

Technical datasheet

Ti Grade 2 / W-Nr. 3.7035

Commercially pure unalloyed titanium offering an excellent balance of strength and ductility.

Available products

Product form	Size range from	Size range to
Sheet/plate	0.1 mm thickness	50.0 mm thickness
Bar	0.7 mm diameter	304.8 mm diameter
Tube/pipe	5.0 mm outside diameter	219.1 mm outside diameter

Chemical composition (%)

Ti	Fe	C	O	N	H
Balance	0.30 max	0.08 max	0.25 max	0.03 max	0.015 max

Major specifications

ASTM B265, B348, B338, B861, B862, B863, F67 ISO 5832-2	UNS R50400
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Physical properties

Density	4.51 g/cm ³	Beta transustemperature	920 ± 4 °C
Melting point	1670°C		

Mechanical properties – per ASTM B265

Yield strength	275-450 MPa
Tensile strength	345 MPa
Elongation	20 % min

Key attributes

Commercially pure unalloyed titanium offering an excellent balance of strength and ductility. It has good impact toughness and is readily weldable. It has good corrosion resistance in highly oxidising environments, alkali media, aqueous salt solutions and in mildly reducing environments, nitric acids and wet chlorine gas. It also has outstanding resistance to sea water and brines. The low density of titanium, high strength to weight ratio and corrosion resistance make it the ideal material across a wide range of applications. As it is castable it is often used for cast valves and fittings.

Applications

Chemical and marine engineering
Plate heat exchangers
Reaction vessels, evaporators and condensers
Electroplating jig
Desalination plant and sea water heaters
Medical and dental applications

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.