

MATERIAL NUMBER 1.8901 · CLASS 1.8

1.8901

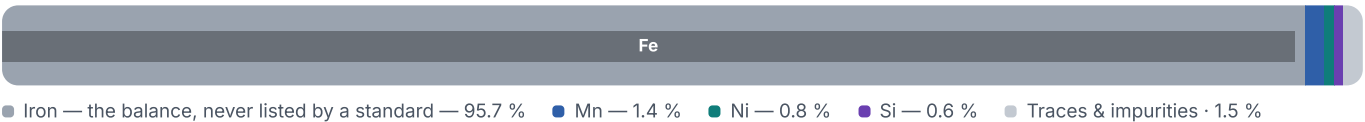
Chemical composition, mechanical and physical property values, and 11 standard designations from 8 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 11 in 8 regions	PROPERTY VALUES 15 on file
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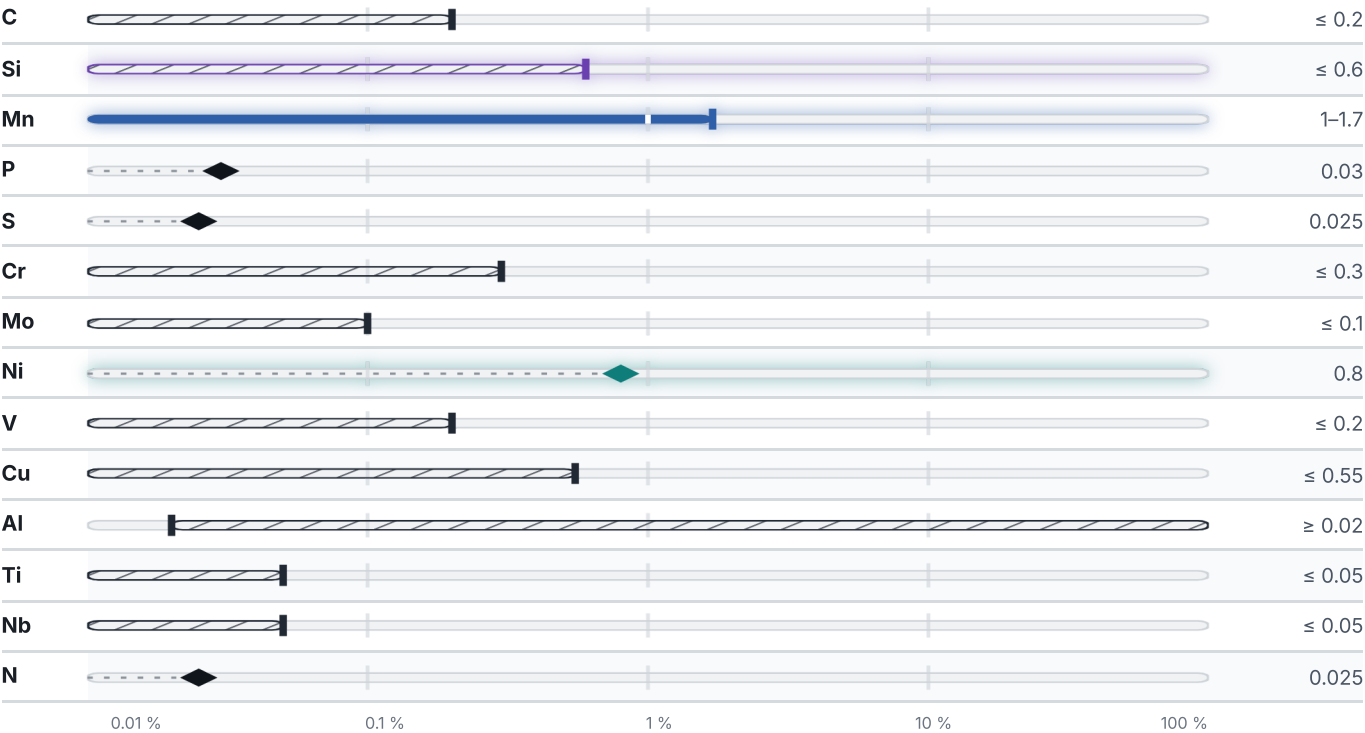
Chemical composition

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

computed from composition · °C

PREDICTED AE3 807 °C	PREDICTED AE1 708 °C	PREDICTED ACM 438 °C	PREDICTED BS 540 °C
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Mechanical properties

14 values across 1 conditions

CONDITION · DIMENSION	REH N/mm²	RM N/mm²	A %
≤ 16	460	–	17
16 – 40	440	–	17
40 – 63	430	–	17
63 – 80	410	–	17
80 – 100	400	–	–
80 – 200	–	–	17
≤ 100	–	540–720	–
100 – 200	–	530–710	–
100 – 150	380	–	–
150 – 200	370	–	–

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

11 designations · 2 documented as identical

Europe3	France1
FeE460KGNdin-en	E460Rafnor
S460N This grade's own namedin-en	International1
StE 460 This grade's own namedin-en	E460iso
Russia / CIS2	Japan1
18G2AFgost	SM520Bjis
18G2AFpsgost	China1
United Kingdom1	Q460Dgb
55Cbs	Italy1
	FeE460KGNuni

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 1.8901
Quotation, availability, mill certificate or a technical question — directly on the material page.

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ISSUED
Aug 20, 2026