

MATERIAL NUMBER 1.7033 · CLASS 1.7

Cr1Z

Material no. 1.7033

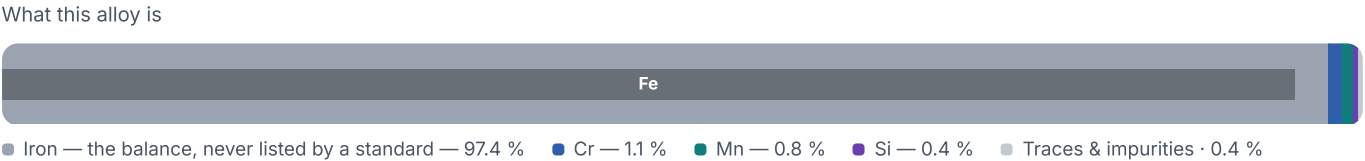
also listed as 34Cr4

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

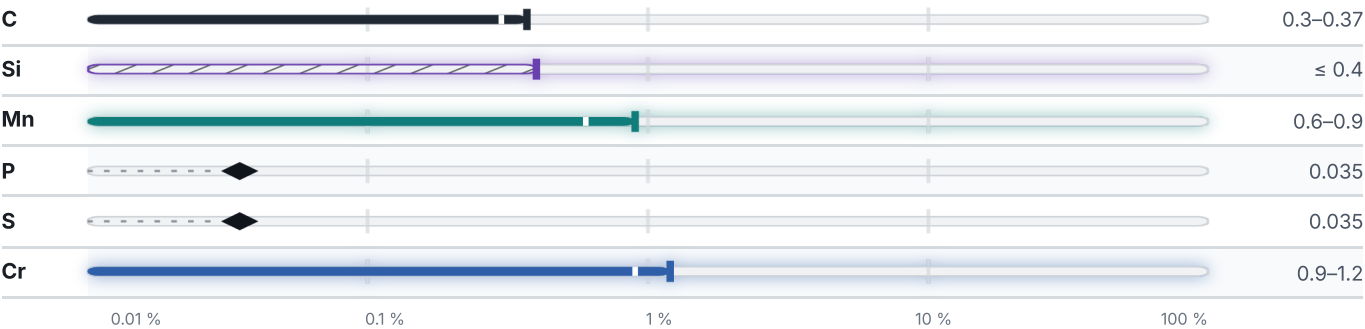
DENSITY 7.72 g/cm³	OTHER DESIGNATIONS 56 in 18 regions	PROPERTY VALUES 13 on file
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Chemical composition

Mass fraction in %



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		
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		
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		
35X		gost			
cr.35X		gost	34Cr4		iso
Spain		4	34CrS4		iso
34Cr4		une	Czechia		
35Cr4		une			
F.224		une	14141		csn
F.8221		une	14141PH		csn

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 Cr1Z

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

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ISSUED

Aug 20, 2026