

Titanium Alloy

Ti5553

Ti-5Al-5Mo-5V-3Cr

SPECIFICATIONS

COMPOSITION

Aluminum.....	5.00
Molybdenum.....	5.00
Vanadium.....	2.00
Chromium.....	3.00
Titanium.....	Base

TYPICAL MECHANICAL PROPERTIES

APPLICATIONS

- Heat treated condition: (STA Solution Treated and Aged)

- Tensile test at ambient temperature:

- UTS: 1050 to 1250 N/mm²
- 0.2 % Yield strength: 1000 to 1100 N/mm²
- Elongation (5d): 5 to 12 %
- K_{1c}: 55 MPa√m

- Structural parts.
- Landing gear.

- Heat treated condition: (BASCA: Bannealed, slow cool and aged)

- UTS: 1100 N/mm²
- 0.2 % Yield strength: 950 N/mm²
- Elongation (5d): 6 %
- K_{1c}: 70 MPa√m

CHARACTERISTICS

- Quasi-beta titanium alloy.

HEAT TREATMENT

- This alloy is generally delivered in the heat treated condition for high strength applications.

PHYSICAL PROPERTIES

- Density: 4.64
- Critical points:
 - Beta Transus: 860°C

Contact:

www.aubertduval.com

The data provided in this document represent typical or average values rather than maximum or minimum guaranteed values. The applications indicated for the grades described are given as guidance only in order to help the reader in his personal assessment. Please note that these do not constitute a guarantee whether implicit or explicit as to whether the grade selected is suited to specific requirements. Aubert & Duval's liability shall not under any circumstances extend to product selection or to the consequences of that selection.