3.7035 Ti-Grade 2

Trade name

Ti 2

Standards

Material No.	EN Designation	ASTM	UNS
3.7035	Titan Grade 2	Ti-Grade 2	R50400

Description

Ti-Grade 2; Unalloyed Titanium - Standard Oxygen

Special properties

Commercially pure titanium grades feature an excellent strength-to-density ratio and good corrosion resistance. This makes them 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. The materials are also widely used in the medical sector because of their outstanding biocompatibility.

Chemical Composition

C %	N %	Ti ≤ %	Fe %	O %
≤ 0.08	≤ 0.03	Rest	≤ 0.30	≤ 0.25

H %
≤ 0.015

Mechanical Properties 20°C

Hardness HB 30 ≤ HB	0.2% Yield strength R_p ≥ N/mm²	Tensile strength R_m N/mm²	Elongation A_5 ≥ %	Modulus of elasticity kN/mm²
150	275	≥ 345	20	105

Physical Properties 20°C

Density g/cm³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm²/m
4.51	520	20	0.48

Application

Chemical industry, aerospace industry, medical engineering

Available forms for 3.7035 / Ti-Grade 2

Sheets/Plates	Bars	Wire	Tubes/Pipes	Fittings	Forged / cast parts	Finished part (drawing)