

MATERIAL NUMBER 1.7218 · CLASS 1.7

20ChM

Material no. 1.7218

also listed as 25CrMo4

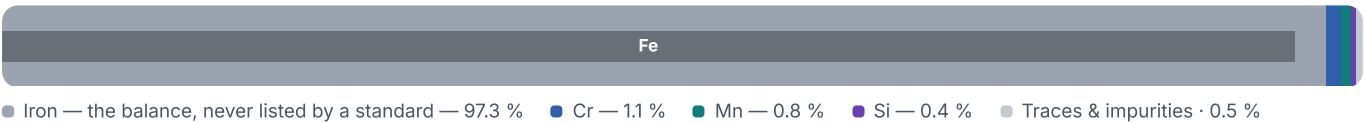
Chemical composition, mechanical and physical property values, and 111 standard designations from 24 regions.

DENSITY 7.75 g/cm³	OTHER DESIGNATIONS 111 in 24 regions	PROPERTY VALUES 15 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.

Mechanical properties

15 values across 4 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
Bar, GOST 4543-71	930	735	11	45	780
ANNEALING 860 - 880°C	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
to 100	550	300	18	45	45
NORMALIZING 860°C	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
100 - 150	600	350	16	45	400
CONDITION · DIMENSION	HB				
(annealing) , GOST 4543-71	229				

Physical properties

8 values

CONDITION · DIMENSION	RHO g/cm ³	E GPa	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)	CP J/(kg·K)	RHO_EL nΩ·m
20	7.82	208	–	–	–	270
100	7.8	207	12.3	41.9	462	–
200	7.77	204	12.6	40.7	–	334
300	7.74	197	12.9	39.6	–	425
400	7.7	188	13.9	38.4	–	524
500	7.66	175	14.4	–	–	628
600	–	160	14.6	–	–	757
PROPERTY	VALUE		UNIT			
Density	7.75		g/cm ³			
Transformation point Ac1	757		°C			
Transformation point Ac3	807		°C			
Transformation point Ar3	763		°C			
Transformation point Ar1	693		°C			

Technological properties

PROPERTY	VALUE	UNIT
Weldability	limited weldability.	
Flake sensitivity	weakly predisposed	

PROPERTY	VALUE	UNIT
Temper brittleness	not predisposed	

Designations across standards

111 designations · 7 documented as identical

United States	13	France	9
G41300	uns	18CrMo4	afnor
H41300 This grade's own name	uns	25 CD 4 (S)	afnor
4118	aisi-sae	25CD4	afnor
4130	aisi-sae	25CD4FF	afnor
4130H This grade's own name	aisi-sae	25CrMo4	afnor
4130RH This grade's own name	aisi-sae	34CD4	afnor
G41300	aisi-sae	34CD4FF	afnor
G41350	aisi-sae	34CrMo4	afnor
H41300	aisi-sae	34CrMo4RR	afnor
H41350	aisi-sae		
SAE4130	aisi-sae	Japan	9
4125	astm	SCCrM1	jis
A519 Gr4130	astm	SCM 2	jis
		SCM418	jis
Spain	12	SCM420	jis
25CrMo4	une	SCM420H	jis
26CrMo4	une	SCM425 This grade's own name	jis
30CrMo4-1	une	SCM430	jis
55Cr3	une	SCM432	jis
AM25CrMo4	une	SCM822H	jis
AM26CrMo4	une		
F.1256	une	Russia / CIS	9
F.222	une	20ChM	gost
F.8330	une	20KHM	gost
F.8330-AM25CrMo4	une	20XM	gost
F.8372	une	25ChM	gost
F.8830	une	30KHM	gost
		30KHMA	gost
United Kingdom	9	30XM	gost
1717CDS110	bs	30XMA	gost
25CrMo4	bs	cr.30XM	gost
708A25	bs		
708H20	bs	Italy	7
708M20	bs	18CrMo4	uni
708M25	bs	25CrMo4	uni
CFS10	bs	25CrMo4KB	uni
En20A	bs	30CrMo4	uni
S534 This grade's own name	bs	34CrMo4	uni
		35CrMo4	uni
		KB	uni

China	5	Austria	3
25CrMo	gb	25CrMo5S	onorm
30CrMn	gb	BOHLERV330	onorm
30CrMo	gb	BOHLERV340	onorm
ML30CrMo	gb		
ML30CrMoA	gb	Europe	2
Sweden	4	1.7218	din-en
2225	ss	25CrMo4 This grade's own name	din-en
2233	ss	Czechia	2
2234	ss	15124	csn
SIS 2225 This grade's own name	ss	15130	csn
Poland	4	Romania	2
18HGM	pn	26MoCr11	stas
20HM	pn	T30CrMo3	stas
25HM	pn		
L25HM	pn	Australia / New Zealand	2
South Korea	4	4130	as-nzs
SCCrM1	ks	4130H	as-nzs
SCM420	ks	Finland	2
SCM420TK	ks	25CrMo4	sfs
SCM430	ks	G-25CrMo4	sfs
International	3	Slovakia	1
20CrMo4	iso	15 130	stn
25CrMo4	iso	Latin America	1
3567	iso	4130	copant
Hungary	3	Serbia	1
25CrMo4	msz	Č.4730	srps
CMo 1	msz		
MCrMo	msz	Belgium	1
Bulgaria	3	25CrMo4	nbn
20ChM	bds		
25ChML	bds		
25CrMo4	bds		

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 20ChM

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