

Technical datasheet

Ti-6Al7Nb | ASTM F1295

Major specifications

UNS R50700

ISO 5832-11

Available product forms

Round bars

The current stock range can be found on www.sd-metals.com.

Further dimensions available upon request.

Use our Service Centre to have the available sizes cut to your desired dimensions.

Key features

The properties and metallurgical behavior of Ti-6Al7Nb are comparable to those of Ti-6Al4V. The difference lies in the betastabilizing element niobium, which replaces vanadium and exhibits even better biocompatibility. Ti-6Al7Nb is therefore an ideal titanium alloy for medical, dental, and surgical applications.

Applications

- orthopedic implants
- bone screws and plates
- medical devices

Chemical properties

Composition - limits in %

Nb	Al	Fe	O	C	N	H	Ti
6,5 - 7,5	5,50 - 6,50	max. 0,25	max. 0,20	max. 0,08	max. 0,05	max. 0,009	Rest

Physical and thermal properties

Density	4,52 g/cm ³
Beta transus temperature	1015 ± 4°C

Mechanical properties (room temperature)

Yield strength	min. 800 MPa
Tensile strength	min. 900 MPa
Elongation	min. 10 %

All information is subject to change without notice.

The properties correspond to the material in the heading. They may vary for other specifications.

Please contact us for more details.

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