Grade 5 Titanium Alloy Flange

1. Size customization: We provide flange size customization services from DN15 to DN1000, and other specifications can be customized.
2. Pressure level: covering Class 150 to Class 2500.
3. Delivery time: about one month
4. Standard: ASTM B381、ASME B16.5、ASME B16.47
5. Application areas: marine, chemical, medical, and other fields.

What are the advantages of Grade 5 titanium alloy flanges?

Grade 5 titanium alloy, namely Ti-6Al-4V, is a commonly used titanium alloy, known for its high strength, low density, excellent corrosion resistance, and fatigue resistance.

High Strength: This product has excellent tensile and yield strength, suitable for high-pressure and heavy-load environments.

Corrosion Resistance: It exhibits excellent corrosion resistance in seawater, chloride solutions, and various acidic environments.

High-temperature performance: Good mechanical properties can still be maintained under high-temperature conditions.

Lightweight Characteristics: The low density of titanium alloy makes Grade 5 titanium flanges lightweight while maintaining high strength.

Product Specifications

1. Chemical composition: Ti: balance, Ni(max): 0.05%, C(max): 0.08%, H(max): 0.015%, Fe(max): 0.40%, O(max): 0.20%, Al: 5.5-6.75%, V: 3.5-4.5%
2. Size customization: We provide flange size customization services from DN15 to DN1000, and other specifications can be customized.
3. Pressure level: covering Class 150 to Class 2500
4. Working temperature: Applicable to the temperature range of -253℃ to 315℃
5. Surface treatment: Provide various surface treatment options such as machining and anodizing
6. Packaging: Use export-specific wooden boxes for packaging, and can also be customized according to customer needs.
7. Supply state: hot working state, annealing state
8. 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		
130	895	120	828	10	25

Quality promise

Zecheng Metal implements strict quality control on the production process of Grade 5 titanium alloy flanges to ensure that each step of the product from raw materials to finished products meets

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international standards and customer requirements. All products are tested by third-party authoritative organizations before leaving the factory, and corresponding quality certification documents are provided.

Why Choose Zecheng Grade 5 Titanium Flanges?

Strict Quality Control

Every Gr5 Titanium Flange we produce undergoes rigorous inspection from raw material to finished product, ensuring reliable performance in your critical applications.

Certified Third-Party Testing

All our flanges come with reports from internationally recognized testing agencies, giving you confidence in quality and compliance.

Flexible Manufacturing Capabilities

As a trusted Ti-6Al-4V Flange manufacturer, we offer custom Gr5 Titanium Flange solutions tailored to your specific needs. You can even request free samples for evaluation before placing bulk orders.

Global Supply and Fast Delivery

We serve international clients with competitive pricing and fast shipping, ensuring your procurement requirements are met efficiently.

Key Applications

Aerospace: Fuel and hydraulic piping systems, airframe connections, landing gear components.

Marine & Shipbuilding: Seawater cooling systems, desalination plant piping, critical offshore oil platform components.

Chemical & Oil & Gas Industry: Reactor vessels, heat exchangers, piping for corrosive chemicals.

High-Performance Automotive & Racing: Turbocharger systems, exhaust systems, fuel delivery systems for performance or racing cars.

Frequently Asked Questions (FAQ)

Q1: Can I get a Gr5 Titanium Flange Free Sample?

A: Yes! We provide free Grade 5 Titanium Flange samples for you to test quality before bulk purchasing.

Q2: What is the difference between Grade 5 and Grade 2 Titanium Flanges?

A: Grade 5 flanges offer higher tensile and yield strength, better fatigue resistance, and excellent corrosion resistance in harsh environments. Grade 2 flanges are more cost-effective for medium-pressure applications but are not suitable for high-load or critical applications.

Q3: How can I place an order or request a quote?

A: Contact us directly to buy discount Grade 5 Titanium Flange, request a custom order, or get a quote:Phone: +86-138-09172622, Email: info@zctitanium.com

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