



# 6-2-4-2 TI-6AL-2SN-4ZR-2MO-SI

# DATA SHEET

## TITANIUM ALLOY

### TYPICAL APPLICATIONS

Jet engine compressors  
Airframe structures  
High performance racing engine components

### MATERIAL SPECIFICATIONS

- ASTM UNS R54620
- AMS 4975, 4976 and 4919
- MIL T – 9046 and -9047G

### 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.  
Corrosion resistance is good.  
The weldability of 6-2-4-2 alloy is fair.  
Density is 4.54 g/cc.

### AVAILABILITY

Round bar  
Sheet  
Plate

### CHEMICAL COMPOSITION (WEIGHT %)

	C	N	O	Fe	Al	Sn	Zn	Mo	Si	H
Min.					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 DUPLEX ANNEALED BAR)

UTS, MPa	0.2% PS, MPa	Elongation, % in 51mm GL	Reduction in area, %
896	827	10	25

The nominal hardness is 34 HRC.

### TECHNICAL SALES ASSISTANCE

Our resident team of qualified metallurgists and engineers will be pleased to assist further on any technical topic.

### Smiths High Performance

Unit O, Stratton Business Park, London Road, Biggleswade, Bedfordshire SG18 8QB United Kingdom  
Tel: +44 (0) 1767 604 708 Fax: +44 (0) 01767 312 885 Email: sales@smithshp.com Website: www.smithshp.com

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