

Titanium Alloy

Ti6242

Ti-6Al-2Sn-4Zr-2Mo

SPECIFICATIONS

WL: 3.7144

UNS: R54620

COMPOSITION

Aluminum.....	6.00
Tin.....	2.00
Zirconium.....	4.00
Molybdenum.....	2.00
Titanium.....	Base

TYPICAL MECHANICAL PROPERTIES

- Heat treated condition:

- Tensile test at ambient temperature:

- UTS:	1000 N/mm ²
- 0.2 % Yield strength:	940 N/mm ²
- Elongation (5d):	15 %

- Tensile test at 480°C:

- UTS:	680 N/mm ²
- 0.2 % Yield strength:	520 N/mm ²
- Elongation (5d):	18 %

APPLICATIONS

- Compressor discs - hot area. Impellers

CHARACTERISTICS

- Alpha-beta titanium alloy.

HEAT TREATMENT

- This alloy is generally delivered in the heat treated condition.

PHYSICAL PROPERTIES

- Density: 4.54
- Mean coefficient of expansion in m/m.°C:
 - between 20°C and 400°C: 7.7×10^{-6}
- Thermal conductivity in W.m/m².°C:
 - at 20°C: 6.92
- Critical points:
 - Beta Transus: 996°C

Contact:

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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.