

30Mn5

Tailor-made chemistry enabling further processing for end use in steel strapping

The 30Mn5 grade is a hot-rolled, pickled product added to our family of heat treatable steels. The material is cold-rolled, slit and heat treated at the end customer to achieve the intended mechanical properties and microstructure of steel straps. This type of steel is typically applied in steel strapping. The tailor made chemistry meets the needs of

our end user customers as well as processing customers in this field. The excellent combination of strength and flexibility after cold rolling ensures consistent mechanical properties, good ductility and work hardening. It enables trouble-free hot-rolled processing, resulting in state-of-the-art surface quality.

Mechanical properties

	Substrate	Test direction	Yield strength R_p (N/mm ²)	Tensile strength R_m (N/mm ²)	Elongation ¹ A_{80}/A_5 (%)
30Mn5 Typical	Hot-rolled	L	450	700	18

¹ The index of elongation (A%) refers to the type of tensile test sample

Chemical composition

	C	Mn	P	S	Si	Al
	Min. - Max.	Min. - Max.	Max.	Max.	Min. - Max.	Min. - Max.
30Mn5	0.290 0.330	1.250 1.450	0.020	0.010	0.150 0.300	0.010 0.050

All values are in weight%

Dimensions

1.91 to 2.20 mm in thickness and 1000 to 1350 mm width. Please refer to Tata Steel or your local sales representative for feasibility of specific dimensions.

CEV

The typical carbon equivalent value is 0.58.

Tolerances

Test certificates 2.2 / 3.1 are available according to EN 10204.

Product support

We want you to get the best from our grade 30Mn5. Our technical engineers and trained sales staff are always happy to answer your questions on our range of boron manganese steels or other steel types. Our engineers are available to assist you with process and product design optimisation for improved throughput, yield and end product performance.

Further information

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