

## titanium TiAl6V4

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### property

The alloy achieves excellent mechanical properties and has a high resistance to corrosion. It has a low specific gravity and is biocompatible. It is processed by Selective Laser Melting. It can be carried out a heat treatment.

### application

A typical application is the advanced industrial usage. Particularly in the aerospace, in motorsport, in medical applications, in the design field and marine applications this material will be used.

### mechanical and thermal properties

property	unit	as built	heat treated
tensile strength	MPa	1215 ± 40	995 ± 20
yield stress (Rp 0,2%)	MPa	1065 ± 40	930 ± 20
elongation at break	%	10 ± 3	14 ± 1
E modulus	GPa	110 ± 5	115 ± 10
charpy-notched flexural impact	J	45 ± 10	11 ± 4
hardness (DIN EN ISO 6508-1)	HV5	320	
maximum operating temperature	°C	350	

*The given values are guideline values. They are affected through part-geometry, material-additives or environmental influences. They are compiled on the base of present experiences and knowledge. A legitimate obligatory assurance of certain properties or the appropriateness for a precise application on the basis of our information is not construable.*