TECHNICAL DATASHEET

Commercially Pure Titanium - Grade 4
FT 007 – 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 4 titanium is the hardest and strongest of the four commercially pure grades. It also has excellent corrosion resistance and good weldability.

APPLICATIONS	ADVANTAGES
Industrial Medical Aeronautic	Corrosion resistance Weldability
STANDARDS	**SHAPES**
ASTM B348 / ASME SB348 ASTM B265 / ASME SB265 ASTM F67 ISO 5832-2 AMS 4901	**BAR** Diameter 1-100 mm Typical length 2000-3500 mm --- **SHEET/ PLATE** Thickness 0.5-10 mm Typical dimensions 1000 x 2000 mm / 1250 x 2500 mm

➢ CHEMICAL COMPOSITION

%	Fe	O	N	C	H	Other (each)	Other (total)	Ti
min								residue
max	0.5	0.40	0.05	0.08	0.015	0.1	0.4	

➢ MECHANICAL PROPERTIES

Rm Tensile strength (MPa)	Rp0.2 Yield strength (MPa)	Elongation (% min)	Necking (% min)
550	483	15	25

➢ PHYSICAL PROPERTIES

Density (g/cm³)	4.51
Hardness (HV)	280
Modulus of elasticity at 20°C (N/mm²)	105 x10³
Thermal conductivity at 20°C (W/m °C)	17.2
Mean coefficient of thermal expansion at 20-200°C (mm °C)	9.4 x10^{-6}
Beta transus (°C)	949
Fusion temperature (°C)	1670