

AMS 4981 - TITANIUM 6246

Typische Anwendungen

Kompressorscheiben und Lüfterblätter

Flugzeugzellenkomponenten

Antriebskomponenten für den Motorsport

Unterwasseranwendungen in saurem Medium

The main characteristics of 6246 are being light weight with exceptional strength and corrosion resistance. This high-performance alloy contains 6% aluminum and 4% zirconium along with titanium and trace elements. The addition of aluminum and zirconium gives 6246 titanium increased strength compared to commercially pure titanium grades. It has an ultimate tensile strength around 1100 MPa, nearly double that of the Ti-6Al-4V alloy. Yet 6246 remains relatively light, with a density of 4.54 g/cm³. Components made from 6246 can withstand tremendous mechanical stresses while remaining incredibly light. 6246 titanium offers great resistance to corrosion, the aluminum and vanadium stabilise the alloy against oxidation and prevent degradation. Like other titanium alloys, 6246 is incredibly durable with a long service life. Products made from this alloy can withstand heavy wear and tear over years of use with minimal maintenance required. The material does not suffer from fatigue, galling, or seizing issues. From a manufacturing perspective, 6246 titanium can be readily formed using standard metalworking techniques like machining, welding, and forming. However, the material is considered more difficult to process compared to other titanium grades due to its higher strength. Whether used to construct aircraft components, high-performance automotive parts, or professional-grade sports gear, 6246 titanium delivers an unbeatable combination of strength, light weight, and corrosion resistance. Key Features and Benefits Superior strength at high temperatures up to 538°C (1000°F) Excellent corrosion resistance Outstanding strength-to-weight ratio Exceptional durability Long service life

Technische Spezifikation

Verwandte Spezifikationen

AMS 4981

AMS-T-9047

UNS R56260

NACE MR01-75

Chemische Zusammensetzung (WT %)

	Min	Max
Al	5.5	6.5
Sn	1.75	2.25

Zr	3.5	4.5
Mo	5.5	6.5
Fe	-	0.15
N	1	0.04
O	-	0.15
C	-	0.04
H	-	0.0125

Typische mechanische Eigenschaften

	Range	Unit
0.2% Proof Stress	1090-1240	MPA
Tensile Strength	1090-1240	MPA
Elongation	13-16	%
Reduction of Area	37-40	%

Hinweis 1: Variationen in den mechanischen Eigenschaften hängen vom Zustand / der Wärmebehandlung ab.

Es wurde größtmögliche Sorgfalt darauf verwendet, dass unsere technischen Spezifikationen korrekt sind. Dennoch sollten die in Dynamic Metals Ltd. enthaltenen technischen Spezifikationen nur als Richtlinie verwendet werden und können ohne vorherige Ankündigung geändert werden.

*Need more information? **Get in touch***

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