

## Material Data Sheet Titanium Grade 5 / WL 3.7164 / Ti6Al4V

### Description

Originally designed for aerospace applications, [Titanium Grade 5](#) is now the most commonly used titanium alloy in many industries. Above all, the good combination of high strength and low density is decisive for the versatile application possibilities of [WL 3.7164 \(Ti6Al4V\)](#) in plant and mechanical engineering, the chemical industry, medical technology and other sectors. All the convincing advantages of [WL 3.7164](#) at a glance:

- Excellent combination of high strength and good toughness at low density
- Excellent corrosion resistance due to very well adhering oxide layer
- Very good heat resistance
- Good weldability and hot formability
- High resistance to material fatigue
- High resistance to crack initiation and propagation
- Excellent biocompatibility

### Chemical composition in %

Ti[%]	Al[%]	V[%]	Fe[%]	O[%]	N[%]	C[%]	H[%]
Main component	5,5-6,75	3,5-4,5	≤0,3	≤0,2	≤0,05	≤0,08	≤0,0125

### Mechanical properties for round bars, sheets and plates at 20°C

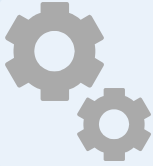
0,2% Offset yield strength [N/mm <sup>2</sup> ]	Tensile strength [N/mm <sup>2</sup> ]	Elongation at break A5 [%]	Hardness [HB30]
≥830	≥900	≥6	≤310

robemetall GmbH  
Am Sandberg 2  
D-35519 Rockenberg  
T.: (+49) 6033/92 8 990  
F.: (+49) 6033/92 8 920

Managing director: Michael  
Stephan, Maximilian Stephan  
Ust-IdNr.: DE255407681  
St-Nr.: 02024270927  
HRB-Nr.: 6480  
E-Mail: info@robemetall.de

#### Important notice:

The data on the quality or usability of materials or products are for information purposes only and do not constitute a contractual obligation. The information merely corresponds to the experience of the manufacturers and robemetall GmbH.









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## Designation and general standards

We offer [Titanium Grade 5](#) according to German standard WL 3.7164 as well as US standards AMS 4911 and AMS 4928 in various delivery forms. We can reliably meet specific requirements according to international standards (SAE AMS, ASTM, ISO, UNS, BS, AFNOR and more) and deliver quickly. Our [experts](#) will be happy to assist you in purchasing Ti6Al4V.

### Forms of delivery

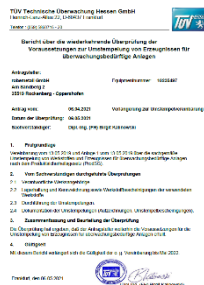
-  Round bars
-  Tubes
-  Sheets and plates
-  Metal powder
-  Screws/threaded rods
-  Forgings

### Areas of application

-  Aerospace
-  Mechanical Engineering
-  Medical Technology
-  Automotive
-  Power Engineering

## Your benefits in purchasing [Titanium Grade 5 \(WL 3.7164\)](#) from robemetall:

- Aviation certification according to EN/AS 9120:2018
- Cuts to the desired dimensions (water jet or saw cuts)
- All materials from one single source
- Qualified advice on questions relating to the selection and use of materials
- Fast and professional handling of your material requests



**Request now >>>**

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