

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

Technical Datasheet



Titanium Alloy

Service. Quality. Value.

Typical Applications

- Gas turbine engine components
- High performance racing engine components
- Oil and gas production equipment

Product Description

6-2-4-6 (a stronger derivative of 6-2-4-2) is an alpha-beta titanium alloy offering very high mechanical strength with good retention up to 450°C. The alloy is heat treatable and deep hardenable.

Weldability

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

Material Specifications

- ASTM UNS R56260
- AMS 4981
- MIL T - 9047

Availability

Round bar

Corrosion Resistance

Corrosion resistance is good. The material is approved for sour service in the NACE MR-01-75 standard.

Chemical Composition (weight %)

Weight (%)	C	N	Fe	O	Al	Sn	Zn	Mo	H
Max	0.04	0.04	0.15	0.5	6.5	2.25	4.5	6.5	0.0125

Mechanical Properties (minima at RT for Annealed Bar)

UTS, MPa	1172
0.2% PS, MPa	1103
Elongation % in 51mm GL	10
Reduction in area, %	20L 15T
Hardness, HRC	39

L = Longitudinal
T = Traverse

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.