

# Stainless Steel

## Corus Narrow Strip

**Corus Narrow Strip is an established manufacturer of many grades of hot rolled stainless steel, sourced locally, that can be tailor made to meet your requirements.**

### Martensitic stainless steel

Martensitic stainless steels, high carbon-chromium, have been developed for a number of applications after cold rolling, such as razor blades, surgical knives, scissors, cutlery, pressure diaphragms, valve components, bacon slicers and circlips.

Martensitic grades that are produced regularly at Corus Narrow Strip are:-

**Table 1: Martensitic Grades**

	<b>C</b>	<b>Cr</b>	<b>Equivalent steel grades</b>
BSM876	0.62/	12.5/	X65Cr13
	0.68	13.1	
BSM879	0.68/	12.7/	
	0.70	13.5	
BSM877	0.35/	13.1/	
	0.41	13.9	
BSM278	0.35/	15.5/	1.4122, 35CrMo17
	0.41	16.5	
BSM275	0.18/	12.5/	420L, 420S45
	0.24	13.5	
BSM276	0.4/	13.0/	420H, Z40C13
	0.45	14.0	

The chemistry is carefully controlled to ensure that once the steel is annealed and descaled it can be readily processed e.g. hot formed/forged, cold rolled, stamped/blanked and finally heat-treated, ground and polished etc. Our high carbon razor grades can be hardened and tempered to approximately 700 Hv<sub>30</sub>.<sup>‡</sup>

<sup>‡</sup> depending upon austenitising temperature, tempering temperature and quenching medium.

Other special features of our martensitic grades include: -

- High carbon razor grades with low levels of sulphur for improved corrosion resistance (876 and 879).
- Molybdenum additions for improved resistance to pitting corrosion (877 and 278).

### Conditions of supply

Black, mill edge (annealed, shotblast and pickled subject to enquiry).

### Size range

Width (mm) 200 – 400mm

Thickness (mm) 2.0 – 7.0mm

### Coil dimensions

Inside diameter 508mm

Outside diameter 1350mm max.

### Coil weight

up to 9.5kg/mm of strip width.

**Austenitic and ferritic stainless steel**

Corus Narrow Strip have extensive experience in the hot rolling of austenitic, high chrome & nickel, and ferritic grades, low carbon-chromium, for example: -

**Table 2: Austenitic and Ferritic Stainless Steel**

	<b>C</b>	<b>Cr</b>	<b>Ni</b>	<b>Equivalent steel grades</b>
BSM285	0.04/ 0.06	17.5/ 17.9	9.0/ 9.5	347S31
BSM273	0.04x	12.0/ 12.8	0.35x	403, 410, X6Cr13

Typical applications after cold rolling, are chemical filters, sprockets, gas valves, pen nibs and washers

**Conditions of supply**

Black, mill or sheared edge.

**Size range***Mill edge*

Width (mm)	Thickness (mm)
200 – 500mm	1.5 – 12.0mm

*Sheared edge*

Width (mm)	Thickness (mm)
26 – 488mm	1.5 – 6.0mm Subject to vetting.

**Cut lengths**

From 800mm to 11,000mm.

**Coil dimensions**

Inside diameter 508mm.

Outside diameter 1350mm max.

**Coil weight**

Up to 9.5kg/mm of strip width.

**Hirework rolling**

Corus Narrow Strip can offer to hirework hot roll stainless steel, subject to technical vetting. If you have any hireworking requirements please contact us.

**Technical support**

Corus Narrow Strip has a comprehensive technical support team, available to advise on the use of martensitic, austenitic and ferritic stainless to achieve maximum benefit. Technical account managers provide specialist advice and help with day-to-day problem solving. Works based metallurgists and the full resources of Corus Research and Development Laboratories are available to assist with longer-term developments.

For further information, enquiries or any technical guidance on potential applications of martensitic, austenitic and ferritic stainless please contact the Commercial Department at the address below.

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