



Ti Gr 2 / 3.7035

Titanium Grade 2 is a pure alpha titanium and is the most widely used titanium alloy in all product forms for industrial service because of moderate strength and excellent corrosion resistance and formability. Compared to the other grades of commercially pure titanium, Grade 2 is slightly weaker than Grade 3, but stronger than Grade 1 and equally resistant to corrosion. Grade 2 offers excellent balance of moderate strength and reasonable ductility. This material is also non-magnetic.

Gehe zu



Material Data Sheet

Material designation	3.7035
EN Material Symbol	Titan Grade 2
ASTM	Ti-Grade 2
UNS	R50400

Main fields of application of Titanium Gr 2

In chemical processes (can be use in oxidizing media, alkaline media, organic acids and compounds, aqueous salt solutions and hot gases); offshore industries (is fully resistant to corrosion in seawater at temperatures up to 300°C); in aircraft construction where a certain strength level and ease of formability is desired; in heat exchangers, hypochlorite systems, fire water systems, ballast water system, pumps and cryogenic vessels.

Chemical composition of Titanium Gr 2

Ti	Fe	C	O	H	N
%	%	%	%	%	%
rest	0.3	0.08	0.25	0.015	0.03

Mechanical properties at room temperature of Titanium Gr 2

	Minimum values	Typical values
Yield Strength	275 MPa	350-450 MPa
Ultimate Strength	345 MPa	485 MPa
Elongation in 50 mm, A5	20 %	28 %
Reduction in area	30 %	55 %
Hardness		160-200 HV
Modulus of elasticity		103 GPa
Charpy V-Noch Impact		40-82 J

Filler metal for welding with titanium Gr 2

Grade 2 has very good weldability. Being substantially single-phase material, the microstructure of the alpha phase is not affected greatly by thermal treatments or welding temperatures. Therefore, the mechanical properties of a correctly welded joint are equal to, or exceed those of the parent metal and show good ductility

Delivery program

Sheets / Plates mm

1 - 40

Coils mm

1 - 3

Bars / Billets dia. mm

3 - 200

Tubes / Fittings ISO6708

<DN50

Precision strip mm

0.2 - 0.5

With short delivery time:

plates or sheets, tubes, flanges, forged or die-cut rings and round blanks, elbows, T-fittings, reductions, screws, nuts or washers according to your request. According to your individual wishes, we are able to cut our material with our plasma- or water jet cutter. Our material is stocked in superformats of 2000x6000mm. Cut to size on request.

Material Outlet by Hempel

ECONOXX.com offers buyers a new and uncomplicated procurement channel, which also includes small quantities and materials in special alloys at favourable conditions.

Contact us



Marcel Zuber

Business Unit Manager Services Aerospace & Medical

- +41 (0)44 823 88 39
- +41 (0)79 765 80 67
- Send e-mail

Services



Waterjet cutting



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Plasma cutting



Shear cutting

Weight Calculator