

Technical datasheet

Ti Grade 4 / W-Nr. 3.7065

The strongest of the commercially pure titanium grades with excellent corrosion resistance.

Available products

Product form	Size range from	Size range from
Sheet/plate	0.25 mm thickness	38.1 mm thickness
Bar	2.0 mm diameter	127.0 mm diameter

Chemical composition (%)

Ti	Fe	O	N	H	C
Balance	0.5 max	0.4 max	0.05 max	0.015 max	0.08 max

Major specifications

ASTM B265, B348, B381	UNS R50700
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Physical properties

Density	4.51 g/cm ³	Beta transus temperature	835 ± 4 °C
Melting point	1670°C		

Mechanical properties – typical room temperature properties

Yield strength	480 MPa	
Tensile strength	550 MPa	
Elongation	15 %	

Key attributes

Titanium Grade 4 has the highest allowable oxygen and iron contents and highest strength of the commercially pure (CP) grades with a minimum yield strength of 480 MPa. It has excellent corrosion resistance in sea water, brines and salt solutions, oxidizing media, alkaline media and organic acids. Titanium Grade 4 has strength levels comparable to annealed stainless steels offering a high strength to weight ration and superior corrosion resistance making it competitive with steels in some environment. This combination of properties makes it a suitable candidate material across a wide range of applications.

Applications

Corrosion resistance in the chemical and marine industries
Desalination plant
Plate heat exchangers
Reaction vessels
Tubing, fittings and flanges
Medical devices
Air frame components and fasteners

All information is subject to change without notice. The properties correspond to the material in the heading. They may vary for other specifications. Please contact us for more details.