



LIBERTY

STEEL

Narrow Strip Alloy Steels

Narrow Strip offers an extensive range of alloy steels available in the hot rolled black, descaled or annealed condition.

The use of alloying additions is often specific to the intended application and service conditions.

MEMBER OF



Alloy steel range

Alloying additions made singularly or in combination influence the metallurgy of the steel and material properties. This influence can be tailored to enhance the performance of hot rolled strip whether used directly as hot rolled or after further processing. We offer alloy steels in the following groups:

Bearing steel

Typically bearing steels are high in carbon 1 % and chromium 1.5 %. They are generally used for transmission/ gear components, links and flat discs/ thrust washers. They are also used in hard wearing fatigue-type applications

Structural steels

These are carbon, carbon-manganese and micro-alloyed steels where a guaranteed minimum yield and tensile strength is required. These can be found in levers, links, support applications and general sheet metals work where welding and fabrication are key parameters.

Steels suitable for hardening and tempering

Medium carbon steels and medium carbon alloy steels are made according to EN10083 quenched and tempered steel and EN10089 hot rolled steels for quenched and tempered springs.

The range of steel grades within these standards is diverse with steels containing typically up to 0.60% carbon with or without alloying additions. The properties of these steels are as different as the chemistries listed. These grades are generally used for heat treatment applications to achieve final mechanical properties.

Typical applications are: clutch springs, transmission plates, blades/ knives, shovels, secateurs and ice axes.

Size range*

Mill Edge		Sheared Edge	
Width (mm)	Thickness (mm)	Width (mm)	Thickness (mm)
190 - 350	1.2 - 13.5	26 - 340	1.2 - 3.5
351 - 420	2.0 - 9.0	26 - 390	2.0 - 3.5
421 - 495	3.0 - 9.0	26 - 410	3.0 - 3.5
		50 - 465	3.5 - 7.0

* Size combinations are dependent upon the required specification.

Tool steels

These grades offer hardenability, wear resistance and resistance to softening on heating.

Typical applications are: carrier strip for bi-metal saws, hacksaw blades, leather knives and die stock blades.

Silicon steels

These generally contain at least 1.5% silicon. One of their most important properties is to have a very high yield strength used in applications where the component, for example a spring, can be flexed and will then return to its original shape despite significant bending or twisting.

Typical applications are: laminated springs, spring/thrust washers and hacksaws.

Conditions of supply:

- Black or pickled & oiled
- Annealed
- Mill or sheared edge
- Cut lengths: from 1000mm to 6000mm
- Coil dimensions:
 - Inside diameter 508mm
 - Outside diameter 1350mm max
- Coil weight: up to 9.5kg/mm of strip width
- Tolerances: width and thickness to EN10048: 1997

Technical support

Our highly qualified technical team will provide advice on the most appropriate grade and product to your specific requirement. Customer Technical Support provide specialist advice and help with day-to-day problem solving.

Works based metallurgists and the full resources of our Steel Research and Development Laboratories are available to assist with longer-term developments.

For further information, enquiries or any technical guidance on our range of Narrow Strip products please contact the Commercial Department at the address below.

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