

## 30MnB5

### Excellent formability combined with strength after heat treatment

Steel grade 30MnB5 is a hot-rolled, uncoated product recently added to our family of boron manganese steels. These steel grades are easy to process into relatively complex shapes. After quenching and tempering, the typical carbon content of 0.30 will enable the final product to achieve exceptional hardness – offering reliable strength and abrasion resistance in demanding applications with tough duty cycles.

Homogeneous material properties allow trouble-free, repeatable processing. High levels of cleanliness help to ensure consistent formability and weldability.

The 30MnB5 grade is used to deliver reliable end product performance in a range of applications. These include many parts for the agricultural machinery (e.g. harrow discs and ploughs) and chassis components and stabilizer bars for the automotive sector.

#### Mechanical properties

	Substrate	Test direction	Yield strength $R_p$ (N/mm <sup>2</sup> )	Tensile strength $R_m$ (N/mm <sup>2</sup> )	Elongation <sup>1</sup> $A_{50}$ (%)
30MnB5 Typical	Hot-rolled	L	375	600	24

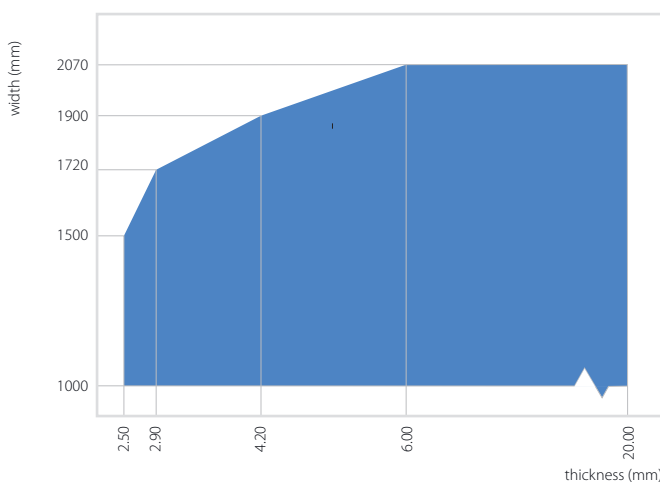
<sup>1</sup> The index of elongation (A%) refers to the type of tensile test sample

#### Chemical composition

	C		Mn		P	S	Si		Al		Cr		Ti		B	
	min. - max.		min. - max.		max.	max.	min. - max.		min. - max.		min. - max.		min. - max.		min. - max.	
30MnB5	0.280	0.310	1.150	1.350	0.020	0.010	0.200	0.250	0.020	0.060	0.150	0.250	0.020	0.035	0.0020	0.0035

All values are in weight%

#### Dimensional window of 30MnB5



■ 30MnB5 Hot-rolled dry

Please contact Tata Steel or your local sales representative for alternative chemistries or dimensions which fall outside of the matrix.

#### CEV

The typical carbon equivalent value is 0.56.

#### Tolerances

Thickness tolerances are according to EN 10051. Test certificates 2.2/3.1 are available according to EN 10204. Our chemistry is in line with EN 10083.

#### Product support

We want you to get the best from our 30MnB5 grade. Our technical engineers and trained sales staff are always happy to answer any of your questions regarding our boron manganese family or any 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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