

## **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  Industrial Medical Aeronautic  STANDARDS				ADVANTAGES  Corrosion resistance Formability Weldability  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				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 COM	POSITION		4.71														
%	Fe	0	N	С	Н	Other (each)	Other (total)	Ti									
min								residu									
max	0.3	0.25	0.03	0.08	0.015	0.1	0.4										
MECHANICAL PR	ROPERTIES																
Rm Tensile strength (MPa)		Rp0.2 Yield strength (MPa)		Elongation (% min)		Necking (% min)											
345		275		20		30											
PHYSICAL PROF	PERTIES																
Density (g/cm³)				4.51													
Hardness (HV)				145													
Modulus of elasticity at 20 °C (N/mm²)				105 x10³													
Thermal conductivity at 20 ℃ (W/m ℃)				16.4													
Mean coefficient of thermal expansion at 20-200 ℃ (mm ℃)				8.7 x10-6													
Beta transus (℃)				913													
Fusion temperature (℃)				1670													

The information and technical data contained in this sheet are for information purposes only. Only the information written on our material analysis certificates will be official.