S+D METALS

A BIBUS GROUP COMPANY

Technical datasheet

Ti-6AL4V | 3.7165

Major specifications

Grade 5	ASTM B265			

Available product forms

Sheets and plates in 3.7165
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

- 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/cm³	Beta transus temperature	999 ± 14°C
Melting range	1538 - 1649 °C	Thermal conductivity at 20°C	6,7 W/ m°C

Mechanical properties

(room temperature according ASTM B265)

Yield strength	**min. 828 MPa**
Tensile strength	min. 895 MPa
Elongation	min. 10%

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