BS S62D Bright
Technical Datasheet

Stainless Steel Bar

Typical Applications
- Aerospace components
- Medical sector in instruments
- Cutlery
- Hand tools
- Plastic Moulds
- Pump shafts

Product Description
A martensitic stainless steel similar to type 410 but with an increased carbon content that improves hardness, strength and wear resistance. Corrosion resistance properties are achieved by the addition of >12% chromium and heat treatments. Not often welded but it is possible.

Related Specifications
- W.Nr 1.4014
- Gen 420S37

Key Features:
- Increased carbon which improves hardness
- Corrosion resistance is good especially if the material is hardened
- Similar to Type 410
- Martensitic stainless alloy

Corrosion Resistance
Good corrosion resistance, especially once hardened.

Weldability
Not usually welded but is possible

Availability
Bar

Chemical Composition (weight %)

<table>
<thead>
<tr>
<th>Weight (%)</th>
<th>C</th>
<th>Mn</th>
<th>Si</th>
<th>Ni</th>
<th>Cr</th>
<th>S</th>
<th>P</th>
<th>Fe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>0.18</td>
<td>12.0</td>
<td>1.0</td>
<td>1.0</td>
<td>14.0</td>
<td>0.025</td>
<td>0.03</td>
<td>Bal</td>
</tr>
<tr>
<td>Max</td>
<td>0.25</td>
<td>1.0</td>
<td>0.8</td>
<td>1.0</td>
<td>14.0</td>
<td>0.025</td>
<td>0.03</td>
<td>Bal</td>
</tr>
</tbody>
</table>

Mechanical Properties

<table>
<thead>
<tr>
<th>Tensile Strength (MPa) 696 - 853</th>
<th>0.2% Proof Stress 530 MPa</th>
<th>Elongation (%) 15 min.</th>
<th>Brinell Hardness (HB) 201-255</th>
</tr>
</thead>
</table>

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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