

## Carbon Steel

Engineering something interesting? Our quality Carbon Steel can help you make it happen!

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**Carbon steel stockholders and suppliers, delivering to the whole of the UK.** Carbon steel grades are stocked in round bar, flat bar and steel plate. Carbon steel grades such as mild steel S275, S355, EN8 and EN9 can be supplied flame cut from plate. Steel profiles can be cut to your required sizes and if required surface ground on thickness.

If you do not find the a carbon steel specification you require on our web site please contact our sales team who may be able to assist you with your enquiry.

The characteristics of each carbon steel grade is mainly defined by the carbon content. The most common carbon steel grades have a carbon content ranging from 0.05% to 0.60%. For most engineering applications the maximum carbon content is 0.50%, carbon steel grades containing more carbon than this are usually used for tools. Carbon steel specifications are also defined by the addition of elements such as silicon, manganese, sulphur and phosphorous.

We welcome export enquiries for carbon steel. Contact our sales office and consult our [shipping policy](#) for further details.

### Popular grades we supply

[EN3](#) | [EN8](#) | [EN9](#) | [EN32](#) | [EN43](#) | [070M20](#) | [080M40](#) | [070M55](#) | [080A15](#) | [S275](#) | [S355](#) | [Key Steel](#) | [C45](#) |

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## Form of Supply

West Yorkshire Steel are stockholders and suppliers of carbon steel specifications in round bar, flat bar and flame cut plate. Diameters in carbon steel grades can be precision ground to tight tolerances.

Contact our friendly sales team who will assist you with your enquiry.

- Sheet
  - Plate
  - Flat
  - Diameter
  - Hexagonal
  - Tube
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## Flame Cutting

[Flame cut profiles](#) can be supplied to your specific requirements. After flame cutting, steel blanks can be normalised or stress relieved to reduce any hardness on the flame cut edges. Steel profiles can be [lumsden ground](#) or [precision ground](#) to size on thickness. Flame cut plates can be supplied in a wide variety of carbon steel specifications.

Below we list our most common specifications. If you do not find the grade you require please contact our

experienced sales team who may be able to assist you.

BS970	BS EN	ASTM ASME
<a href="#">EN8</a>	<a href="#">10025 S275</a>	SA 516 Grade 60
<a href="#">EN9</a>	<a href="#">10025 S275JR</a>	SA 516 Grade 65
<a href="#">EN3</a>	<a href="#">10025 S355</a>	SA 516 Grade 70
<a href="#">EN32</a>	<a href="#">10025 S355J2+N</a>	A 285 Grade C
<a href="#">080M40</a>	10207 SPH 265	
080A42	10028 P265 GH	<a href="#">C45</a>
<a href="#">070M55</a>	10028 P355 NL1	
<a href="#">080M46</a>	P256GH, P355NL	
<a href="#">080M50</a>	4360 43A	
<a href="#">070M20</a>	4360 50B	
080M15	4360 50C	
<a href="#">080A15</a>	4360 50D	
	1501 161 430A	
	1501 161 430B	
	1501 224 490B LT50	
	1501 223 490B LT50	
	1501 225 490B LT50	

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## Key Steel

Carbon steel is available as bright drawn [key steel](#) in flat and square sections. With medium tensile strength key steel is used widely in general engineering for components such as plain, gibhead, taper and parallel keys. Key steel is produced to the required tolerances as specified in British Standard BS46 and BS4235.

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## Spring Steel

Carbon [spring steel](#) specifications [EN42](#), [CS70](#), [CS80](#), [CS95](#) and [CS100](#) are available as hardened and tempered spring steel strip, annealed spring steel strip, spring steel plate and spring steel sheet. [EN43](#) spring steel is available in bar and plate. The grades commonly conform to BS970, BS1449, BS EN10083-1, BS EN10083-2, BS EN 10277 and BS EN 10278 standards.

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## 11% to 14% Manganese Steel

X120Mn12 1.3401 is a [manganese steel](#) with 1% carbon steel and an 11% to 14% manganese content supplied in plate. Offering excellent work hardening properties high manganese steel can be supplied in full plates or cut to your requirements.

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## Heat Treatment

Heat treatment temperatures for carbon steel specifications, including rate of heating, cooling and soaking times etc. will vary due to factors such as the shape and size of each carbon steel 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 carbon steel grades.

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## Welding

We recommend you contact your welding consumables supplier who should provide you full assistance and information on welding carbon steel grades.

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## Certification

Carbon steel is commonly available with BS EN 10204 3.1 mill certificate, please request when placing any orders.

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## Quality Assured Supply

All our carbon steel specifications are supplied in accordance with our ISO 9001:2015 registration.