



TECHNICAL DATASHEET

Commercially Pure Titanium – Grade 2 FT 005 – Version 0

The four types of commercially pure titanium currently on the market (1/2/3/4) are used for applications requiring good ductility combined with excellent corrosion resistance, moderate strength and good weldability. The limited impurities are iron, oxygen and nitrogen, the variations in content of which define each grade's mechanical properties, from the softest and most ductile (Grade 1) through to the hardest and strongest (Grade 4).

Grade 2 titanium is the most popular and widely-available of the four commercially pure grades. It has similar corrosion resistance and formability to Grade 1, but with higher strength.

APPLICATIONS	ADVANTAGES
Industrial Medical Aeronautic	Corrosion resistance Formability Weldability
STANDARDS	SHAPES
ASTM B348 / ASME SB348 ASTM B265 / ASME SB265 ASTM B338 / ASME SB338 ASTM B861 / ASTM B862 ASTM B381 NACE MR0175 AWS A5.16 ERTi2 ASTM F67 ISO 5832-2 AMS 4902	BAR Diameter 3-300 mm Typical length 2500-3500 mm ----- SHEET/ PLATE Thickness 0.4-80 mm Typical dimensions 1000 x 2000 mm / 1250 x 2500 mm ----- TUBES some dimensions stocked and on request

➤ CHEMICAL COMPOSITION

%	Fe	O	N	C	H	Other (each)	Other (total)	Ti
min								residue
max	0.3	0.25	0.03	0.08	0.015	0.1	0.4	

➤ MECHANICAL PROPERTIES

Rm Tensile strength (MPa)	Rp0.2 Yield strength (MPa)	Elongation (% min)	Necking (% min)
345	275	20	30

➤ PHYSICAL PROPERTIES

Density (g/cm ³)	4.51
Hardness (HV)	145
Modulus of elasticity at 20°C (N/mm ²)	105 x10 ³
Thermal conductivity at 20°C (W/m °C)	16.4
Mean coefficient of thermal expansion at 20-200°C (mm °C)	8.7 x10 ⁻⁶
Beta transus (°C)	913
Fusion temperature (°C)	1670