

1.2767 Tool Steel

1.2767 tool steel stockholders and suppliers, delivering to the whole of the UK. West Yorkshire Steel are suppliers of round bar, flat bar and plate. 1.2767 is a higher carbon version of the standard 4.25% nickel oil hardening steel. It is a good quality tool steel that achieves high impact and compressive strength and is suitable for applications demanding extra wear resistance. With its characteristics of good full hardenability, good polishability and excellent toughness this cold work tool steel specification is widely used for plastic mould applications.

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

Form of Supply

West Yorkshire Steel are stockholders and suppliers of round bar, flat bar, plate and block. Diameters can be sawn to your required lengths as one offs or multiple cut pieces. Rectangular pieces can be sawn from flat bar or block to your specific sizes. Ground tool steel bar can be supplied, providing a quality precision ground bar to your required tolerances.

Contact our experienced sales team who will assist you with your 1.2767 steel enquiry.

- Plate
- Flat
- Diameter

Applications

Typical applications and components include plastic moulds, cutlery dies, shear blades for heavy gauge material, cutting tools, drawing jaws and highly stressed coining tools.

Analysis

Carbon	0.40-0.50%	Chromium	1.20-1.50%
Manganese	0.20-0.50%	Silicon	0.10-0.40%
Sulphur	0.03% max	Nickel	3.80-4.30%
Phosphorous	0.03% max	Molybdenum	0.15-0.35%

Forging

Heat the steel slowly and uniformly to 1050°C. Re heat as necessary and avoid working below 850°C After forging cool slowly in furnace or thermoinsulating material.

Annealing

Heat uniformly to 630-650°C. Soak well and cool slowly in the furnace to approximately 600°C then cool in air.

Stress Relieving

When dies produced in 1.2767 tool steel are heavily machined, stabilising is recommended just before finish machining in order to relieve machining strains. Heat to approximately 650°C. Soak well and allow to cool in air.

Hardening

Pre heat the tool slowly and uniformly to 650-700°C and thoroughly soak. Continue heating to the final hardening temperature of 840-870°C and allow the component to be heated through. Quench the component in oil or cool in air.

Tempering

Slowly heat the 1.2767 tool uniformly and thoroughly at the selected tempering temperatures and hold at heat for one hour per 25mm of total thickness but for a minimum of two hours. Cool in air. 1.2767 tool steel can be hardened by vacuum furnace, gas quench process.

Temperature [°C]	100	200	300	400	500	600
Hardness [HRc]	56	54	50	46	42	38

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 1.2767 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 tool steels.

Final Grinding

Select the correct grade of wheel in consultation with the grinding wheel manufacturer. Ensure the grinding wheel is in good condition by means of a suitable dressing tool. Wet grinding is a preferable option using a copious supply of coolant. If dry grinding is resorted to then use a very soft wheel.

Quality Assured Supply

1.2767 tool steel is supplied in accordance with our ISO 9001:2015 registration.