

MATERIAL NUMBER 1.2542 · CLASS 1.2

45WCrSi8

Material no. 1.2542

also listed as 45WCrV7

Chemical composition, mechanical and physical property values, and 25 standard designations from 12 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 25 in 12 regions	PROPERTY VALUES 9 on file
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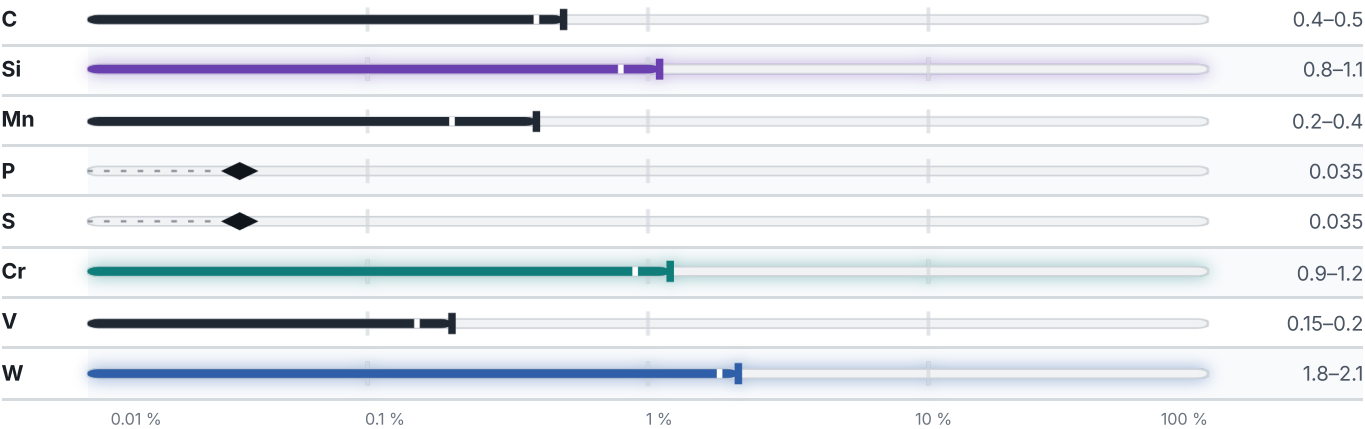
Chemical composition

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.

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

25 designations · 3 documented as identical

Russia / CIS	5	International	2
5ChV2S	gost	45WCrV7	iso
5ChV2SF	gost	60WCrV8	iso
5XB2C	gost	Italy	2
6ChV2S	gost	45WCrV8KU	uni
6XB2C	gost	55WCrV8KU	uni
Spain	3	Poland	2
45WCrSi8	une	NZ2	pn
F.5241	une	NZ3	pn
F.5241 45 WCrSi 8	une	United Kingdom	1
Czechia	3	BS1	bs
19732	csn	France	1
19733	csn	55WC20	afnor
19735	csn	Sweden	1
Europe	2	2710	ss
1.2542	din-en	Hungary	1
45WCrV7 This grade's own name	din-en	W6	msz
United States	2		
T41901 This grade's own name	uns		
S1 This grade's own name	aisi-sae		

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 45WCrSi8

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	1.2542	Aug 20, 2026