

# **Tool Steel**

Quality tool steel cut and delivered straight to your tool room, whatever size you need.

**Tool steel stockholders and suppliers, delivering to the whole of the UK.** West Yorkshire Steel are stockholders of round bar, flat bar and plate. Large block, plate and diameters can be bandsaw cut to your specific requirements. Tool Steel specifications are stocked in a large range of grades conforming to British, European, American and International standards. Specifications are available for hot work, cold work and plastic mould applications, suitable for subsequent heat treatment and hardening. Tool steel to standards including BS4659, BS EN ISO 4957, Werkstoff, AISI, DIN 17350, ASTM A681 and EN10027-2 are stocked as well as other designated standards.

Our comprehensive database includes tool steel brand names - specifications and grades old and new. If you do no find the specification you require on our web site please contact our sales team who may be able to assist you with your enquiry.

We welcome export enquiries for tool steel. Please contact our sales office and consult our <u>shipping policy</u> for further details.

#### Popular grades we supply

O1 | D2 | D3 | O2 | D6 | A2 | S1 | H13 | P20 | P20S | 420 | 1.2083 | 2767 | M2 | M42 | Ground Flat Stock | 1.1730

#### Tool Steel 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 plate to your specific sizes.

Ground tool steel bar can be supplied, providing a quality precision finish bar to close tolerances.

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

- Sheet
- Plate
- Flat
- Diameter

#### Cold Work Tool Steel

Cold work tool steel specifications are stocked in round bar, flat bar and plate which can be bandsaw cut to your specific requirements. Cold work steel specifications are held in International Standards including BS4659, BS EN ISO 4957, AISI, Werkstoff Nr and DIN designations.

Cold works grades are through hardening steels which can be heat treated to a high Rockwell hardness. These grades are ideally suited for the manufacture of tools working in a surface temperature of not more than 200°C. With a well balanced alloy content cold work specifications offer high wear resistance, good toughness, excellent compressive and impact strength and high dimensional stability in heat treatment. Cold work grades combine wear

and toughness characteristics which suit relatively heavy forming and cutting operations at room temperature.

BS4659	AISI	Werkstoff	DIN
<u>B01</u>	<u>01</u>	1.2510	100MnCrW4
BD2	<u>O2</u>	1.2842	90MnCrV8
BD3	<u>D2</u>	1.2379	X155CrVMo 12-1
BA2	<u>D3</u>	1.2080	X210Cr12
BS1	<u>D6</u>	<u>1.2436</u>	X210CrW12
	<u>A2</u>	1.2363	X100CrMoV 5-1
	<u>S1</u>	1.2550	60WCrV7
			X153CrMoV12

## Hot Work Tool Steel

Hot work tool steel specifications are stocked in diameters, flat bar and plate and can be sawn to your requirements. Hot work steel grades are held in International Standards such as BS4659, BS EN ISO 4957, AISI, Werkstoff Nr and DIN designations.

Hot work tool steel specifications provide strength and hardness during prolonged exposure to elevated temperatures. These grades offer good machinability in the annealed supply condition. Hot work grades offer resistance to erosion, high temperature corrosion and oxidation with dimensional stability during heat treatment.

BS4659	AISI	Werkstoff	DIN
<u>BH13</u>	H13	1.2344	X40CrMoV 5-1

## Plastic Mould Tool Steel

Plastic mould tool steel specifications are stocked in round bar, flat bar and plate that can be bandsaw cut to your specific requirements. Plastic mould steel specifications are held in International Standards such as BS4659, BS EN ISO 4957, AISI, Werkstoff Nr and DIN designations.

Plastic mould tool steel grades offer a high wear resistance, good polishability and etching ability with adequate corrosion resistance.

BS4659	AISI	Werkstoff	DIN
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BP20	<u>P20</u>	<u>1.2311</u>	40CrMnMo7
BP30	P20 + S. (Sulphur)	1.2312	40CrMnMoS-8-6
	<u>420</u>	1.2316	X45NiCrMo4
		<u>1.2767</u>	X40Cr13
		1.2083	X40Cr14
		1.2085	45NiCrMo16

## Tool Steel Drill Rod

Tool steel drill rod is supplied as precision ground bar to tight tolerances. Commonly supplied in O1 annealed tool steel grade. Other grades of tool steel drill rod are available, please advise our sales team of any specific specification requirements when sending your enquiry.

## **Heat Treatment**

When heat treating tool steel grades consideration should be given to hardening temperatures, including rate of heating, cooling and soaking times which will vary due to factors such as the shape and size of each component. Other considerations during heat treatment 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.

#### Certification

Tool steel specifications are commonly available with a cast and analysis certificate or a certificate of conformity, please request when placing any orders.

# **Quality Assured Supply**

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