



TECHNICAL DATASHEET

Commercially Pure Titanium – Grade 3 FT 006 – 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 3 titanium is the least used of the four CP titanium grades. Stronger than grades 1 and 2, its ductility is similar and its formability only slightly less.

| APPLICATIONS | ADVANTAGES |
|--|---|
| Industrial Medical Aeronautic | Corrosion resistance Formability Weldability |
| STANDARDS | SHAPES |
| ASTM B348 / ASME SB348 ASTM B265 / ASME SB265 ASTM F67 ISO 5832-2 AMS 4900 | Sheet / Plate Bar Grade not stocked, available on request |

➤ CHEMICAL COMPOSITION

| % | Fe | O | N | C | H | Other (each) | Other (total) | Ti |
|-----|-----|------|------|------|-------|-----------------|------------------|---------|
| min | | | | | | | | residue |
| max | 0.3 | 0.35 | 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) |
|---------------------------------|----------------------------------|-----------------------|--------------------|
| 450 | 380 | 18 | 30 |

➤ PHYSICAL PROPERTIES

| | |
|--|-----------|
| Density (g/cm³) | 4.51 |
| Hardness (HV) | 180 |
| Modulus of elasticity at 20 °C (N/mm²) | 105 x10³ |
| Thermal conductivity at 20 °C (W/m °C) | 19.9 |
| Mean coefficient of thermal expansion at 20-200 °C (mm °C) | 9.1 x10-6 |
| Beta transus (°C) | 921 |
| Fusion temperature (°C) | 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.