

## EN34 Case Hardening Steel

**EN34 steel suppliers, delivering to the whole of the UK.** EN34 is a 2% nickel, molybdenum case hardening steel grade. Combining good core strength, toughness and fatigue resistance this grade can be case hardened up to 60HRc. EN34 is suitable for applications requiring wear resistance and shock resistance. It offers good core strength and impact properties with little temper brittleness.

We welcome export enquiries for EN34 case hardening steel. Contact our sales office and consult our [shipping policy](#) for details.

### Alternative grades we supply

[EN16T](#) | [EN19T](#) | [EN24T](#) | [EN26W](#) | [EN30B](#) | [EN31](#) | [EN32](#) | [EN36](#) | [EN40B](#) | [EN41B](#) |

### Form of Supply

West Yorkshire Steel are stockholders and suppliers of EN34 round bar. Diameters in EN34 can be sawn to your required lengths as one offs or multiple cut pieces. Ground steel bar can be supplied, providing a case hardening steel precision ground bar to tight tolerances.

Contact our experienced sales team who will assist you with your EN34 case hardening steel enquiry.

- Diameter

### Applications

This carburising steel grade is suitable for shafts, gears, transmission parts, camshafts and cams.

### Analysis

Carbon	0.14-0.20%	Nickel	1.50-2.00%
Manganese	0.35-0.75%	Molybdenum	0.20-0.30%
Silicon	0.10-0.35%	Sulphur	0.040% max
		Phosphorous	0.035% max

## Carburising / Case Hardening

Carburising and case hardening will give a hard wear resisting surface and a tough core strength to the steel. EN34 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.

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## 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 EN34 steel component. Other considerations during the heat treatment process include the type of furnace, quenching medium and the work piece transfer facilities. Please consult your heat treatment provider for full guidance on heat treatment of EN34 case hardening steel.

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## Certification

EN34 case hardening steel is available with BS EN 10204 3.1 mill certificate, please request when placing any orders.