

MATERIAL NUMBER 1.2842 · CLASS 1.2

0 2

Material no. 1.2842

also listed as 90MnCrV8

Chemical composition, mechanical and physical property values, and 24 standard designations from 14 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 24 in 14 regions	PROPERTY VALUES 8 on file
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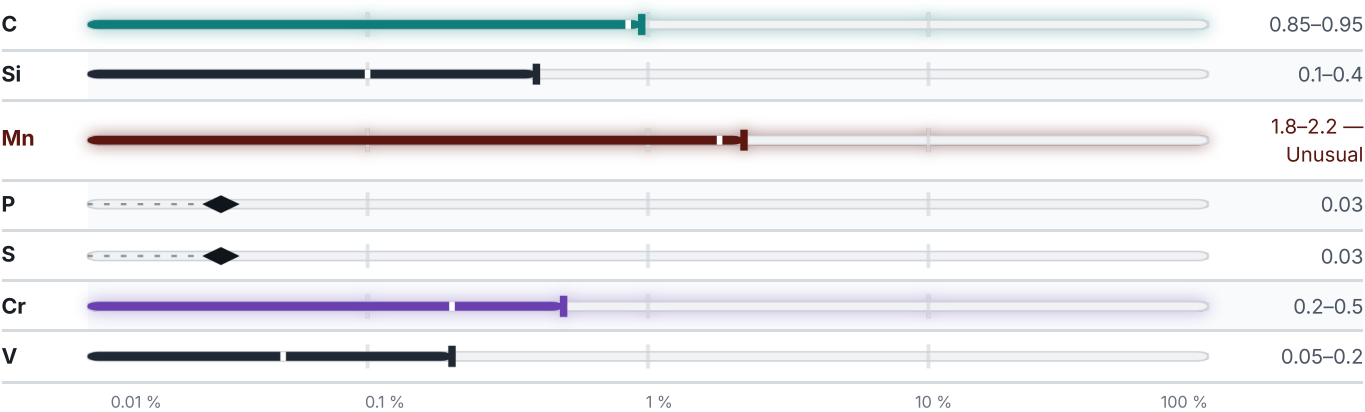
Chemical composition

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

1 values across 1 conditions

SOFT ANNEALED	HB
Soft annealed	229

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Heat treatment

3 regimes

STEP	TEMPERATURE	MEDIUM
Quenching	Temperature not stated	—
Quenching	780–810 °C	Oil
Annealing	Temperature not stated	—

Designations across standards

24 designations · 3 documented as identical

France	3	Czechia	2
90MCV8	afnor	19312	csn
90MnV8	afnor	19313	csn
90MV8	afnor		
Russia / CIS	3	Slovakia	2
9ChVG	gost	19 312	stn
9KhF / 9KhVG przybliż.	gost	19 313	stn
9Г2Φ	gost		
United States	2	Europe	1
T31502 This grade's own name	uns	90MnCrV8 This grade's own name	din-en
O 2 This grade's own name	aisi-sae	Japan	1
		zblížony do SKS93	jis
United Kingdom	2	China	1
B02	bs	9Mn2V	gb
B02	bs		
International	2	Croatia	1
90MnCrV8	iso	Č3840	hrn
90MnV2	iso	Poland	1
		NMV	pn
Italy	2	Austria	1
90MnCrV8KU	uni	K720	onorm
90MnVCr8KU	uni		

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 O 2

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

[Start an enquiry](#)

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ISSUED
Aug 20, 2026