

EN9 Carbon Steel

EN9 steel stockholders and suppliers, delivering to the whole of the UK. EN9 is a medium carbon steel grade commonly supplied in the as rolled condition. It can be flame or induction hardened to produce a high surface hardness with excellent wear resistance for a carbon steel grade. EN9 bar is available in full lengths or can be cut to your requirements. EN9 flame cut steel plates can be supplied cut to your required sizes and normalized. Flame cut plates can be supplied Lumsden ground or precision ground.

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

Alternative carbon steel grades we supply

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

Form of Supply

West Yorkshire Steel are steel stockholders and suppliers of EN9 carbon steel in round, square, hexagon and flat bar. Diameters and flat bar can be sawn cut to your exact requirements. West Yorkshire Steel can offer flame cut profile plates in grade EN9, which can be surface ground if required. Ground steel bar can be supplied, providing a precision ground steel bar to tight tolerances.

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

- Sheet
- Plate
- Flat
- Diameter
- Hexagonal

Applications

EN9 is used commonly for many general engineering applications. Typical applications include, shafts, axes, knives, bushes, crankshafts, screws, sickles, wood working drills and hammers.

Analysis

Carbon	0.50-0.60%	Phosphorous	0.06% max
Manganese	0.50-0.80%	Sulphur	0.06% max
Silicon	0.05-0.35%		

Flame Cut Profiles

West Yorkshire Steel are suppliers of EN9 flame cut steel profiles. A hard edge can occur when flame cutting EN9 plates therefore this grade is commonly normalised after cutting. EN9 flame cut profiles can be supplied Lumsden ground or precision ground.

Ground Flat Stock

Precision ground flat stock / gauge plate can be produced using EN9 steel. Subject to size suitability and availability of raw material pieces can be produced in approximately 2 to 3 weeks. Standard and non-standard sizes are available.

Forging

Preheat the component carefully, then raise the temperature to 1100°C for forging. Do not forge below 850°C. After forging cool slowly, preferably in a furnace.

Annealing

Heat the steel slowly to 680-710°C, soak well. Cool slowly in the furnace.

Hardening

Heat slowly to 820-840°C and allow it to be heated through. Quench in oil, brine or water.

Tempering

Temper the EN9 steel component immediately after quenching whilst still hand warm. Re-heat to the tempering temperature then soak for one hour per 25 millimetre of total thickness (2 hours minimum) Cool in air. For most applications tempering of EN9 will be between 550-660°C.

Welding

We recommend you contact your welding consumables supplier who should provide you full assistance and information on welding EN9 steel.

Heat Treatment

Heat treatment temperatures, including rate of heating, cooling and soaking times will vary due to factors such as the shape and size of each EN9 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 EN9 carbon steel.

Certification

EN9 carbon steel is available with a cast and analysis certificate or a BS EN 10204 3.1 mill certificate, please request when placing any orders.

Quality Assured Supply

EN9 is supplied in accordance with our ISO 9001:2015 registration.