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

**Technical Datasheet**

**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 -9047 W Nr. 3.7194

**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 -9047 W Nr. 3.7194

**Availability**

Round bar, sheet, plate

**Corrosion Resistance**

Corrosion resistance is good.

**Chemical Composition (weight %)**

<table>
<thead>
<tr>
<th>Weight (%)</th>
<th>C</th>
<th>N</th>
<th>O</th>
<th>Fe</th>
<th>Al</th>
<th>Sn</th>
<th>Zn</th>
<th>Mo</th>
<th>Si</th>
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<tr>
<td>Max</td>
<td>0.08</td>
<td>0.05</td>
<td>0.12</td>
<td>0.25</td>
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<td>2.25</td>
<td>4.5</td>
<td>2.25</td>
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<td>0.0125</td>
</tr>
</tbody>
</table>

**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.

www.smithmetal.com

sales@smithmetal.com

Biggleswade 01767 604604
Birmingham 0121 7284940
Bristol 0117 9712800
Chelmsford 01245 466664
Gateshead 0191 4695428
Horsham 01403 261981
Leeds 0113 3075167
London 020 72412430
Manchester 0161 7948650
Nottingham 0115 9254801
Norwich 01603 789878
Redruth 01209 315512
Verwood 01202 824347
General 0845 5273331

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