

Nitriding Steel

With a high surface hardness nitriding steel grades offer increased wear resistance

Nitriding steel stockholders and suppliers, delivering to the whole of the UK. Nitriding steel specifications are available in round bar, flat bar and steel plate. Nitriding is a heat treatment process that introduces nitrogen in to the surface of a steel and dependant on the material and nitriding process, a nitride case depth of 0.05mm up to 0.50mm can be achieved. With a high surface hardness nitriding steel grades offer increased wear resistance. This can improve fatigue life and also improve the corrosion resistance (though not for stainless steel grades).

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

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

Popular nitriding steel grades we supply

[EN40B](#) | [EN41B](#) | [722M24](#) | [905M39](#)

Form of Supply

West Yorkshire Steel are stockholders and suppliers of nitriding steel specifications in round bar, flat bar and cut plate. Diameters and flats can be supplied as full bar lengths or cut pieces. Diameters in nitriding steel grades can be precision ground to tight tolerances.

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

- Flat
 - Diameter
-

Specifications

Common nitriding steel grades are generally medium carbon alloy steel types that have strong nitride-forming elements such as aluminium chromium, vanadium and molybdenum.

Below we list our range of engineering steel. If you do not find the specification you require on our web site please contact our experienced sales team who may be able to assist you with your enquiry.

BS970	BS EN10083-1	Werkstoff	DIN
BS970	BS EN10083-1	Werkstoff	DIN
EN40B	722M24	1.7361	32CrMo12
EN41B	905M39	1.8509	41CrAiMo7
EN40			
EN41			

Other nitriding grades include hot work [tool steel](#) (H13), cold work tool steel (O1, O2, D2, D3, D6, A2, S1) plastic mould steel (P20, 2767), high speed steel (M2, M42) stainless steel (420, 17/4PH, 440B, 440C) and some cast iron grades are also suitable for nitriding.

Heat Treatment

When heat treating nitriding steel grades consideration should be given to temperatures, including rate of heating, cooling and soaking times etc. will vary due to factors such as the shape and size of each 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 steel grades.

Welding

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

Certification

Nitriding steel specifications are commonly 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

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