SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.8935 · CLASS 1.8

WStE 460

Material no. 1.8935

also listed as P460NH

Chemical composition, mechanical and physical property values, and 7 standard designations from 4 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm³	**7** in 4 regions	**15** on file

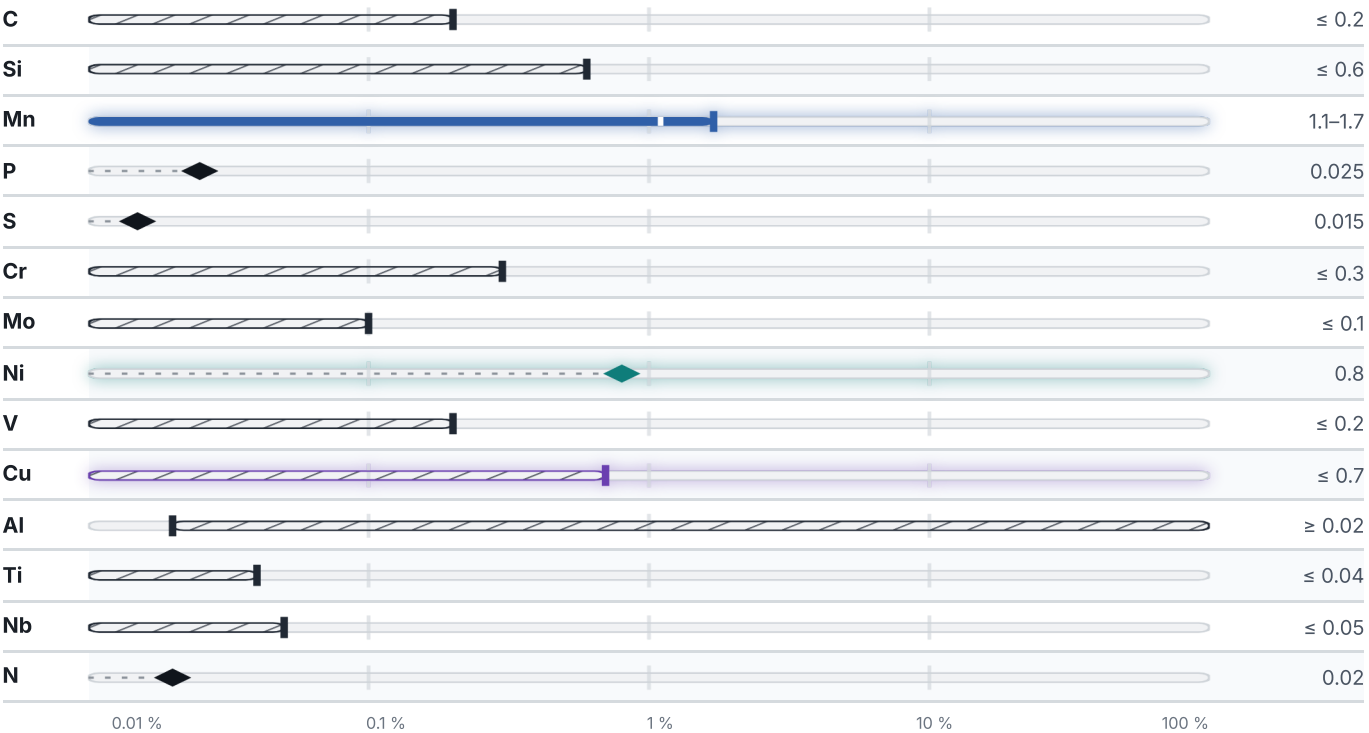
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 95.5 % · Mn — 1.4 % · Ni — 0.8 % · Cu — 0.7 % · Traces & impurities · 1.6 %

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
807 °C	708 °C	438 °C	540 °C

Mechanical properties

10 values across 2 conditions

NORMALIZED	REH N/mm²	RM N/mm²
≤ 16	460	560–730
16 – 60	–	570–720
16 – 40	445	–
40 – 60	430	–
60 – 100	400	540–710

NORMALIZING	RM N/mm²	RE N/mm²	A5 %
Ø 80	500	320	19

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

7 designations · 2 documented as identical

Europe	2
P460NH This grade's own name	din-en
WStE 460 This grade's own name	din-en

Russia / CIS	2
18G2	gost
18Г2	gost

United States	2
K02900	uns
K12202	uns

France	1
E460FP	afnor

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 WStE 460

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	1.8935	Aug 20, 2026