

MATERIAL NUMBER 1.2080 · CLASS 1.2

X12

Material no. 1.2080

also listed as X210Cr12

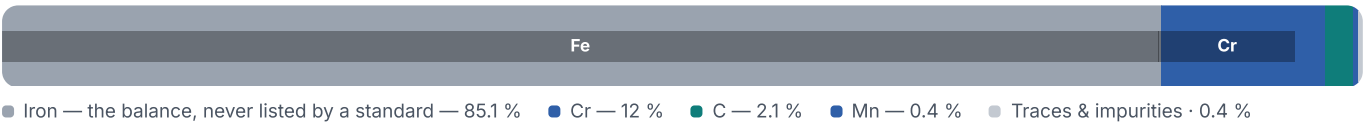
Chemical composition, mechanical and physical property values, and 32 standard designations from 18 regions.

DENSITY 7.6 g/cm ³	OTHER DESIGNATIONS 32 in 18 regions	PROPERTY VALUES 11 on file
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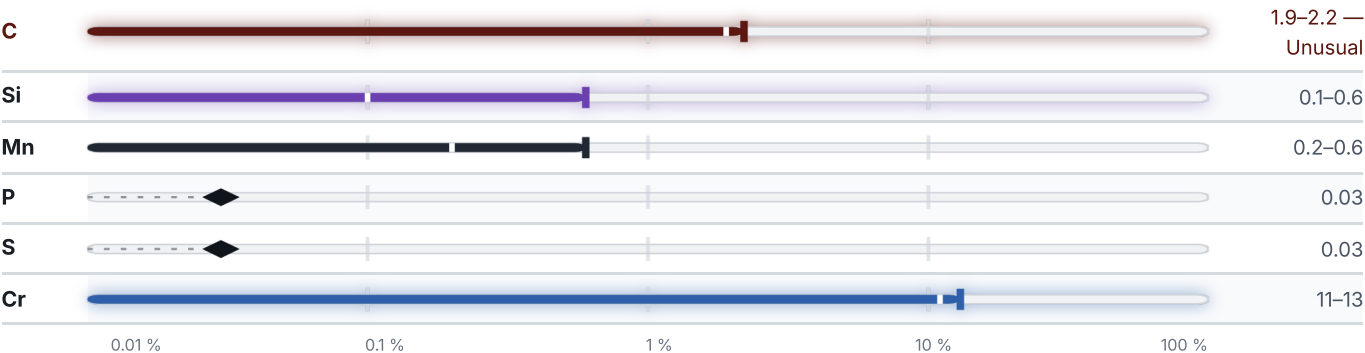
Chemical composition

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

Not enough recorded composition to predict a transformation temperature for this grade — missing: Ni, Mo.

Mechanical properties

4 values across 3 conditions

CONDITION · DIMENSION	HB	HRC
Annealed	248	—
Quenched and tempered	—	62
SOFT ANNEALED		HB
Soft annealed		248
CONDITION · DIMENSION		HB
(annealing) , GOST 5950-2000		255

Physical properties

5 values

PROPERTY	VALUE	UNIT
Density	7.6	g/cm ³
Transformation point Ac1	810	°C
Transformation point Ac3	835	°C
Transformation point Ar3	770	°C
Transformation point Ar1	755	°C

Heat treatment

3 regimes

STEP	TEMPERATURE	MEDIUM
Quenching	Temperature not stated	—
Quenching	950–1000 °C	Oil
Annealing	Temperature not stated	—

Designations across standards

32 designations · 3 documented as identical

United States	4	Russia / CIS	4
T30403 This grade's own name	uns	Ch12	gost
ASTM D3	aisi-sae	H12	gost
D3 This grade's own name	aisi-sae	KH12	gost
D3 ASTM D3	aisi-sae	X12	gost
		International	3
		210Cr12	iso
		X210Cr12	iso
		X210CrW12	iso

Italy	3
X205Cr12KU	uni
X210Cr13KU	uni
X250Cr12KU	uni
Europe	2
1.2080	din-en
X210Cr12 This grade's own name	din-en
France	2
Z200C12	afnor
Z210CW12-01	afnor
Spain	2
F.5212	une
X210Cr12	une
Czechia	2
19 435	csn
19436	csn
United Kingdom	1
BD3	bs

Japan	1
SKD1	jis
China	1
Cr12	gb
Sweden	1
2312	ss
Slovakia	1
19 436	stn
Serbia	1
Č.4150	srps
Croatia	1
Č4150	hrn
Poland	1
NC11	pn
Austria	1
K100	onorm
South Korea	1
STD1	ks

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 X12

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

[Start an enquiry](#)

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

MATERIAL NO.

1.2080

ISSUED

Aug 20, 2026