



Ti Gr 1 / 3.7025

Unalloyed titanium offering optimum ductility and cold formability with useful strength, high-impact toughness and excellent weldability. This makes this grade suitable for the manufacture of components in weight-saving structures with reduced mass forces and also for components requiring high corrosion resistance. In addition, thermal stresses in titanium structures are lower than in other metallic materials, due to the low thermal expansion of titanium.

Gehe zu



Material Data Sheet

Material designation	3.7025
EN Material Symbol	Titan Grade 1
ASTM	Ti-Grade 1
UNS	R50250

Main fields of application of Titanium Gr 1

For corrosion resistance in the chemical and marine industries; in airframe construction where ease of formability is desired also widely used in the medical sector because of their outstanding biocompatibility.

Chemical composition of Titanium Gr 1

Ti	Fe	C	O	H	N
%	%	%	%	%	%
rest	0.2	0.08	0.18	0.015	0.03

Characteristics of Titanium Gr 1

Hardness HB 30 ≤ 30	120
0.2 % Yield strenght Rp ≥ N/mm ²	170
Tensile strenght Rm N/mm ²	≥ 240
Elongation ≥ %	24
Modulus of elasticity kN/mm ²	105

Filler metal (for welding with titanium Gr 1)

Grade 1 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

0.6 - 12

Coils mm

0.5 - 1.5

Tubes / Fittings ISO6708 < DN50

With short delivery time:

plates or sheets, Bars and Wires, tubes & pipes, 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 & Watch

+41 (0)44 823 88 39

+41 (0)79 765 80 67

Send e-mail

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