304H
Austenitic Grade

DESCRIPTION:

304H grade is a modification of the most widely used 18/8 stainless. 304H has a controlled carbon content (carbon of .04 to .10 %) which increases its strength at elevated temperatures.

304H has a corrosion resistance similar to 304/304L. This austenitic grade is subject to carbide precipitation in weld zones due to its higher carbon content.

APPLICATIONS:

- Oil and Gas
- Boilers and Heat Exchangers
- Power and Industrial Plants

CHEMICAL COMPOSITION:

<table>
<thead>
<tr>
<th>Element</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>0.04 – 0.10</td>
</tr>
<tr>
<td>Chromium</td>
<td>18.0 – 20.0</td>
</tr>
<tr>
<td>Nickel</td>
<td>8.0 – 10.5</td>
</tr>
<tr>
<td>Manganese</td>
<td>2.0 max</td>
</tr>
<tr>
<td>Silicon</td>
<td>0.75 max</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>0.10 max</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>0.045 max</td>
</tr>
</tbody>
</table>

MECHANICAL PROPERTIES:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield Strength</td>
<td>30 KSI min</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>75 KSI min</td>
</tr>
<tr>
<td>Elongation</td>
<td>40%</td>
</tr>
<tr>
<td>Hardness</td>
<td>92 Rockwell B</td>
</tr>
</tbody>
</table>

STAINLESS STRUCTURALS CAN PRODUCE THIS ALLOY IN BEAMS, CHANNELS, ANGLES, TEES AND CUSTOM SHAPES.

Disclaimer:
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