S275 S275JR Steel

S275 steel stockholders and suppliers, delivering to the whole of the UK. West Yorkshire Steel are suppliers of S275 steel plate. S275 is an unalloyed low carbon mild steel grade supplied as hot rolled. As a low carbon steel specifications S275 provides low strength with good machinability and is suitable for welding. S275 was first introduced in 1990 by the European Committee for Iron and Steel Standardisation, The steel was first specified in the EN10025 standard and later published in the UK by the British Standards Institute (BSI) as BS EN 10025 S275 & S275JR. The new grade superceded the previous British Standard BS 4360 43A which has now been officially withdrawn. The average minimum yield for this material is 275 N/mm², hence the name S275.

We welcome export enquiries for S275 carbon steel. Contact our sales office and consult our shipping policy for further details.

Related Specifications

BS EN 10025, BS4360 43A

Alternative carbon steel grades we supply

EN3 | EN8 | EN9 | EN32 | EN43 | 070M20 | 080M40 | 070M55 | 080A15 | S355 | Key Steel

Form of Supply

West Yorkshire Steel are S275 stockholders and suppliers of flame cut plate. The steel can be supplied to your required sizes as one offs or multiple cut pieces. Plates can also be Lumsden ground to size on thickness.

Contact our experienced sales team who will assist you with your S275 carbon steel enquiry.

- Plate

Applications

S275 is a very popular low carbon steel grade suitable for numerous general engineering and structural applications. Supplied as a hot rolled non alloy steel it is used widely in the construction, maintenance and manufacturing industries.
Analysis

<table>
<thead>
<tr>
<th>Element</th>
<th>% Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>0.25%</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>0.04%</td>
</tr>
<tr>
<td>Manganese</td>
<td>1.60%</td>
</tr>
<tr>
<td>Sulphur</td>
<td>0.05%</td>
</tr>
<tr>
<td>Silicon</td>
<td>0.50%</td>
</tr>
</tbody>
</table>

Steel Profiles

S275 steel profiles are available as multiple or one off pieces. Flame cut steel blanks can be supplied surface ground and edge machined to your requirements. All flame cut steel pieces are dressed before final inspection and despatch. If you have any special requirements please inform our sales staff when you enquire for flame cut steel profiles.

Grinding

Surface grinding and edge grinding is available on all flame cut steel components. This is carried out on Lumsden grinding rotary reciprocating table machines. After flame cutting pieces can be ground to clean up or blanks can be Lumsden ground to size on thickness to an tolerance of +/-0.25mm. A tighter tolerance may be possible, please provide your required tolerances to our sales team when enquiring.

Typical Mechanical Properties*

As a hot rolled non alloy steel the main characterisitics of S275 are its mechanical properties, such as the tensile strength and yield strength.

<table>
<thead>
<tr>
<th>Tensile Strength N/mm² (MPa)</th>
<th>Yield Strength N/mm² (MPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>380-540</td>
<td>275</td>
</tr>
</tbody>
</table>

(*as rolled - 16mm plate)
Heat Treatment

S275 is not ideally suited to hardening, though it can be subjected to limited heat treatment process such as case hardening. When hardening S275 heat treatment temperatures, including rate of heating, cooling and soaking times will vary due to factors such as the shape and size of each component. Other considerations during the heat treatment process include the type of furnace, quenching medium and work piece transfer facilities. Please consult your heat treatment provider for full guidance on heat treatment of S275 carbon steel.

Certification

S275 steel is commonly available with a 3.1b mill certificate, cast and analysis certificate or a certificate of conformity, please request when placing any orders.

Quality Assured Supply

S275 steel is supplied in accordance with our ISO 9001:2015 registration.