

MATERIAL NUMBER 1.8809 · CLASS 1.8

S355G12

Material no. 1.8809

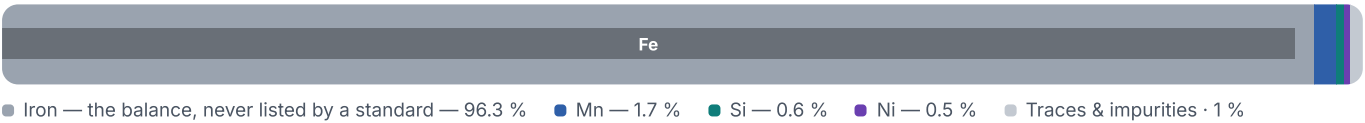
Chemical composition, mechanical and physical property values, and 9 standard designations from 4 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 9 in 4 regions	PROPERTY VALUES 15 on file
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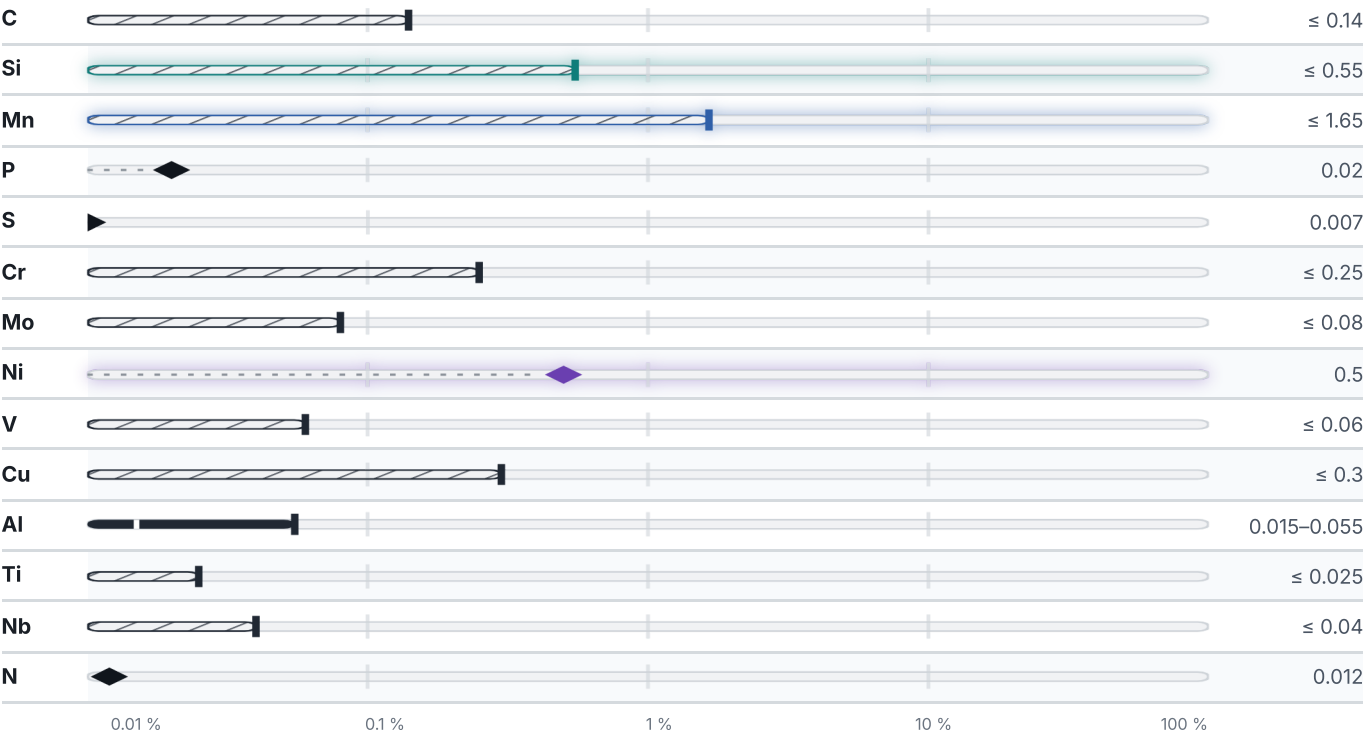
Chemical composition

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 822 °C	PREDICTED AE1 711 °C	PREDICTED ACM 385 °C	PREDICTED BS 552 °C
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Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

9 designations · 3 documented as identical

Europe	4	Norway	2
2WGr.50/50T	din-en	Y21S355M3	ns
S355G12 This grade's own name	din-en	Y21S355N3	ns
S355G12+M This grade's own name	din-en		
S355G12+N This grade's own name	din-en	United Kingdom	1
		355EMZ	bs
United States	2		
2HGr.50	aisi-sae		
2WGr.50/50T	aisi-sae		

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 S355G12

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

[Start an enquiry](#)

DATASHEET ONLINE	GRADE SEARCH	MATERIAL NO.	ISSUED
View the material page	Search all grades	1.8809	Aug 20, 2026