

Technical datasheet

Ti Grade 5 / Ti-6Al-4V / W-Nr.3.7164/65

Ti-6Al-4V is the most widely used titanium alloy due to its outstanding strength-to-weight ratio and corrosion resistance.

Available products

Product form
Sheet/plate
Bar

Size range from
0.3 mm thickness
1.0 mm diameter

Size range to
38.1 mm thickness
304.8 mm diameter

Chemical composition (%)

Ti	Al	V	Fe	O	C
Balance	5.50-6.75	3.5-4.5	0.40	0.20	0.08 max

Major specifications

ASTM B265, B348
AMS 4911, 4928

UNS R56400

Physical properties

Density 4.43 g/cm³
Melting point 1648°C

Beta transus temperature 980 ± 4 °C

Mechanical properties – typical room temperature properties (annealed)

Yield strength 828 MPa
Tensile strength 895 MPa
Elongation 10 %

Key attributes

Originally developed for aerospace applications Ti-6Al-4V is still widely used in the aerospace industry but due to its outstanding strength-to-weight ratio combined with excellent corrosion resistance in many media its uses are increasing in other sectors. In the annealed condition it is suitable for service at temperatures up to 400°C.

Ti-6Al-4V is highly fabricable and readily formed. It is machinable and can be welded by conventional processes and procedures. Please contact us for further details on forming, fabrication and welding consumables

Applications

Aero engine inlet cases, compressor blades, discs, hubs and spacers
Air frame components
Offshore oil and gas equipment
Motorsport/automotive components
Medical equipment and devices
Consumer goods

Do you require further information or a quotation?

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