

MATERIAL NUMBER 1.7033 · CLASS 1.7

1.7033

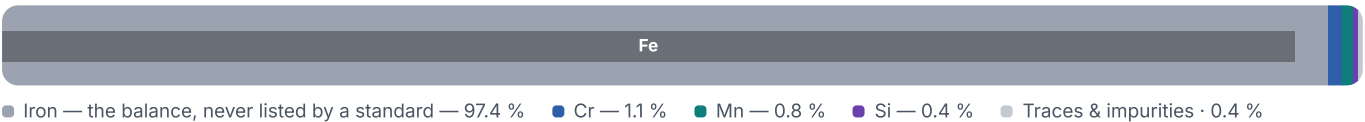
Chemical composition, mechanical and physical property values, and 56 standard designations from 18 regions.

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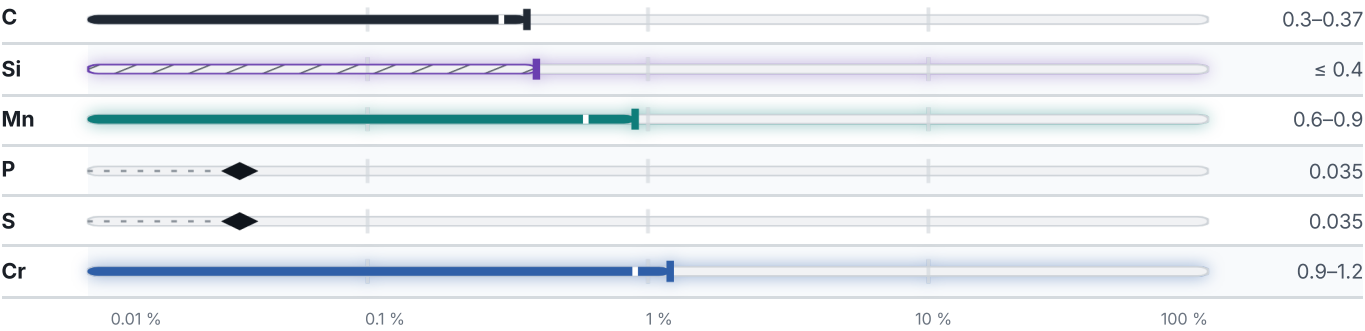
Chemical composition

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

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

Poland	1	Australia / New Zealand	1
30H	pn	5132	as-nzs
Serbia	1	Belgium	1
Č.4130	srps	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 1.7033
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. 1.7033	ISSUED Aug 20, 2026
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