

Technical datasheet

Ti-6Al4V | WL 3.7164

Major specifications

Grade 5	AMS 4928	ABS 5326C + AIMS 03-18-004	ABS 5453	ASNA 3304
	AMS 4911	ABS 5125A + AIMS 03-18-001		ASNA 3307

Available product forms

Round bars in WL 3.7164

Sheets and plates in WL 3.7164

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

Ti-6Al4V Grade 5 was originally developed for aviation and aerospace applications. Due to the combination of excellent strength, low weight, and excellent corrosion resistance, this alloy is now used in numerous applications, making it one of the most widely used titanium alloys today. It is also applied in the areas of sports, marine technology, and medical technology. Another advantage of Ti-6Al4V Grade 5 when annealed is that it is suitable for use at temperatures up to 400°C and is easy to forge, form, and weld.

Applications

- aircraft engine intake housings
- compressor blades
- disks
- hubs and spacers
- airframe components
- offshore oil and gas equipment
- power generation industry
- motorsport/automotive components
- consumer products

Chemical properties

Composition - limits in %

Al	V	Fe	O	C	N	H	Ti
5,50 - 6,75	3,5 - 4,5	max. 0,30	max. 0,20	max. 0,08	max. 0,05	max. 0,0125	Rest

Physical and thermal properties

Density	4,52 g/cm ³	Beta transus temperature	999 ± 14°C
Melting range	1538 - 1649 °C	Thermal conductivity at 20°C	6,7 W/ m°C

Mechanical properties

(room temperatur according AMS 4911)

	Yield strength	Tensile strength	Elongation
0,30-4,76 mm thickness	min. 869 MPa	min. 920 MPa	-
4,76-100,00 mm thickness	min. 827 MPa	min. 893 MPa	min. 10%

Team Germany and France

Piotr Jurkiewicz | +49 4174 66 94 -115 | p.jurkiewicz@sd-metals.com
Lukasz Smiech | +49 21123 09 99-24 | l.smiech@sd-metals.com

Team Rest of EU and third countries

Thomas Ziert | +49 21123 09 99-12 | t.ziert@sd-metals.com
Kevin Verhoeven | +49 21123 09 99-13 | k.verhoeven@sd-metals.com
S+D METALS GmbH | +49 4174 66 94 -0 | www.sd-metals.com

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.