

MATERIAL NUMBER 1.1181 · CLASS 1.1

1038H

Material no. 1.1181

also listed as C35E

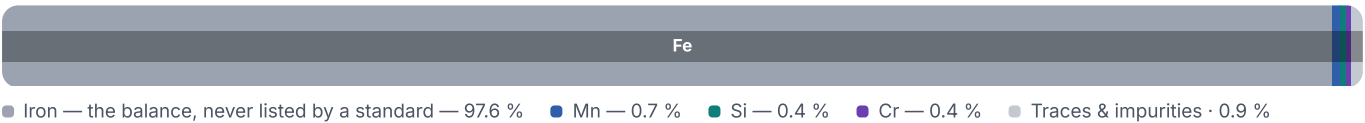
Chemical composition, mechanical and physical property values, and 36 standard designations from 20 regions.

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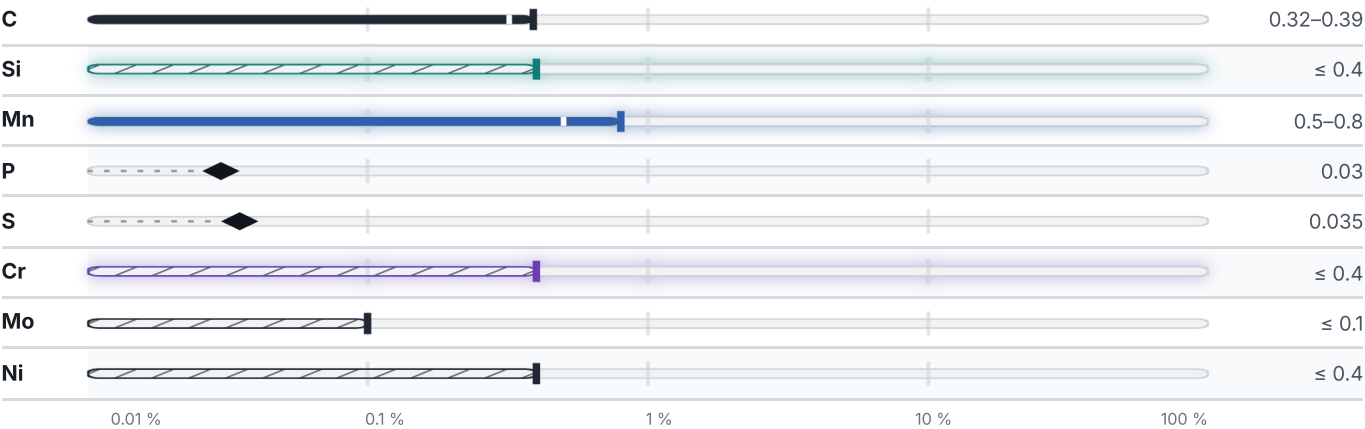
Chemical composition

Mass fraction in %

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 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 States		9	Sweden		2	
G10340	This grade's own name	uns	1572		ss	
G10350	This grade's own name	uns	SIS 14 1572	This grade's own name	ss	
G10380	This grade's own name	uns	International			1
H10380	This grade's own name	uns	C35E4		iso	
1034	This grade's own name	aisi-sae	China			1
1035	This grade's own name	aisi-sae	35		gb	
1038	This grade's own name	aisi-sae	Italy			1
1038H	This grade's own name	aisi-sae	C35		uni	
C1034	This grade's own name	aisi-sae	Czechia			1
France		3	12040		csn	
XC 32	This grade's own name	afnor	Brazil			1
XC 38H1	This grade's own name	afnor	Latin America			1
XC38		afnor	1038		copant	
Europe		2	Slovakia			1
C35E	This grade's own name	din-en	12 040		stn	
Ck 35	This grade's own name	din-en	Poland			1
United Kingdom		2	35		pn	
080M36		bs	Türkiye			1
CFS6		bs	Ç 1030		mke	
Spain		2	Hungary			1
C35k		une	C 35		msz	
F1130		une	Romania			1
Japan		2	OLC35X		stas	
S35C		jis	Finland			1
S38C		jis	C35		sfs	
Russia / CIS		2				
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 1038H
Quotation, availability, mill certificate or a technical question — directly on the material page.

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ISSUED
Aug 20, 2026