

MATERIAL NUMBER 1.4034 · CLASS 1.4

Z40CM

Material no. 1.4034

also listed as X46Cr13

Chemical composition, mechanical and physical property values, and 46 standard designations from 17 regions.

DENSITY 7.7 g/cm ³	OTHER DESIGNATIONS 46 in 17 regions	PROPERTY VALUES 7 on file
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Chemical composition

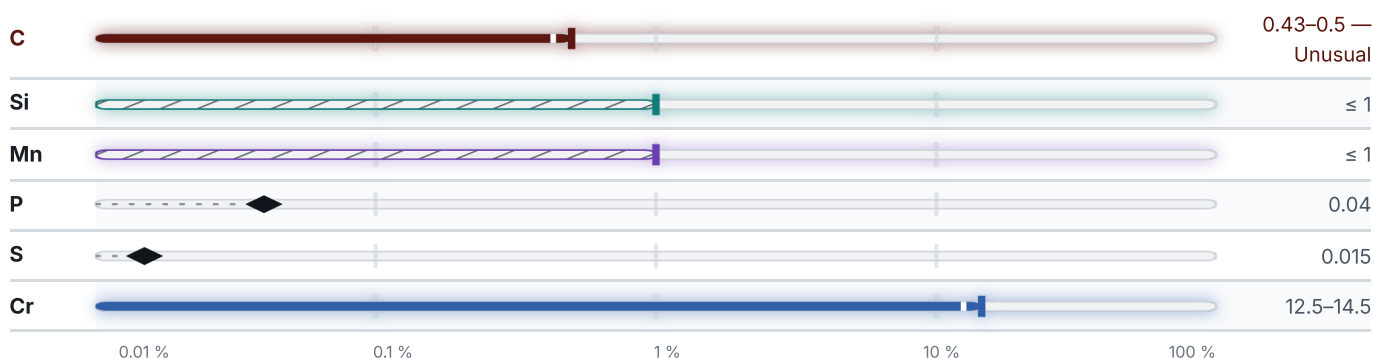
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 84 % ● Cr — 13.5 % ● Si — 1 % ● Mn — 1 % ● Traces & impurities · 0.5 %

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

1 values across 1 conditions

SOFT ANNEALED	HB
Soft annealed	245

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.7	g/cm ³

Designations across standards

46 designations · 4 documented as identical

United States		14	Europe		3
S42000	uns		1.4034	din-en	
S42080	uns		X40Cr13	din-en	
420	aisi-sae		X46Cr13	This grade's own name	din-en
51420	aisi-sae				
S42000	aisi-sae		Spain		2
A1049	astm		F.3405	une	
A176	astm		F.3405-X46Cr13	une	
A182	astm				
A276	astm		United States / Aerospace		2
A314	astm		5506	ams	
A473	astm		5621	ams	
A580	astm				
F1079	astm		Poland		2
F2215	astm		4H13	pn	
			4H14	pn	
France		6	International		1
Z38C13M	This grade's own name	afnor	X40Cr14	iso	
Z40C13	afnor				
Z40C14	afnor		Japan		1
Z40CM	afnor		SUS420J2	jis	
Z40Cr14	afnor				
Z44C14	This grade's own name	afnor	China		1
United Kingdom		4	4Cr13	gb	
420S45	bs		Italy		1
420S45 EN 56D	bs		X40Cr14	uni	
56D	bs				
EN56D	bs		Sweden		1
Russia / CIS		4	2304	ss	
40Ch13	This grade's own name	gost	Czechia		1
40KH13	gost		17 029	csn	
40X13	gost				
40X13	gost				

Brazil	1	former Yugoslavia	1
420	abnt	Č.4175	jus
Serbia	1		
Č.4175	srps		

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 Z40CM

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	1.4034	Sep 8, 2026