

Ti6Al4V

Ti6Al4V is a titanium alloy widely known and used in the additive manufacturing industry. It combines high strength, hardness, and ductility with high corrosion resistance. It also means a 45% weight reduction compared to conventional steel.

The most common applications are within aerospace, but Ti6Al4V is also used in marine, automobile, energy, chemical and biomedical industries.

COMPOSITION - TYPICAL VALUES

Composition	(weight %)
Fe	Balance
Al	6
V	4
C	0,05
N	0,01
O	0,26

Related standards and denominations: ISO22068 (2014)

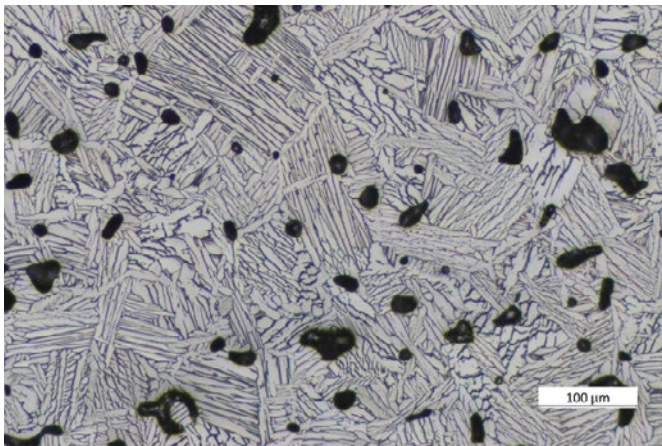
PHYSICAL PROPERTIES - TYPICAL VALUES

Composition (% weight)	As Sintered	H900
Ultimate tensile strength (MPa)	890	1050
Yield strength (MPa)	790	940
Elongation (%)	8	10
Hardness (HRC)	25	55
Relative density (%)	95	Full

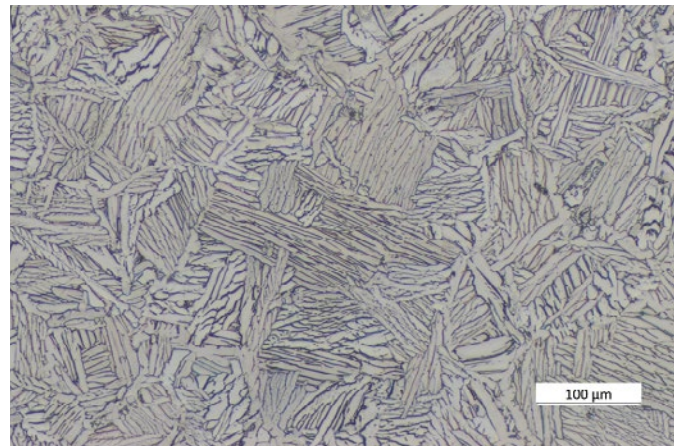


FEATURES

- High strength and hardness
- Excellent corrosion resistance
- 45% lighter than conventional steel
- Biocompatible



As Sintered



HIP: 820 °C; 2000 bar; 2 h