TI-6AI-2Sn-4Zr-2Mo-Si (6-2-4-2)

Technical Datasheet



Titanium Alloy Service. Quality. Value.

Typical Applications

- Jet engine compressors
- Airframe structures
- High performance racing engine components

Product Description

6-2-4-2 is a weldable, near-alpha titanium alloy offering excellent mechanical strength, stability and creep resistance to temperatures as high as 550°C. Density is 4.54 g/cc.

Weldability

The weldability of 6-2-4-2 alloy is fair.

Material Specifications

- ASTM UNS R54620
- AMS 4975, 4976 and 4919
- MIL T 9046 and -9047G WNr. 3.7194

Availability

Round bar, sheet, plate

Corrosion Resistance

Corrosion resistance is good.

Chemical Composition (weight %)										
Weight (%)	С	N	0	Fe	Al	Sn	Zn	Мо	Si	Н
					5.5	1.75	3.5	1.75		
Max	0.08	0.05	0.12	0.25	6.5	2.25	4.5	2.25	0.10	0.0125

Mechanical Properties (minima at RT for Annealed Bar)					
UTS, MPa	896				
0.2% PS, MPa	827				
Elongation % in 51mm GL	10				
Reduction in area, %	25				
Hardness, HRC	34				

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.