EN16 Technical Datasheet

Applications
- Connecting rods
- High load couplings
- Pistons
- High tensile shafts
- Gears

Product Description
EN16 is a high tensile steel which has excellent ductility and good shock resistance. EN16 shares the same good mechanical properties of EN8 but is more resistant to shear loading and frictional wearing. It is an alternative alloy steel grade to other chromium and nickel high tensile steel specifications and is readily machinable in the supplied condition. EN16 is a popular ‘all-rounder’ and is used in a wide variety of general engineering applications.

Key features:
- High tensile steel
- More resistant to shear loading and frictional wearing than EN8
- Good mechanical properties
- Good shock resistance

Machinability
Readily machinable

Related material specifications
BRITISH BS 970:1991 605M36T
BRITISH BS 970:1955 EN16T

Hardening
Supplied ready heat treated.

Availability
Bar.

Chemical Composition (weight %)

<table>
<thead>
<tr>
<th></th>
<th>C</th>
<th>Mn</th>
<th>Mo</th>
<th>Si</th>
<th>S</th>
<th>P</th>
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</thead>
<tbody>
<tr>
<td>min.</td>
<td>0.30</td>
<td>1.30</td>
<td>0.20</td>
<td>0.10</td>
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<tr>
<td>max.</td>
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<td>1.80</td>
<td>0.35</td>
<td>0.35</td>
<td>0.05</td>
<td>0.035</td>
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</tbody>
</table>

Mechanical Properties (subject to ruling section)

<table>
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<tr>
<th>Condition</th>
<th>Tensile N/mm²</th>
<th>Yield N/mm²</th>
<th>Elongation %</th>
<th>Izod KCV J</th>
<th>Hardness Brinell</th>
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</thead>
<tbody>
<tr>
<td>R</td>
<td>700-850</td>
<td>525</td>
<td>17</td>
<td>28</td>
<td>201-255</td>
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<tr>
<td>S</td>
<td>775-925</td>
<td>585</td>
<td>15</td>
<td>50</td>
<td>223-277</td>
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<tr>
<td>T</td>
<td>850-1000</td>
<td>680</td>
<td>13</td>
<td>50</td>
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</tbody>
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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.

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