

Grade 12 Titanium Plate

Available Forms: Gr 12 Titanium Plate, Gr12 Titanium Sheet, Gr 12 Titanium Strip

Chemical Composition: Ti-0.3Mo-0.8Ni.

Processing: Cold Rolled, Hot Rolled

Standards: ASTM B265, ASME SB265, GB/T 3621

Certifications: ISO 9001, EN 9100 (Aerospace Quality Management)

Grade 12 Titanium Plate Manufacturer & Supplier

If you are looking for a titanium material that offers excellent corrosion resistance, good formability, and stable mechanical strength, Ti-0.3Mo-0.8Ni Plate is one of the most cost-effective solutions for chemical, petrochemical, and industrial equipment.

Baoji Zecheng Metal Materials Co., Ltd. supplies ASTM B265 Gr12 titanium plates, sheets, and strips with stable alloy chemistry, tight dimensional control, and reliable delivery to customers worldwide.

Customization Grade 12 titanium sheet

You can order standard sizes or fully customized materials for project-based requirements.

Item Range

Thickness 0.4 mm – 60 mm

Width 400 mm – 3000 mm

Length 1000 mm – 6000 mm

We also provide:

- Custom cut-to-length plates
- Special tolerances
- Non-standard sizes
- Project batch control

Whether you need small quantities for fabrication or large volumes for chemical plant projects, we can match your technical and commercial requirements.

ASTM B265 Grade 12 – Chemical Composition & Mechanical Properties

Element	Ti	Mo	Ni	Fe	O	C	N	H
Content Balance	0.20 – 0.40	0.60 – 0.90	≤0.30	≤0.25	≤0.08	≤0.03	≤0.015	
Property				Value				
Tensile Strength				≥ 483 MPa				
Yield Strength (0.2%)				≥ 345 MPa				
Elongation				≥ 18%				
Elastic Modulus				~105 GPa				
Density				~4.51 g/cm³				

Typical Applications of Grade 12 Titanium Sheet

Because of its superior resistance to pitting, crevice corrosion, and reducing acids, Grade 12 is widely used in:

- Chemical & Petrochemical Industry
- Heat exchangers
- Chemical reactors
- Pressure vessels
- Storage tanks
- Process equipment exposed to corrosive media

Industrial Equipment

- Corrosion-resistant pipelines & fittings
- Electroplating systems
- Chemical processing systems
- Electronic hardware
- Structural and machined industrial parts

If your equipment operates in acidic, chloride-rich, or aggressive chemical environments, Grade 12 offers longer service life and lower maintenance cost than stainless steel or pure titanium.

Grade 12 vs Other Titanium Grades

Grade 12 vs Grade 1 & Grade 2 (Commercially Pure Titanium)

Compared with CP titanium, Grade 12 provides:

- Higher mechanical strength
- Better corrosion resistance in reducing acids
- Stronger resistance to pitting and crevice corrosion

This makes Grade 12 far more suitable for chemical plants and industrial systems.

Grade 12 vs Grade 5 (Ti-6Al-4V)

Grade	Key Advantage	Typical Use
Grade 5	Very high strength	Aerospace, structural parts
Grade 12	Superior corrosion resistance & ductility	Chemical, petrochemical, industrial equipment

If your priority is corrosion resistance and fabrication performance, Grade 12 is the better choice.

Why Choose Baoji Zecheng Metal Materials Co., Ltd.?

When you buy Grade 12 Titanium Plate from Zecheng, you get:

- Stable Ti-Mo-Ni alloy chemistry
- Excellent batch-to-batch consistency
- Strict ISO 9001 & EN 9100 quality control
- Full mill test reports (MTC)
- Reliable global delivery

Request a Quote or Technical Support

If you are sourcing Grade 12 Titanium Plate, Sheet, or Strip, our technical and sales team is ready to support your project.

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