

26MnB5

Consistent formability combined with excellent strength after heat treatment

The 26MnB5 grade of boron steel is a hot-rolled, uncoated product which is easy to process into relatively complex shapes. After quenching and tempering, the final product will 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 26MnB5 grade is used to deliver reliable end product performance in a range of applications. These include drive and gear shafts, stabiliser bars and precision tubes for the automotive sector, tubular goods used in the oil and gas industry, and agricultural ploughs and harvesting equipment.

Mechanical properties

Grade	Test Direction	Yield strength	Tensile strength	Elongation after fracture ¹
		R _p (N/mm ²)	R _m (N/mm ²)	A ₈₀ /A ₅ (%)
26MnB5 Typical	L	350 - 450	600 - 660	25

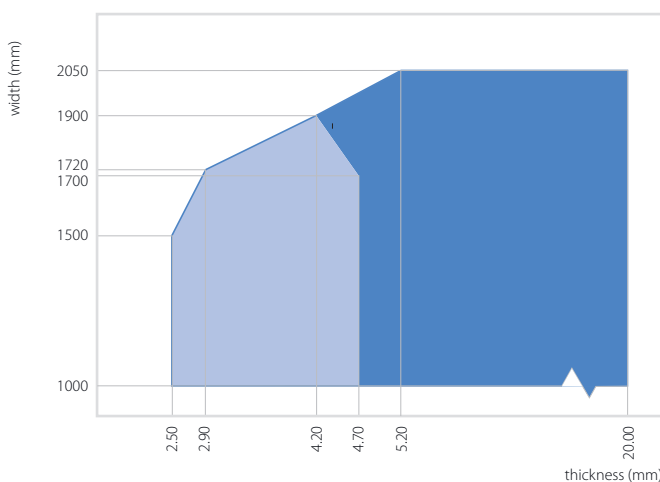
¹ The index of elongation (A%) refers to the type of tensile test sample

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.
26MnB5	0.23 - 0.29	1.00 - 1.40	0.02	0.01	0.10 - 0.30	0.02 - 0.06	0.10 - 0.40	0.02 - 0.04	0.0015 - 0.005

All values are in weight%

Dimensional window of 26MnB5



- 26MnB5 Dry
- Pickled and oiled

Please refer to Tata Steel or your local sales representative for dimensions outside of the matrix (in hot-rolled dry and hot-rolled pickled and oiled).

CEV

The typical carbon equivalent value is 0.48.

EN standards

Thickness tolerances are according to ½ EN 10051 or tighter (please inquire). Test certificates 2.2 / 3.1 are available according to EN 10204.

Product support

We want you to get the best from our 26MnB5 grade. 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.

For more information please contact us at connect.engineering@tatasteel.com.

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