

MATERIAL NUMBER 1.0460 · CLASS 1.0

SA 105

Material no. 1.0460

also listed as C22.8

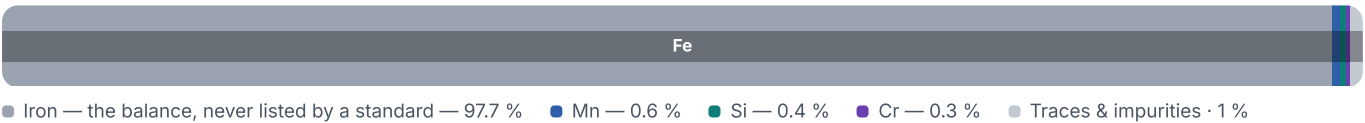
Chemical composition, mechanical and physical property values, and 9 standard designations from 3 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 9 in 3 regions	PROPERTY VALUES 14 on file
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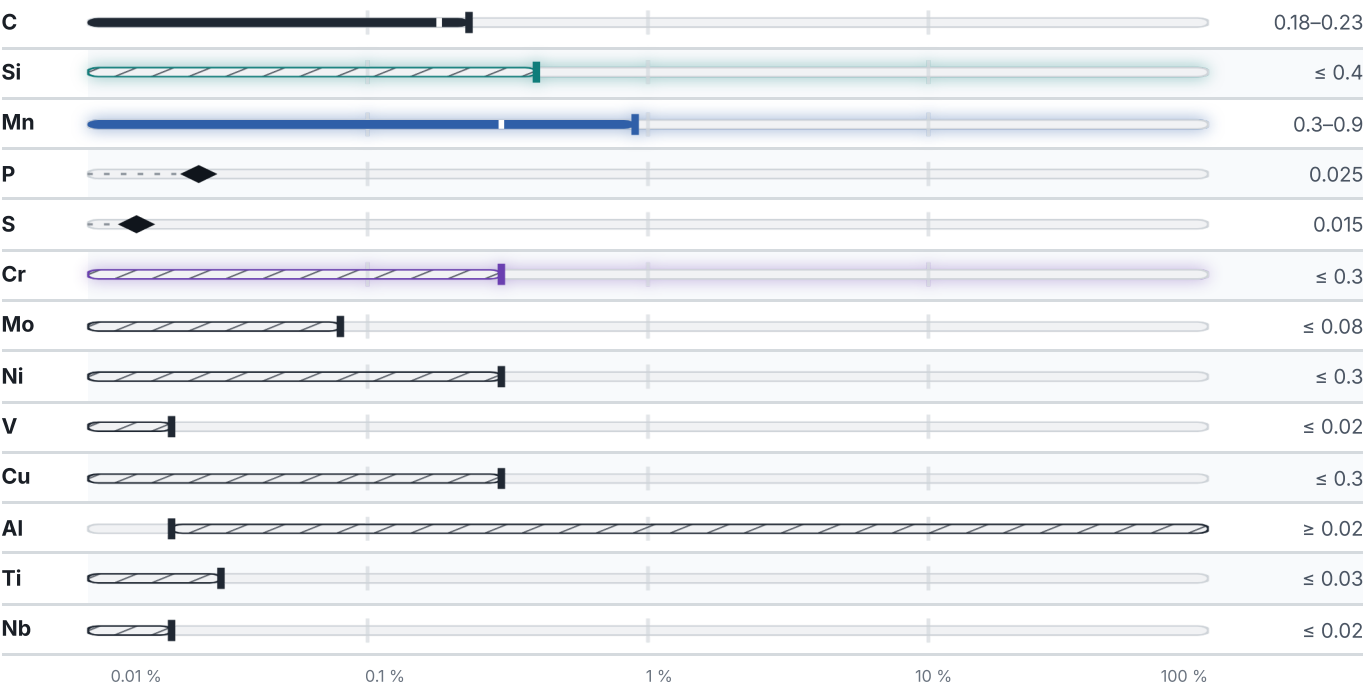
Chemical composition

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 813 °C	PREDICTED AE1 722 °C	PREDICTED ACM 455 °C	PREDICTED BS 574 °C
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Mechanical properties

5 values across 1 conditions

NORMALIZED	REH N/mm ²	RM N/mm ²	A %
≤ 50	250	–	–
50 – 100	240	–	–
100 – 150	230	–	–
≤ 150	–	410–540	25

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

9 designations · 4 documented as identical

Europe	3	Poland	3
C22.8 This grade's own name	din-en	St36K	pn
C22G2 This grade's own name	din-en	St41K	pn
P250GH This grade's own name	din-en	St44K	pn
United States	3		
K03504	uns		
SA 105 This grade's own name	aisi-sae		
A 105	astm		

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 SA 105

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	1.0460	Aug 20, 2026