Technical datasheet

Ti Grade 2 / W-Nr. 3.7035

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

Available products

Product formSize range fromSize range toSheet/plate0.1 mm thickness50.0 mm thicknessBar0.7 mm diameter304.8 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 UNS R50400

ISO 5832-2

Physical properties

Density 4.51 g/cm³ Beta transus temperature 920 \pm 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

Do you require further information or a quotation? Please contact us...

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