

## 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/cm<sup>3</sup>  
Melting point 1648°C

Beta transus temperature 980 ± 4 °C

### Mechanical properties – minimum room temperature properties per AMS 4911

Dia up to 50.80 mm  
Yield strength 931 MPa  
Tensile strength 862 MPa  
Elongation 10 %

Dia 50.8-101.6mm  
Yield strength 896 MPa  
Tensile strength 827 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?

Please contact us...

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