SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.8827 · CLASS 1.8

A913Gr.65

Material no. 1.8827

also listed as S460M

Chemical composition, mechanical and physical property values, and 12 standard designations from 6 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm³	12 in 6 regions	15 on file

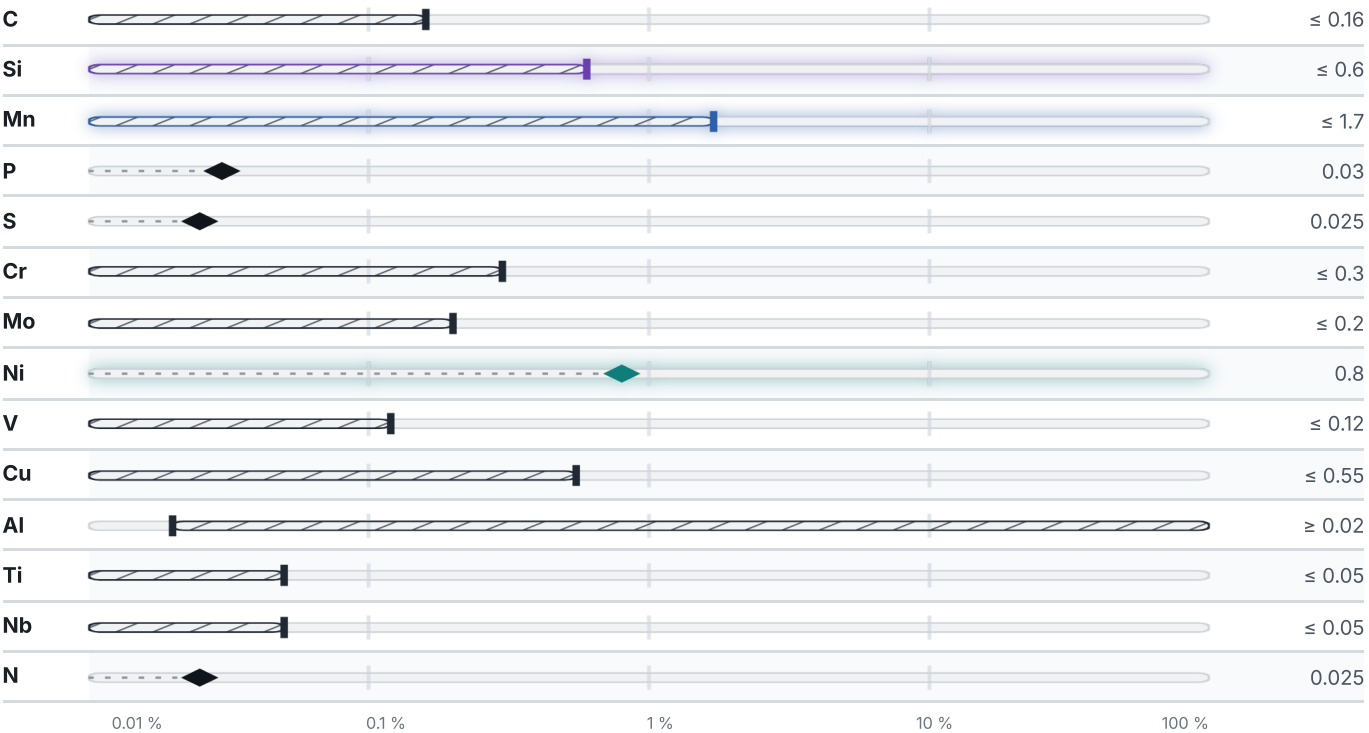
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 95.4 % · Mn — 1.7 % · Ni — 0.8 % · Si — 0.6 % · Traces & impurities · 1.5 %

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	PREDICTED AE1	PREDICTED ACM	PREDICTED BS
814 °C	708 °C	405 °C	538 °C

Mechanical properties

11 values across 1 conditions

CONDITION · DIMENSION	REH N/mm²	RM N/mm²
≤ 16	460	–
16 – 40	440	–
≤ 40	–	540–720
40 – 63	430	530–710
63 – 80	410	510–690
80 – 100	400	500–680
100 – 120	385	490–660

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

12 designations · 1 documented as identical

Europe 5

A913Gr.65	din-en
FeE460KGTM	din-en
S460M This grade's own name	din-en
StE 460 TM	din-en
StE460	din-en

United States 2

A572Gr.65	aisi-sae
A913Gr.65	aisi-sae

Italy 2

FeE460KG	uni
FeE460KGTM	uni

United Kingdom 1

55C	bs

France 1

E460R	afnor

Japan 1

SM570	jis

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 A913Gr.65

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	1.8827	Aug 20, 2026