

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

Technical Datasheet



Service. Quality. Value.

Titanium Alloy

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 (%)	C	N	O	Fe	Al	Sn	Zn	Mo	Si	H
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.

UK Service Centres:

Smiths Belfast **02895 908 897**
Smiths Biggleswade **01767 604 704**
Smiths Birmingham **0121 728 4940**
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Main Office **0845 527 3331**

Quality & Testing:



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