

MATERIAL NUMBER 1.1181 · CLASS 1.1

Ck 35

Material no. 1.1181

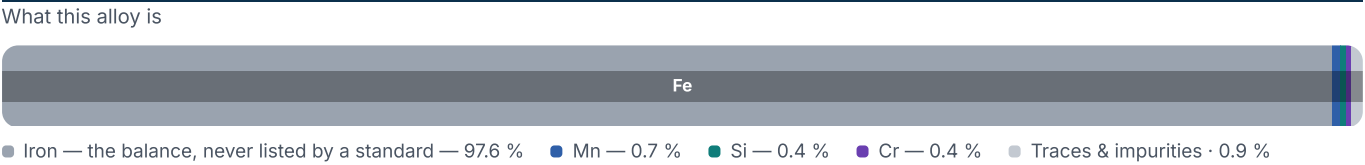
also listed as C35E

Chemical composition, mechanical and physical property values, and 36 standard designations from 20 regions.

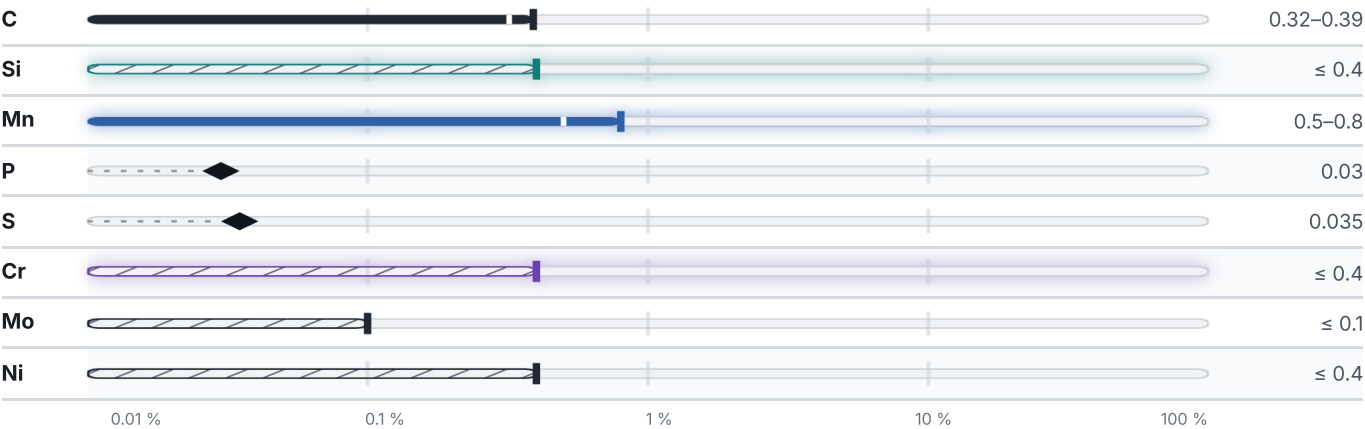
DENSITY 7.73 g/cm³	OTHER DESIGNATIONS 36 in 20 regions	PROPERTY VALUES 9 on file
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Chemical composition

Mass fraction in %



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 783 °C	PREDICTED AE1 724 °C	PREDICTED ACM 572 °C	PREDICTED BS 563 °C
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Mechanical properties

36 values across 8 conditions

NORMALIZED		RM N/mm ²	A %	
≤ 16		550	18	
16 – 100		520	19	
100 – 250		500	19	
250 – 500		480	–	
500 – 1000		470	–	
COLD DRAWN / HARD		RM N/mm ²	A %	
5 – 10		650–1000	6	
10 – 16		600–950	7	
16 – 40		580–880	8	
40 – 63		550–840	9	
63 – 100		520–800	9	
QUENCHED AND TEMPERED		REH N/mm ²	RM N/mm ²	A %
≤ 8		430	630	17
8 – 20		380	600	19
20 – 50		320	550	20
50 – 80		290	500	20
SOFT ANNEALED			RM N/mm ²	
0.3 – 3			540	
COLD ROLLED			RM N/mm ²	
0.3 – 3			930	
AS ROLLED AND TURNED			HB	
As rolled and turned			154–207	
SOFT ANNEALED		HB	HV	
Soft annealed		183	170	
COLD ROLLED			HV	
Cold rolled			275	

Physical properties

1 values

CONDITION · DIMENSION	RHO g/cm³	RHO_EL nΩ·m
20	7.55	600

PROPERTY	VALUE	UNIT
Density	7.73	g/cm³

Designations across standards

36 designations · 14 documented as identical

United States9		Sweden2	
G10340	This grade's own nameuns	1572	ss
G10350	This grade's own nameuns	SIS 14 1572	This grade's own namess
G10380	This grade's own nameuns	International1	
H10380	This grade's own nameuns	C35E4	iso
1034	This grade's own nameaisi-sae	China1	
1035	This grade's own nameaisi-sae	35	gb
1038	This grade's own nameaisi-sae	Italy1	
1038H	This grade's own nameaisi-sae	C35	uni
C1034	This grade's own nameaisi-sae	Czechia1	
France3		12040	csn
XC 32	This grade's own nameafnor	Brazil1	
XC 38H1	This grade's own nameafnor	1035	abnt
XC38	afnor	Latin America1	
Europe2		1038	copant
C35E	This grade's own namedin-en	Slovakia1	
Ck 35	This grade's own namedin-en	12 040	stn
United Kingdom2		Poland1	
O80M36	bs	35	pn
CFS6	bs	Türkiye1	
Spain2		Ç 1030	mke
C35k	une	Hungary1	
F1130	une	C 35	msz
Japan2		Romania1	
S35C	jis	OLC35X	stas
S38C	jis	Finland1	
Russia / CIS2		C35	sfs
35	gost		
ct35	gost		

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 Ck 35

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

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ISSUED
Aug 20, 2026