISO 5832-2, and other global standards
- **Packaging:** Export-grade wooden crates to ensure safe delivery

Grade 3 Titanium Bar Manufacturing Process: Precision and Quality

Control

The manufacturing of **Titanium Bars** involves a detailed process that ensures both high precision and high quality, meeting the requirements of various industries. Every step is closely monitored to ensure the final product exceeds your expectations.

Applications of **Grade 3 Titanium Rods** in Various Industries

1. Medical Applications:

Gr3 Titanium Bars are ideal for medical devices such as orthopedic implants, internal fixation devices, surgical instruments, and precision medical equipment.

2. Industrial Uses:

These titanium bars are widely used in marine environments, specifically in seawater-resistant pipelines, valves, pumps, and desalination system components.

3. Chemical Industry:

Ti Gr3 Bars offer excellent corrosion resistance for components like pump bodies, stirrers, tees, impellers, fasteners, ion pumps, compressors, and diesel engine parts.

Quality Assurance and Certification of **Grade 3 Titanium Rods**

Our **Ti Gr3 Bars** are produced in compliance with ISO 9001 and AS9100 international quality standards. Each bar undergoes stringent third-party testing, including chemical composition analysis, mechanical property testing, and ultrasonic inspection, ensuring our products exceed customer expectations in quality and performance.

Frequently Asked Questions (FAQ) About **Gr3 Titanium Bars**

1. Can you customize the size and specifications of **Gr3 Bars**?

Yes, we offer custom titanium bars in various sizes, shapes, and finishes to meet your exact specifications. Whether you need specific diameters, lengths, or custom shapes, we can deliver tailored solutions.

2. What surface treatment options do you provide for **Ti Gr3 Bars**?

We offer several surface treatments such as:

- Polishing to improve the surface finish.
- Sandblasting for better adhesion.
- Anodizing to enhance corrosion resistance and form a protective layer.

3. Can you optimize the performance of **Grade 3 Bars**?

Yes, we can adjust the chemical composition of **Gr3 Titanium Bars** to enhance their mechanical properties and corrosion resistance. Whether for specific applications or strength requirements, we can provide custom solutions.

4. What special processing services do you offer for **Grade 3 Bars**?

We provide precision cutting, drilling, tapping, and bending services, helping you streamline production by reducing the need for further post-processing.