

Trade name | Ti 1

Material No.	EN Designation	ASTM	UNS
3.7025	Titan Grade 1	Ti-Grade 1	R50250

Description | Ti-Grade 1; Unalloyed Titanium - Low 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.

C %	N %	Ti ≤ %	Fe %	O %
≤ 0.08	≤ 0.03	Rest	≤ 0.20	≤ 0.18
H %				
≤ 0.015				

Hardness HB 30 ≤ HB	0.2% Yield strength R _p ≥ N/mm ²	Tensile strength R _m N/mm ²	Elongation A ₅ ≥ %	Modulus of elasticity kN/mm ²
120	170	≥ 240	24	105

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
4.51	520	21	0.47

Application | Chemical industry, aerospace industry, medical applications

Available forms for 3.7025 / Ti-Grade 1	Sheets/Plates	Bars	Wire	Tubes/Pipes	Fittings	Forged / cast parts	Finished part (drawing)
							