AUBERT&DUVAL

Titanium Alloy

Ti1023

Ti-10V-2Fe-3Al

SPECIFICATIONS

UNS: R56410

COMPOSITION

Vanadium	10.00
Iron	2.00
Aluminum	3.00
Titanium	Base

TYPICAL MECHANICAL PROPERTIES

- Heat treated condition:

- Tensile test at ambient temperature:
  - UTS: 1000 to 1300 N/mm^2
  - 0.2 % Yield strength: 900 to 1200 N/mm^2
  - Elongation (5d): 5 to 12 %

- Tensile test at 315°C:
  - UTS: 900 to 1170 N/mm^2
  - 0.2 % Yield strength: 800 to 1080 N/mm^2
  - Elongation (5d): 5 to 12 %

APPLICATIONS

- Structural parts.
- Helicopter rotor hubs.
- Landing gear.

CHARACTERISTICS

- Quasi-beta titanium alloy.

HEAT TREATMENT

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

PHYSICAL PROPERTIES

- Density: 4.65

- Mean coefficient of expansion in m/m.°C:

  - between 20°C and 400°C: 9.7×10^{-6}

- Thermal conductivity in $W.m/m^2.°C$:

  - at 20°C: 7.8

- Critical points:

  - Beta Transus: 800°C

Contact:

www.aubertduval.com