

MATERIAL NUMBER 1.1204 · CLASS 1.1

C55S

Material no. 1.1204

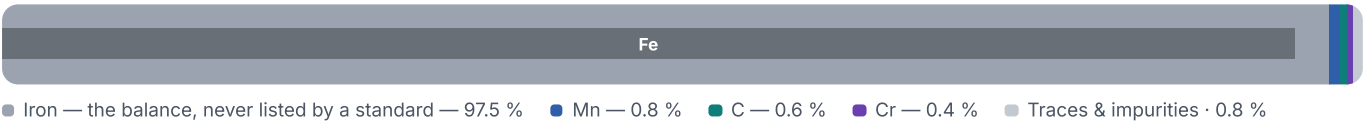
Chemical composition, mechanical and physical property values, and 10 standard designations from 5 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 10 in 5 regions	PROPERTY VALUES 9 on file
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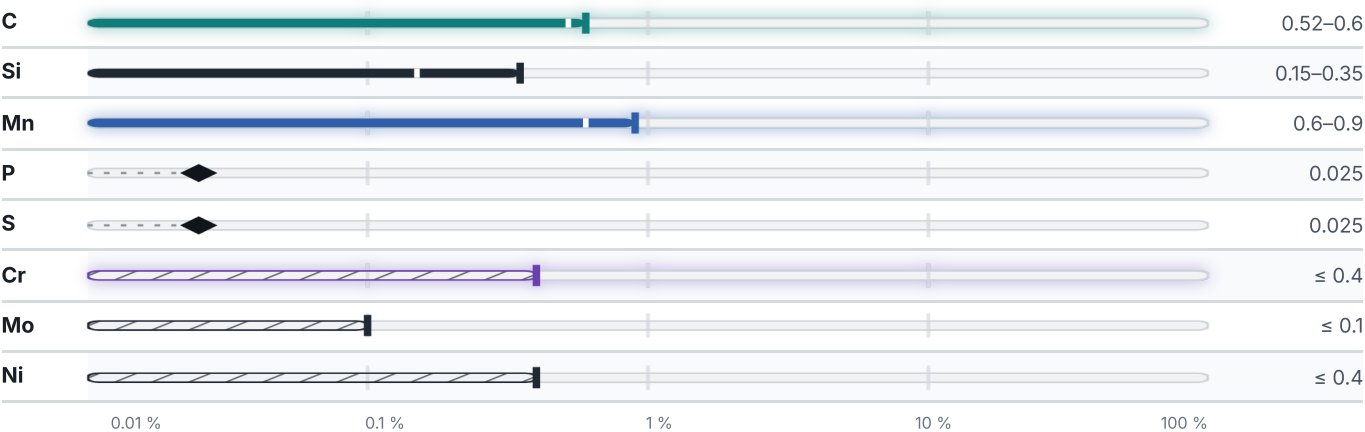
Chemical composition

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 742 °C	PREDICTED AE1 722 °C	PREDICTED ACM 686 °C	PREDICTED BS 547 °C
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Mechanical properties

7 values across 6 conditions

SOFT ANNEALED	RM N/mm ²	A80 %
0.3 – 3	600	17
COLD ROLLED	RM N/mm ²	
0.3 – 3		1070
QUENCHED AND TEMPERED	RM N/mm ²	
0.3 – 3		1100–1700
SOFT ANNEALED		HV
Soft annealed		185
COLD ROLLED		HV
Cold rolled		300
QUENCHED AND TEMPERED		HV
Quenched and tempered		340–520

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

10 designations · 3 documented as identical

Europe	3	France	2
1.1203	din-en	C50RR	afnor
C55S This grade's own name	din-en	XC 50	afnor
Ck55	din-en		
United States	2	Poland	2
G10550 This grade's own name	uns	55	pn
1055 This grade's own name	aisi-sae	gat. 55	pn
		United Kingdom	1
		CS50	bs

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 C55S

Quotation, availability, mill certificate or a technical question — directly on the material page.

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DATASHEET ONLINE

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GRADE SEARCH

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ISSUED

Aug 20, 2026