MATERIAL DATA SHEET

Ti6-4

SPECIFICATIONS

<table>
<thead>
<tr>
<th></th>
<th>EU</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ti-6Al-4V</td>
<td>Ti-6Al-4V</td>
<td>UNSR56400</td>
</tr>
</tbody>
</table>

MATERIAL DESCRIPTION

Titanium alloy with good mechanical properties up to 300°C. Titanium alloy alpha + beta type.

COMPOSITION

<table>
<thead>
<tr>
<th>Element</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ti</td>
<td>Balance</td>
</tr>
<tr>
<td>Al</td>
<td>6</td>
</tr>
<tr>
<td>V</td>
<td>4</td>
</tr>
<tr>
<td>O₂</td>
<td>0.2</td>
</tr>
<tr>
<td>C</td>
<td>&lt;0.08</td>
</tr>
</tbody>
</table>

APPLICATIONS

- Aviation
- Aircraft
- Aerospace
- Space
- Defense

MATERIAL CHARACTERISTICS

Typical mechanical properties:

The data provided in this document represent typical but not guaranteed values.

<table>
<thead>
<tr>
<th></th>
<th>Stress-relieved</th>
<th>Heat treated*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultimate Tensile Strength (UTS, MPa)</td>
<td>1150</td>
<td>980</td>
</tr>
<tr>
<td>Yield Strength (YS, MPa)</td>
<td>1070</td>
<td>860</td>
</tr>
<tr>
<td>Elongation at break (E5D, %)</td>
<td>10</td>
<td>15</td>
</tr>
</tbody>
</table>

* Heat treatment: 920°C/2h.

The mechanical characteristics along the Z axis are lowered by about 100 MPa after manufacturing. The anisotropy is significantly reduced, if not eliminated, after heat treatment.

Physical properties:

- Corrosion resistance
- Operating temperature
- Specific strength (UTS/density)
- Thermal conductivity
- Electrical conductivity

Qualitative comparison according to processes:

- Casting
- Forging
- LBM (Laser Beam Melting)

Static

(Tensile, hardness, resilience...)

Dynamic

(Fatigue)

Density

TECHNICAL DATA

Particle size:

Available in different granulometries.

Suppliers:

AddUp will provide support with your choice of powder supplier.