

MATERIAL NUMBER 1.7033 · CLASS 1.7

F.224

Material no. 1.7033

also listed as 34Cr4

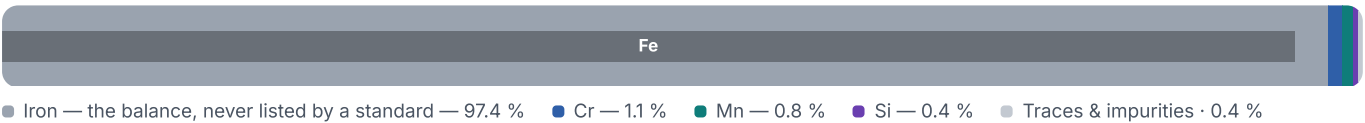
Chemical composition, mechanical and physical property values, and 56 standard designations from 18 regions.

DENSITY 7.72 g/cm³	OTHER DESIGNATIONS 56 in 18 regions	PROPERTY VALUES 13 on file
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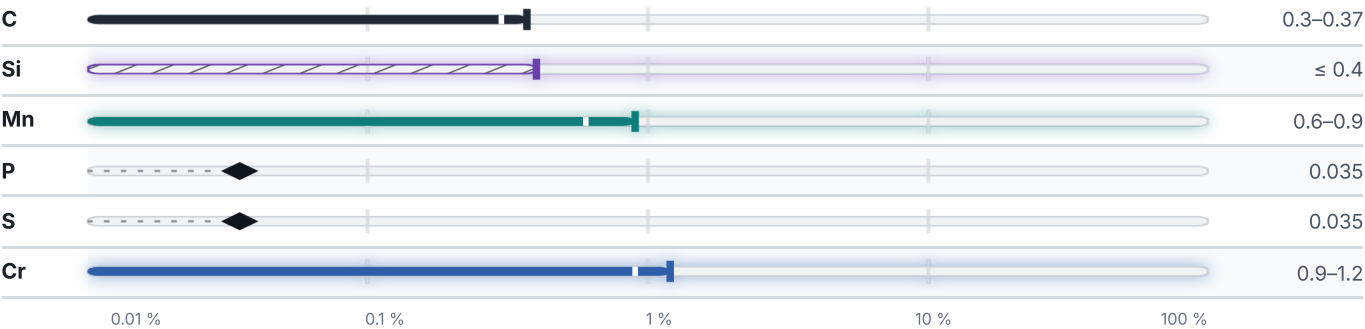
Chemical composition

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

10 values across 4 conditions

CONDITION · DIMENSION					HB
(annealing) , GOST 4543-71					187
(cold-worked) , GOST 4543-71					241
Bar GOST 10702-78					170
TREATED TO IMPROVE SHEARABILITY					HB
Treated to improve shearability					255
SOFT ANNEALED					HB
Soft annealed					223
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
, GOST 4543-71	880	685	12	45	690

Physical properties

7 values

CONDITION · DIMENSION	RHO g/cm ³	E GPa	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)	CP J/(kg·K)	RHO_EL nQ·m
20	7.82	208	–	–	–	210
100	7.8	211	12.4	46.5	482	259
200	7.77	–	12.9	44.4	496	330
300	7.74	197	13.3	42.3	513	417
400	7.7	–	13.8	38.5	532	517
500	7.67	175	14.1	35.6	555	636
600	7.63	–	14.5	31.9	583	778
700	7.59	–	14.8	28.8	620	934
800	7.61	–	–	26	703	1106
900	7.56	–	–	26.7	687	1146
1100	7.47	–	–	–	670	1205
1200	7.43	–	–	–	670	1230
PROPERTY				VALUE	UNIT	
Density				7.72	g/cm ³	
Transformation point Ac1				740	°C	

PROPERTY	VALUE	UNIT
Transformation point Ac3	815	°C
Transformation point Ar1	670	°C

Technological properties

PROPERTY	VALUE	UNIT
Weldability	limited weldability.	
Flake sensitivity	predisposed	
Temper brittleness	predisposed	

Designations across standards

56 designations · 6 documented as identical

United States		10	Japan		4	
G51320	This grade's own name	uns	SCr430		jis	
H51320	This grade's own name	uns	SCr430H		jis	
5130 5132		aisi-sae	SCr435		jis	
5130H		aisi-sae	SCr435H		jis	
5132	This grade's own name	aisi-sae	Hungary		4	
5132H	This grade's own name	aisi-sae				
5135		aisi-sae		34Cr4		msz
5135H		aisi-sae		Cr 1		msz
G51350		aisi-sae		Cr 2		msz
H51320		aisi-sae		Cr1Z		msz
United Kingdom		8	France		3	
18B		bs	32C4		afnor	
18C		bs	32C4FF		afnor	
34Cr4		bs	34Cr4		afnor	
530A32		bs	Italy		3	
530A36		bs				
530H32		bs		34Cr4		uni
530M32		bs		34Cr4KB		uni
EN18B	This grade's own name	bs	KB		uni	
Russia / CIS		5	Europe		2	
30KH		gost	1.7033		din-en	
35KH		gost	34Cr4	This grade's own name	din-en	
35X		gost	International		2	
35X		gost				
cr.35X		gost		34Cr4		iso
			34CrS4		iso	
Spain		4	Czechia		2	
34Cr4		une	14141		csn	
35Cr4		une	14141PH		csn	
F.224		une				
F.8221		une				

Bulgaria	2	Poland	1
34Cr4	bds	30H	pn
35Ch	bds		
South Korea	2	Serbia	1
SCr430	ks	Č.4130	srps
SCr430H	ks	Australia / New Zealand	1
China	1	5132	as-nzs
35Cr	gb	Belgium	1
		34Cr4	nbn

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 F.224

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	1.7033	Aug 20, 2026