

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.

Team Germany and France

Dirk Verhoeven | +49 211 23 09 99-10 | d.verhoeven@sd-metals.com
Kevin Verhoeven | +49 211 23 09 99-13 | k.verhoeven@sd-metals.com
Seda Ceyhan | +49 211 23 09 99-20 | s.cejhan@sd-metals.com

Team Export

Thomas Ziert | +49 211 23 09 99-12 | t.ziert@sd-metals.com
S+D METALS GmbH | +49 4174 66 94 -0 | www.sd-metals.com