

MATERIAL NUMBER 1.8870 · CLASS 1.8

P460Q

Material no. 1.8870

Chemical composition, mechanical and physical property values, and 3 standard designations from 2 regions.

DENSITY

7.85 g/cm³

OTHER DESIGNATIONS

3 in 2 regions

PROPERTY VALUES

16 on file

Chemical composition

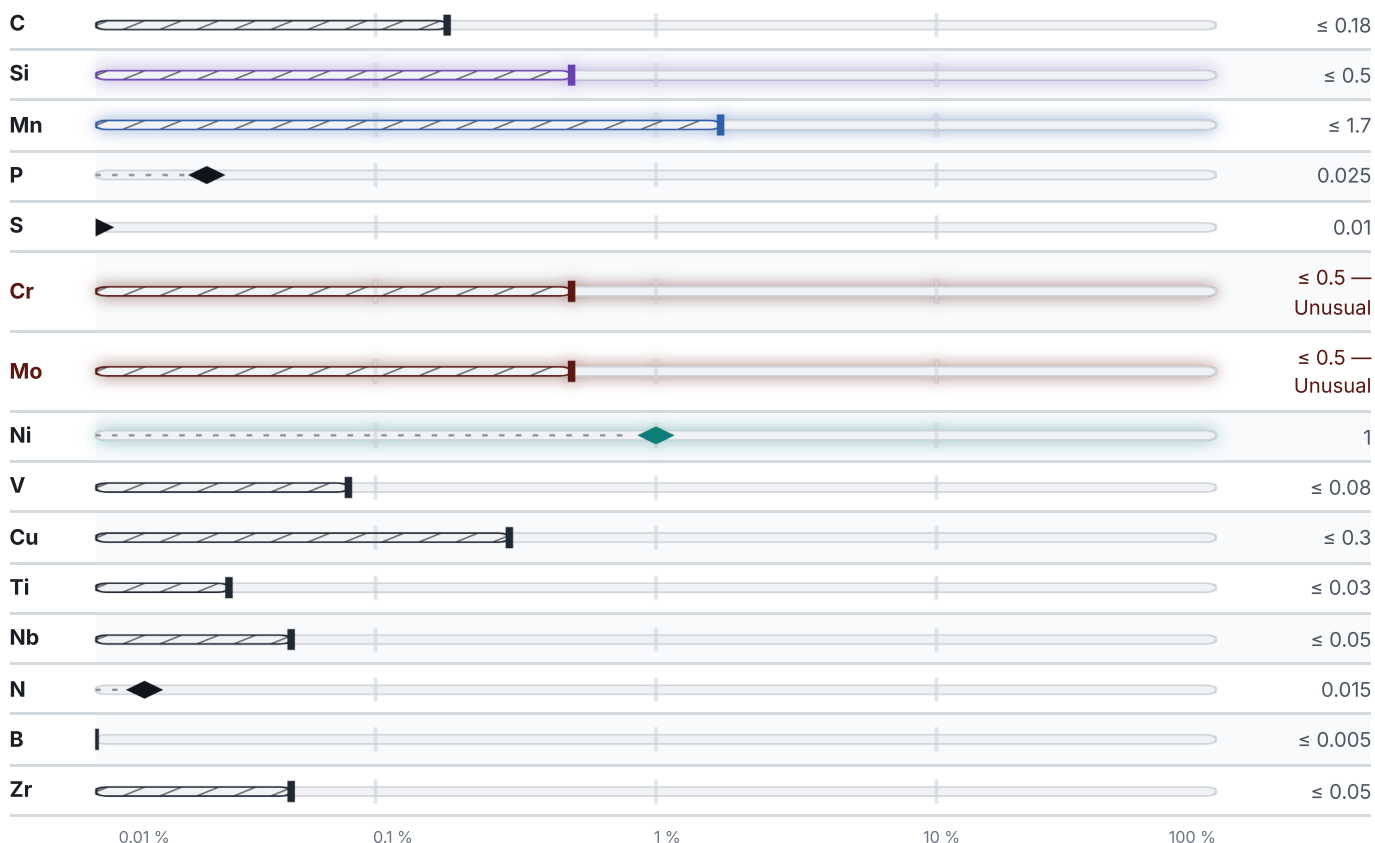
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 95.1 % ● Mn — 1.7 % ● Ni — 1 % ● Si — 0.5 % ● Traces & impurities · 1.7 %

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 802 °C	PREDICTED AE1 708 °C	PREDICTED ACM 429 °C	PREDICTED BS 515 °C
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Mechanical properties

5 values across 1 conditions

QUENCHED AND TEMPERED	REH N/mm²	RM N/mm²
≤ 50	460	—
50 – 100	440	—
≤ 100	—	550–720
100 – 150	400	500–670

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

3 designations · 1 documented as identical

United States	2	Europe	1
K12001	uns	P460Q	This grade's own name
K12447	uns		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 P460Q

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	1.8870	Aug 20, 2026