SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.1181 · CLASS 1.1

1.1181

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

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

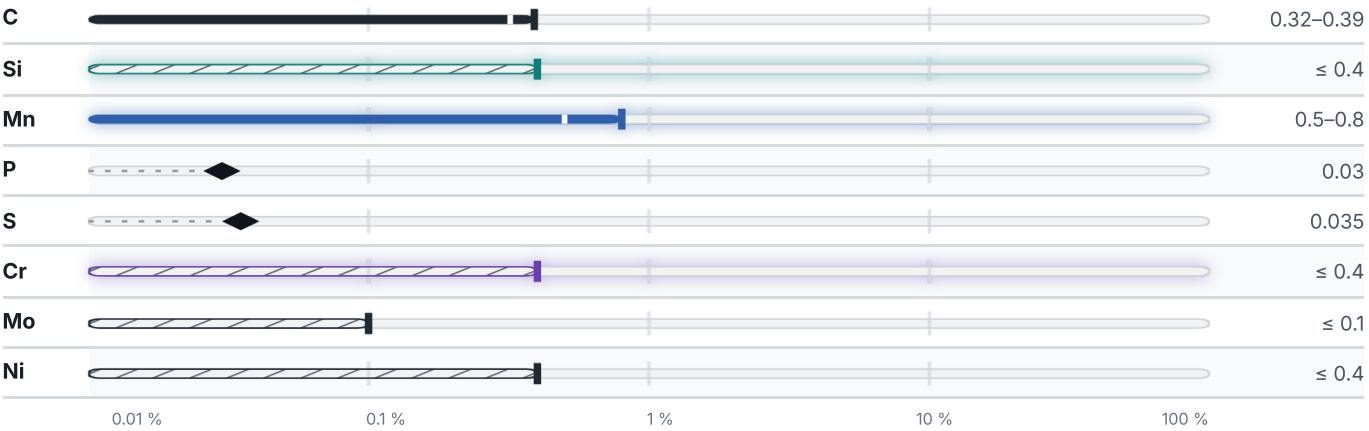
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 97.6 % · Mn — 0.7 % · Si — 0.4 % · Cr — 0.4 % · Traces & impurities · 0.9 %

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

Mechanical properties

36 values across 8 conditions

NORMALIZED	RM N/mm²	A %
≤ 16	550	18
16 – 100	520	19
100 – 250	500	19
250 – 500	480	–
500 – 1000	470	–

COLD DRAWN / HARD	RM N/mm²	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/mm²	RM N/mm²	A %
≤ 8	430	630	17
8 – 20	380	600	19
20 – 50	320	550	20
50 – 80	290	500	20

SOFT ANNEALED	RM N/mm²
0.3 – 3	540

COLD ROLLED	RM N/mm²
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)

G10340 This grade's own name	uns
G10350 This grade's own name	uns
G10380 This grade's own name	uns
H10380 This grade's own name	uns
1034 This grade's own name	aisi-sae
1035 This grade's own name	aisi-sae
1038 This grade's own name	aisi-sae
1038H This grade's own name	aisi-sae
C1034 This grade's own name	aisi-sae

France (3)

XC 32 This grade's own name	afnor
XC 38H1 This grade's own name	afnor
XC38	afnor

Europe (2)

C35E This grade's own name	din-en
Ck 35 This grade's own name	din-en

United Kingdom (2)

080M36	bs
CFS6	bs

Spain (2)

C35k	une
F1130	une

Japan (2)

S35C	jis
S38C	jis

Russia / CIS (2)

35	gost
ct35	gost

Sweden (2)

1572	ss
SIS 14 1572 This grade's own name	ss

International (1)

C35E4	iso

China (1)

35	gb

Italy (1)

C35	uni

Czechia (1)

12040	csn

Brazil (1)

1035	abnt

Latin America (1)

1038	copant

Slovakia (1)

12 040	stn

Poland (1)

35	pn

Türkiye (1)

Ç 1030	mke

Hungary (1)

C 35	msz

Romania (1)

OLC35X	stas

Finland (1)

C35	sfs

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 1.1181

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	1.1181	Aug 20, 2026