DTD 197A (BS B23)

BRONZE ALLOY

PRODUCT DESCRIPTION

Used when commercial CA104 is not deemed fit for purpose, DTD 197A (BS B23) is another wrought alloy version of 10/5/5 aluminium bronze. Developed for use in the aerospace engineering sector, the alloy is also popular in the marine and chemical sector due to the material's excellent corrosion and erosion resistance in sea water and other chloride environments. DTD 197A offers excellent wear and shock resistance and is a high strength alloy which also retains it’s characteristics at cryogenic temperatures.

KEY FEATURES

- Excellent corrosion / erosion resistance
- Good resistance to shock loading
- Good weldability
- High wear and abrasion resistance

APPLICATIONS

- Aerospace components, marine hardware
- High strength fasteners, pump and valve components
- Heavy duty bushes and bearings, engine components

AVAILABILITY

Round bar, hexagon, flat bar

MATERIAL SPECIFICATIONS

BS B23 | CA104 (Commercial)
CW307G (Commercial)

MACHINABILITY

Good / fair

CHEMICAL COMPOSITION (weight %)

<table>
<thead>
<tr>
<th></th>
<th>Cu</th>
<th>Al</th>
<th>Ni</th>
<th>Fe</th>
<th>Mn</th>
<th>Total Impurities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>8.50</td>
<td>4.00</td>
<td>4.00</td>
<td></td>
<td></td>
<td>0.50</td>
</tr>
<tr>
<td>Max</td>
<td>11.00</td>
<td>5.50</td>
<td>5.00</td>
<td>0.50</td>
<td>0.50</td>
<td></td>
</tr>
</tbody>
</table>

MECHANICAL PROPERTIES

<table>
<thead>
<tr>
<th>Diameter</th>
<th>UTS 700 N/mm²</th>
<th>0.2% Proof Strength 400 N/mm²</th>
<th>0.1% Proof Strength 385 N/mm²</th>
<th>Elongation 15%</th>
<th>Hardness 188-268 or 179-255</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-18mm incl.</td>
<td>700 N/mm² ²</td>
<td>385 N/mm² ²</td>
<td>15%</td>
<td>188-268 or 179-255</td>
<td></td>
</tr>
<tr>
<td>&gt;18-80mm incl.</td>
<td>700 N/mm² ²</td>
<td>385 N/mm² ²</td>
<td>15%</td>
<td>188-268 or 179-255</td>
<td></td>
</tr>
<tr>
<td>&gt;80-100mm</td>
<td>695 N/mm² ²</td>
<td>385 N/mm² ²</td>
<td>15%</td>
<td>188-268 or 179-255</td>
<td></td>
</tr>
<tr>
<td>&gt;100mm (4&quot;)</td>
<td>650 N/mm² ²</td>
<td>320 N/mm² ²</td>
<td>15%</td>
<td>188-268 or 179-255</td>
<td></td>
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</tbody>
</table>

All information in our data sheet is based on approximate testing and is stated to the best of our knowledge and belief. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading.

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