

MATERIAL NUMBER 1.8818 · CLASS 1.8

S275M

Material no. 1.8818

Chemical composition, mechanical and physical property values, and 4 standard designations from 2 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm³	4 in 2 regions	15 on file

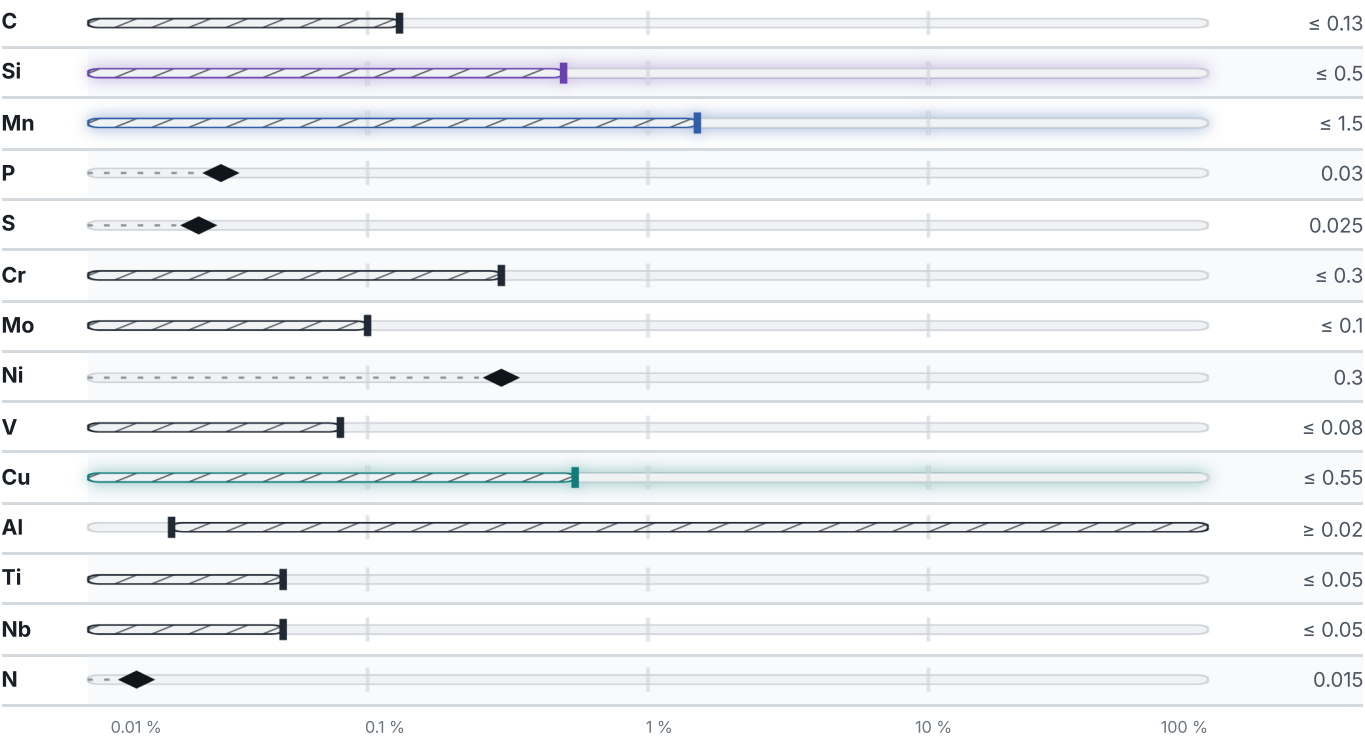
Chemical composition

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 827 °C	PREDICTED AE1 716 °C	PREDICTED ACM 378 °C	PREDICTED BS 558 °C
-------------------------	-------------------------	-------------------------	------------------------

Mechanical properties

11 values across 1 conditions

CONDITION · DIMENSION	REH N/mm ²	RM N/mm ²
≤ 16	275	–
16 – 40	265	–
≤ 40	–	370–530
40 – 63	255	360–520
63 – 80	245	350–510
80 – 100	245	350–510
100 – 120	240	350–510

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

4 designations · 1 documented as identical

Europe	3	Italy	1
FeE275KGTM	din-en	FeE275KGTM	uni
S275M This grade's own name	din-en		
StE285TM	din-en		

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 S275M

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	1.8818	Aug 20, 2026