

MATERIAL NUMBER 1.2235 · CLASS 1.2

czasami porównywany z 1080

Material no. 1.2235

also listed as 80CrV2

Chemical composition, mechanical and physical property values, and 26 standard designations from 14 regions.

DENSITY**7.85** g/cm³**OTHER DESIGNATIONS****26** in 14 regions**PROPERTY VALUES****11** on file

Chemical composition

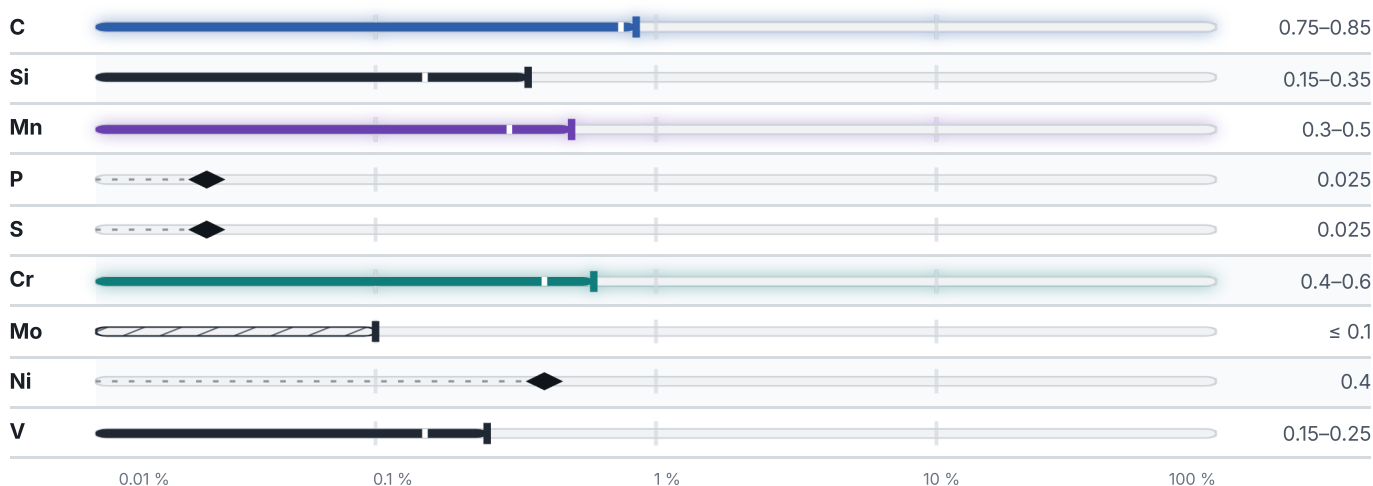
Mass fraction in %

What this alloy is



■ Iron — the balance, never listed by a standard — 97.3 % ■ C — 0.8 % ■ Cr — 0.5 % ■ Mn — 0.4 % ■ Traces & impurities · 1 %

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

This grade's composition falls outside the published model's validated range (a low-alloy composition window), so no transformation temperature is predicted here.

Mechanical properties

7 values across 6 conditions

SOFT ANNEALED	RM N/mm ²	A80 %
0.3 – 3	720	12
CONDITION · DIMENSION		RM N/mm ²
0.1 - 4		930
QUENCHED AND TEMPERED		RM N/mm ²
0.3 – 3		1200–1800
CONDITION · DIMENSION		HB
(heat treatment) , GOST 5950-2000		241
SOFT ANNEALED		HV
Soft annealed		225
QUENCHED AND TEMPERED		HV
Quenched and tempered		370–550

Physical properties

2 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³
Transformation point Ac1	700	°C

Designations across standards

26 designations · 2 documented as identical

Russia / CIS7		United Kingdom1	
8ChF	gost	735A50 przybliż.	bs
8KhF	gost	France1	
9ChF	gost	80CrV2afnor	
9ChS	gost	China1	
9KHF	gost	8CrVgb	
9KhS	gost	Italy1	
9XΦ	gost	80CrV2uni	
United States4		Serbia1	
1084+Cr	aisi-sae	Č.4844srps	
czasami porównywany z 1080	aisi-sae	Poland1	
handlowo używany L2	aisi-sae	NCV1pn	
L2	aisi-sae	Bulgaria1	
Czechia3		8ChFbds	
19419	csn	Austria1	
19421 przybliż.	csn	BOHLERB400onorm	
19423	csn	South Korea1	
Japan2		SKC11This grade's own nameks	
SKC11	jis		
SKS5 przybliż.	jis		
Europe1			
80CrV2	This grade's own name		
	din-en		

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 czasami porównywany z 1080
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	1.2235	Aug 20, 2026