

# AISI 6150 Spring Steel

6150 round bar

## 6150 steel stockholders and suppliers, delivering throughout the UK.

AISI 6150 chromium vanadium type spring steel supplied in the as rolled condition. This grade is suitable for oil hardening and tempering, and when used in the oil hardened and tempered condition AISI 6150 spring steel combines spring characteristics with good wear and abrasion resistance. Hardened 6150 offers excellent toughness and shock resistance which make it a suitable alloy spring steel for parts exposed to stress, vibration and shock.

### Spring steel grades we supply

[CS70](#) | [CS80](#) | [CS95](#) | [CS100](#)  
[EN42](#) | [6150](#) | [6150](#) | [301](#) | [75Cr1](#)

### Form of Supply

Suppliers of round bar we can offer diameters in 6150 sawn to your required lengths as 1 offs or multiple cut pieces. Ground steel bar can be supplied, providing a high quality precision ground spring steel bar to tight tolerances.



- Round
- Flat (limited range)

Contact our experienced sales team who will assist you with your 6150 spring steel enquiry.

## Applications

Used widely in the motor vehicle industry AISI 6150 is suitable for many general engineering applications that require high tensile strength and toughness. Typical applications include crankshafts, steering knuckles, spindles, pumps and gears.

## Analysis

Carbon	0.48-0.53%	Silicon	0.15-0.35%
Manganese	0.70-0.90%	Chromium	0.80-1.10%
Sulphur	0.04% max	Phosphorous	0.035% max
Vanadium	0.15% min		

## Forging

Preheat the steel carefully, then raise temperature to 1050°C. Do not forge below 840°C. After forging cool slowly, preferably in a furnace.

## Annealing

Heat the steel slowly to 820-840°C, soak well. Cool slowly in a furnace.

## Hardening

Heat slowly to 650-700°C and thoroughly soak. Continue to heat the 6150 to the final hardening temperature of 830-860°C and allow the component to be heated through. Quench in oil.

## Tempering

Temper the component immediately after quenching whilst tools are still hand warm. Re-heat to the tempering temperature then soak for one hour per 25 millimetre of total thickness (2 hours minimum) Cool in air. For most applications tempering of 6150 will be between 400-600°C.

## Welding

We recommend you contact your welding consumables supplier who should provide you full assistance and information on welding 6150 steel

## 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 6150 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 6150 steel.

## Certification

6150 as rolled spring steel is available with a cast and analysis certificate or certificate of conformity, please request when placing any orders.

## Quality Assured Supply

6150 spring steel is supplied in accordance with our ISO 9001:2015 registration.



**West Yorkshire Steel Ltd**  
Sandbeck Industrial Estate,  
Wetherby, Leeds,  
LS22 7DN UK

Call: 01937 584440  
Fax: 01937 580128  
Email: [sales@westyorkssteel.com](mailto:sales@westyorkssteel.com)



**QUOTE ME**



Information provided on our datasheets has been drawn from various recognised sources, including British, European and International Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources. Material supplied by the Company may vary significantly from this data but will conform to all relevant and applicable standards. Any of the products detailed may be used for a large range of purposes and as WYS has no control over their use; WYS specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied. © West Yorkshire Steel Ltd. All Rights Reserved.