

MATERIAL NUMBER 1.7380 · CLASS 1.7

A 234 Grade WP22

Material no. 1.7380

also listed as 10CrMo9-10

Chemical composition, mechanical and physical property values, and 82 standard designations from 19 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm ³	82 in 19 regions	10 on file

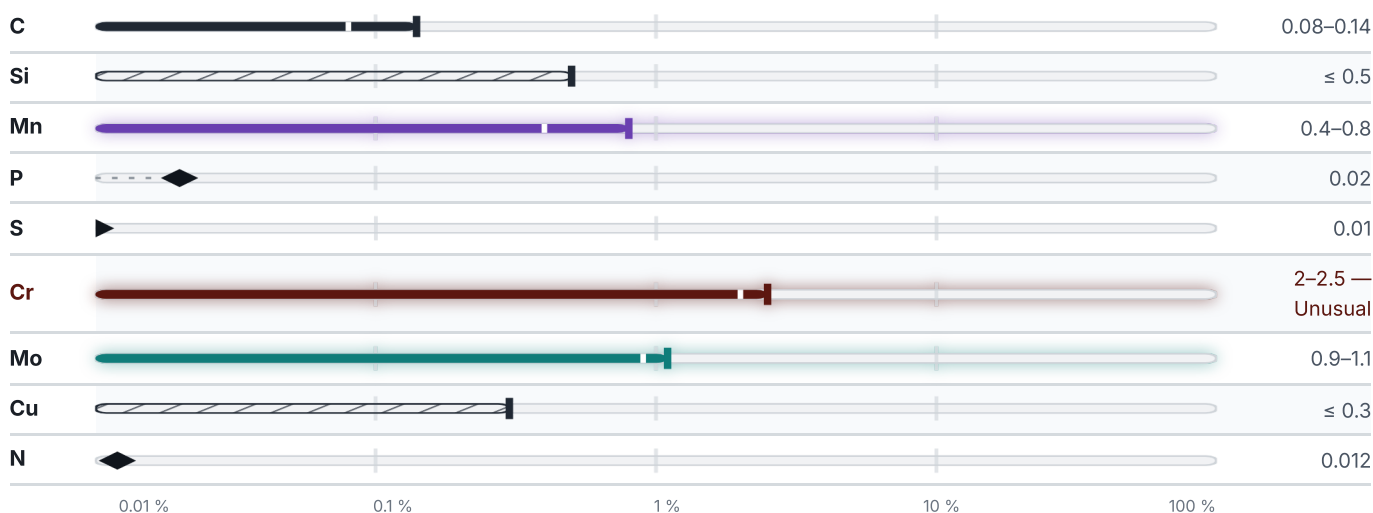
Chemical composition

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.

Mechanical properties

14 values across 2 conditions

CONDITION · DIMENSION	REH N/mm ²	RM N/mm ²
≤ 16	310	—
16 – 40	300	—
40 – 60	290	—
≤ 60	—	480–630
60 – 100	280	470–620
100 – 150	260	460–610
150 – 250	250	450–600

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	KCU kJ/m ²
Sheet, GOST 5520-79	390–590	295	20	980

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Heat treatment

1 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with + / procedural order		
Isothermal annealing	Temperature not stated	—
Normalizing	Temperature not stated	—
Tempering	675 °C	—

Designations across standards

82 designations · 4 documented as identical

Russia / CIS	28	United States	19
10Ch2M	gost	2.25Cr1Mo	uns
10G2A	gost	A182 F22	uns
10G2FB	gost	A182 T22	uns
10G2FBYu	gost	K21390 This grade's own name	uns
10G2SB	gost	K21590 This grade's own name	uns
10G2SFB	gost	A182	aisi-sae
10GN2MFA	gost	A387Gr.22	aisi-sae
10GN2MFA-Sh	gost	ASTM A182	aisi-sae
10Kh2GNM	gost	ASTM A182 F.22	aisi-sae
10KH2M	gost	F22	aisi-sae
10ГН2МФА-БД	gost	Gr.P22	aisi-sae
10X2M	gost	2.25Cr1Mo	astm
10X2M-БД	gost	A 182 F 22 Class1 This grade's own name	astm
12X2M	gost	A 182 Grade F22	astm
1Ch2M	gost	A 234 Grade WP22	astm
1Kh2M	gost	A 335 Grade P22	astm
PK10D2F	gost	A182 F22	astm
PK10N2M	gost	A182 T22	astm
Sv-10G2	gost	K21590	astm
Sv-10G2SMA	gost		
Sv-10KhG2SMA	gost	United Kingdom	6
Sv-10KhN2GMT	gost	1501-622	bs
ПК10Д2Ф-6.0	gost	1501-622 Gr31	bs
ПК10Н2М-6.8	gost	622	bs
ПК10Н2М-7.2	gost	622-490	bs
ПК10Н2М-7.6	gost	622Gr.31	bs
сг.12Х2М	gost	Gr31	bs
ЭИ-984	gost		
		France	5
		10CD9-10	afnor
		11CrMo9-10	afnor
		12CD10	afnor
		12CD9	afnor
		12CD9-10	afnor
		Italy	4
		10CrMo9-10	uni
		12CrMo10	uni
		12CrMo9	uni
		12CrMo9-10	uni
		Europe	3
		1.7380	din-en
		10CrMo9-10 This grade's own name	din-en
		Gr.P22	din-en

International	3	Czechia	1
F34	iso	15313	csn
P34	iso		
TS34	iso	Poland	1
		10H2M	pn
Japan	2	Slovakia	1
SCMV4	jis	15 313	stn
SFVAF22A	jis		
Romania	2	Serbia	1
10CrMo10	stas	Č.7401	srps
12MoCr22	stas		
Spain	1	Hungary	1
TU.H	une	2Cr10Mo45.47	msz
China	1	Bulgaria	1
12CrMo	gb	12Ch2M	bds
Sweden	1	Austria	1
2218	ss	10CrMo9-10KW	onorm

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 A 234 Grade WP22

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

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GRADE SEARCH

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ISSUED

Aug 20, 2026