

DATA SHEET

TI-6AL4V | WL 3.7164

Major specifications

Grade 5 | 3.7165 | AMS 4928 | AMS 4911 | ABS 5326C + AIMS 03-18-004 | ABS 5125A + AIMS 03-18-001 | ABS 5453 | ASTM B265 | ASNA 3304 | ASNA 3307

Product forms

Round bars in WL 3.7164

Sheets and plates in WL 3.7164

Sheets and plates in 3.7165

The current Stock Range can be found on www.sd-metals.com. Further dimensions available upon request.

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.

Areas of application

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

CHARACTERISTIC

Chemical composition limits in %

Ti	Rest
Al	5,50 - 6,75
V	3,50 - 4,50
Fe	max. 0,30
O	max. 0,20

Physical constants and thermal properties

Density	4,42 g/cm ³
Melting point	1648 °C
Beta transus temperature	980 ± 4 °C
Thermal conductivity at 20°C	6,7 W/ m°C

Mechanical properties (room temperature)

Yield strength	
0,30-6,00 mm thickness	min. 870 MPa
6,00-100,00 mm thickness	min. 830 MPa
Tensile strength	
0,30-6,00mm thickness	min. 920 MPa
6,00-100,00 mm thickness	min. 900 MPa
Elongation	max. 10 %

The properties correspond to the material in the heading. They may vary for other specifications. Please contact us for more details.

Do you have any questions? Contact us:

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