West Yorkshire Steel

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Alloy Steel

Try a company with a strong heritage in high strength alloy steel

Alloy steel stockholders and suppliers, delivering to the whole of the UK.

Alloy steel grades are stocked in round bar, flat bar and plate. Specifications are supplied in a comprehensive range of grades conforming to British, European, American and International standards.

If you do no find the alloy steel grade you require on our website please contact our sales team who may be able to assist you with your enquiry.

Alloy steel is ideally suited for applications that require higher strength, improved toughness or better wear resistance than standard carbon steel grades. The choice of an alloy steel is often determined by the tensile strength and ruling section of the steel. Other considerations are the wear resistance and impact properties of the steel. The mechanical properties achievable are dependent on the addition of elements such as nickel, chromium, molybdenum and vanadium. Other factors to be taken in to consideration are the availability of the alloy steel. The majority of alloy steel specifications are only available in diameters. EN24T flat bar can be produced by bandsaw cutting pieces from large rectangular block.



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

- Flat
- Diameter
- Plate

Popular alloy steel grades we supply

EN16T | EN19T | EN24T | EN26W | EN30B
EN31 | EN32 | EN36 | EN40B | EN41B
605M36T | 709M40T | 708M40T | 817M40T
826M40W | 835M30 | 535A99 | 655M13
722M24 | 905M39
4130 | 4140 | 4145 | 4330V | 4340
8620 | 6150 | S690QL

Engineering Steel
Engineering Steel grades are commonly alloy steels which can be hardened and tempered to a range of high tensile strengths and mechanical properties. Engineering steel grades are tough, easily heat treated and do not suffer from temper brittleness. These steels are used in a wide variety of applications where high tensile properties are required. Common engineering components produced include crankshafts, gears, bolts and machine parts.

Popular engineering steel grades we supply
EN16T | EN19T | EN24T | EN26W | EN30B | EN31 | EN32 | EN36
605M36T | 709M40T | 708M40T | 817M40T | 826M40W | 835M30 | 535A99 | 655M13 | S690QL

Nitriding Steel
Nitriding Steel grades are commonly chromium molybdenum (chrome moly) and chromium aluminium molybdenum types, such as EN40B and EN41. Nitrided EN40B can achieve a surface hardness in excess of 65HRc. The addition of aluminium to EN41 nitriding steel enables this grade to achieve a surface hardness in excess of 68HRc. Flat bar sizes are limited in these specifications, we can offer 1.2311 or 1.2312 nitriding steel grades as an alternative.

Popular nitriding steel grades we supply
EN40B | EN41B 722M24 | 905M39

Case Hardening Steel
Case Hardening Steel grades are commonly supplied in the as rolled condition and can be carburised heat treated to give a high surface hardness and (with alloy case hardening steel grades) a tough core. The nickel and chromium combination of EN36 make this a good quality case hardening steel specification offering higher strength levels and a more uniform hardness than that of other carburising grades.

Popular case hardening steel grades we supply
EN32 EN36 EN39 080A15 655M13 835M15 | 8620

Oil & Gas Steel
Oil & Gas Steel grades are supplied in round bar only, diameters can be cut to your required lengths. These grades are commonly supplied heat treated conforming to SAE and AISI steel specifications.

Popular oil and gas steel grades we supply
4130 4140 4145 4330 4340

Spring Steel
Silicon manganese spring steel (often used for producing and repairing leaf springs) is supplied in flat bar with a limited range of sizes in round bar. Chromium vanadium alloy spring steel is available in a limited range of round bar.

Popular spring steel grades we supply
EN45 EN47

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 C45 component. Other considerations during the heat treatment process including the type of furnace, quenching medium and work piece transfer facilities. Please consult your heat treatment provider for full guidance on heat treatment of C45 steel.

Welding

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

Certification

C45 steel is available with a cast and analysis certificate or BS EN 10204 3.1 mill certificate, please request when placing any orders.

Quality Assured Supply

C45 steel is supplied in accordance with our ISO 9001:2015 registration.

Why buy Alloy Steel from West Yorkshire Steel?

- West Yorkshire Steel has been selling Alloy Steel for over 50 years and has established itself as one of the UK's leading suppliers of Alloy Steel.
- Large stock range.
- Reliable on time delivery throughout the UK, all items packaged safe and secure.
- Knowledgeable team with decades of experience – our sales team are responsive and reliable.
- Trusted by thousands of engineers and tool makers – 5 star Google reviews
- Long-standing customer relationships – reliable supplier to customers old and new.
- Trusted for quality, we are an ISO 9001 certified steel supplier.

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