

## EN32

Quality EN32 case hardening steel in rounds and flats.

EN32 case hardening steel stockholders and suppliers, delivering to the whole of the UK. This steel is an unalloyed low carbon grade. Components when carburised have a core strength range of 430-490N/mm<sup>2</sup> with a hard wear resistant surface case. It is a popular case hardening steel grade for general engineering, readily machinable and weldable in its supply condition. EN32 is a low tensile steel suited for lightly stressed components.

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

### Alternative case hardening grades we supply

| [EN36](#) | [16MnCr5](#) | [20MnCr5](#) | [8620](#) |

### Form of Supply

West Yorkshire Steel are EN32 EN32B steel stockholders and steel suppliers of round bar, flat bar and plate. This case hardening grade can be sawn to your required lengths as one offs or multiple cut pieces. Ground steel bar can be supplied, providing precision ground bar to tight tolerances. This grade is also available as EN32A, EN32B, EN32C and EN32M types.



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

- Flat
- Plate
- Diameter

## Applications

Commonly used for general engineering lightly stressed applications that are subject to wear, EN32 is suitable for applications such as collets, cams, rollers, bushes, spindles, and gears.

## Analysis

Carbon	0.10-0.18%	Silicon	0.05-0.35%
Manganese	0.60-1.0%	Phosphorous	0.050% max
Sulphur	0.050% max		

## Carburising / Case Hardening

EN32 is suited for carburising and case hardening, surfaces must be free from dirt and grease, and of low sulphur content. Case hardening can be carried out in salt baths with selected content depending on the type of salt and the depth of penetration required. Other considerations during the heat treatment process include the type of furnace, quenching medium and work piece transfer facilities. Time, temperatures and salt selection will be advised by your heat treatment provider.

## Hardening

Harden at a temperature of 760-780°C. Quench in water.

## Tempering

Tempering is recommended for stress relief and maximum case toughness. Tempering temperatures range from 150-200°C.

## Typical Mechanical Properties\*

Tensile N/mm <sup>2</sup>	Elongation %	Impact Izod J	Impact KCV J
430	18	39	35

(subject to ruling section\*)

## 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 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 case hardening steel grades.

## Certification

EN32 case hardening steel is commonly available with cast and analysis certificate of a certificate of conformity, please request when placing any orders.

## Quality Assured Supply

EN32 is supplied in accordance with our ISO 9001:2015 registration.