

MATERIAL NUMBER 1.1151 · CLASS 1.1

CS22

Material no. 1.1151

also listed as C22E

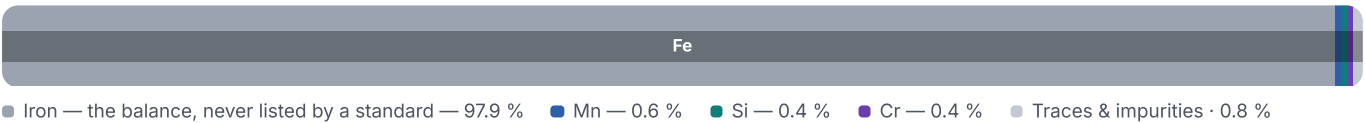
Chemical composition, mechanical and physical property values, and 27 standard designations from 15 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 27 in 15 regions	PROPERTY VALUES 9 on file
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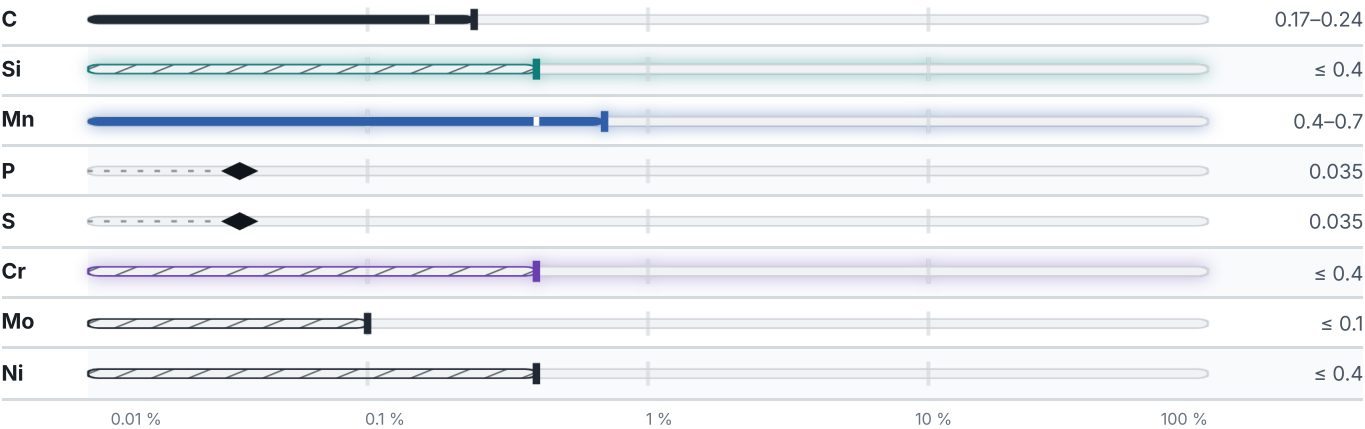
Chemical composition

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 812 °C	PREDICTED AE1 725 °C	PREDICTED ACM 465 °C	PREDICTED BS 575 °C
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Mechanical properties

22 values across 6 conditions

QUENCHED AND TEMPERED	REH N/mm ²	RM N/mm ²	A %
≤ 8	340	500	20
8 – 20	290	470	22
20 – 50	270	440	22
50 – 80	260	420	22
NORMALIZED		RM N/mm ²	A %
≤ 16		430	24
16 – 100		410	25
SOFT ANNEALED		RM N/mm ²	A80 %
0.3 – 3		500	22
COLD ROLLED			RM N/mm ²
0.3 – 3			900
COLD ROLLED			HV
Cold rolled			265
SOFT ANNEALED		HB	HV
Soft annealed		156	155

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

27 designations · 6 documented as identical

United States		5	United Kingdom		3
G10200	This grade's own name	uns	050A20		bs
G10230	This grade's own name	uns	070M20		bs
1020	This grade's own name	aisi-sae	CS22		bs
10201023		aisi-sae			
1023	This grade's own name	aisi-sae	France		3
			C22E		afnor
			XC18		afnor
			XC25		afnor

Europe	2	Italy	1
C22E This grade's own name	din-en	C25	uni
Ck 22 This grade's own name	din-en		
Spain	2	Czechia	1
F.1120	une	12024	csn
F.1120-C25k	une	Brazil	1
Japan	2	1020	abnt
S20C	jis	Slovakia	1
S22C	jis	12 024	stn
Russia / CIS	2	Poland	1
20	gost	20	pn
st 20	gost	Türkiye	1
China	1	Ç 1020	mke
20	gb	Hungary	1
		C 22	msz

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 CS22

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	1.1151	Aug 20, 2026