Typical Applications

- Pressure vessels
- Wishbones
- Uprights
- Suspension components
- Motorsport applications
- Track and push rods
- Rocket motor casings
- Roll cages

Key features:

- Chromium-Vanadium steel
- Easily welded
- Heat treatable
- Does not require localised heat treatment after welding
- Outstanding yield strength
- Good toughness

Product Description

A chromium-molybdenum-vanadium heat treatable steel with high strength after heat treatment (1080-1280 N/mm²). Easily welded and does not require localised heat treatment after welding. 15CDV6 benefits from a combination of outstanding yield strength and good toughness.

Chemical Composition (weight %)

<table>
<thead>
<tr>
<th></th>
<th>C</th>
<th>Si</th>
<th>Mn</th>
<th>S</th>
<th>P</th>
<th>Cr</th>
<th>Mo</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>0.12</td>
<td>0.80</td>
<td>1.25</td>
<td>0.80</td>
<td>0.20</td>
<td></td>
<td></td>
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<tr>
<td>Max</td>
<td>0.18</td>
<td>0.20</td>
<td>1.10</td>
<td>0.015</td>
<td>0.020</td>
<td>1.50</td>
<td>1.00</td>
<td>0.30</td>
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</tbody>
</table>

Mechanical Properties

<table>
<thead>
<tr>
<th>Condition</th>
<th>0.2% Proof Stress</th>
<th>Tensile Strength</th>
<th>Elongation</th>
<th>Hardness</th>
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</thead>
<tbody>
<tr>
<td>1.7734.2 (Annealed)</td>
<td>550 MPA Min.</td>
<td>700 MPA Min. 980-1180 MPA Min. 1080-1250 MPA Min.</td>
<td>13 % Min. 11 % Min. 10 % Min.</td>
<td>197 HB</td>
</tr>
<tr>
<td>1.7734.4</td>
<td>790 MPA Min.</td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>1.7734.4</td>
<td>930 MPA Min.</td>
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<tr>
<td>1.7734.6</td>
<td></td>
<td></td>
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<td>-</td>
</tr>
</tbody>
</table>

Weldability

Excellent

Availability

Tube

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

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