

MATERIAL NUMBER 1.0596 · CLASS 1.0

SM520B

Material no. 1.0596

also listed as S355K2

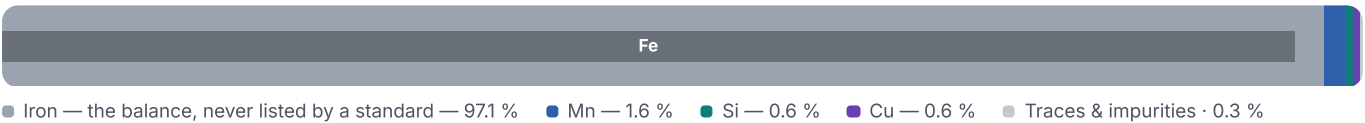
Chemical composition, mechanical and physical property values, and 7 standard designations from 5 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 7 in 5 regions	PROPERTY VALUES 7 on file
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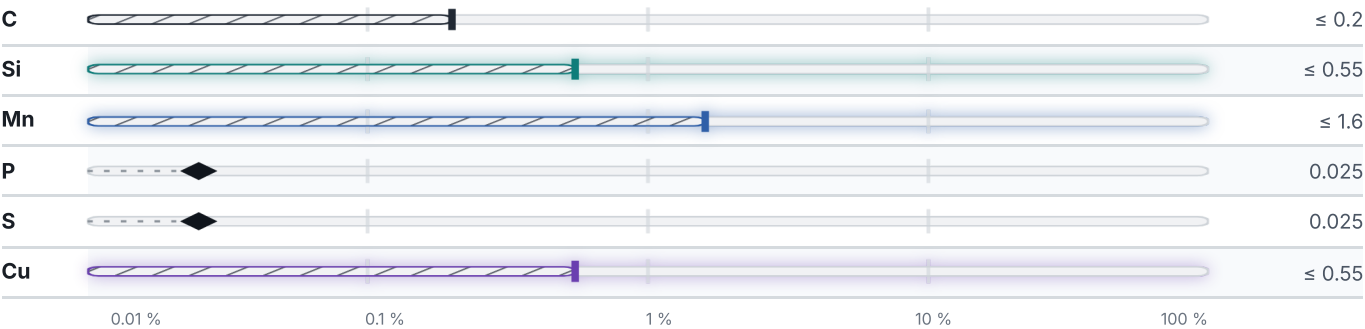
Chemical composition

Mass fraction in %

What this alloy is



Logarithmic scale, 0.01 % to 100 % — every value here compares directly, decade by decade.



The scale is logarithmic, not the element’s raw share of the alloy — the only honest way to fit 0.01 % and 100 % in one picture, and it means every value here can be compared with every other.

Predicted transformation temperatures

Not enough recorded composition to predict a transformation temperature for this grade — missing: Ni, Cr, Mo.

Mechanical properties

3 values across 1 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %
Hot-rolled	520–640	325–365	15–21

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

7 designations · 3 documented as identical

Europe	3	Japan	1
Fe510DD2	din-en	SM520B	jis
S355K2	This grade's own name din-en		
S355K2G4	This grade's own name din-en	Hungary	1
		Fe 355 D	msz
United Kingdom	1	South Korea	1
50EE	bs	SM520B	This grade's own name ks

Note on use. The data is compiled to the best of our knowledge from publicly available standards and manufacturer documentation. It replaces neither material testing nor an inspection document to EN 10204. Please request a mill certificate to EN 10204 2.1, 3.1 or 3.2 together with your enquiry. The standard in its current valid edition always prevails.

Enquiry about SM520B

Quotation, availability, mill certificate or a technical question — directly on the material page.

Start an enquiry

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

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ISSUED

Aug 20, 2026