

MATERIAL NUMBER 1.7202 · CLASS 1.7

37CrMo4

Material no. 1.7202

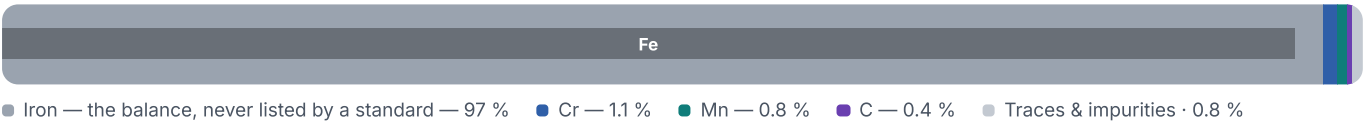
Chemical composition, mechanical and physical property values, and 3 standard designations from 2 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 3 in 2 regions	PROPERTY VALUES 13 on file
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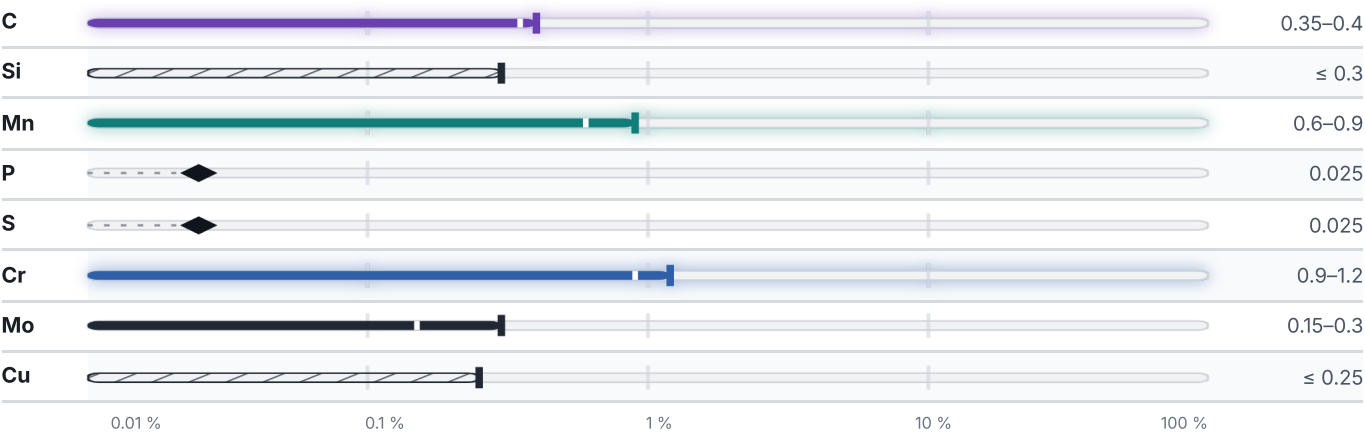
Chemical composition

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.

Mechanical properties

5 values across 1 conditions

QUENCHING 850°C, OIL, DRAWING 600°C, AIR	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
Ø 25	980	885	11	45	690

Physical properties

5 values

CONDITION · DIMENSION	E GPa	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)	CP J/(kg·K)	RHO_EL nΩ·m
20	211	–	33	–	257
100	201	12.4	35	496	280
200	194	13.1	38	508	310
300	184	13.7	39	525	380
400	174	14.2	36	538	470
500	169	14.5	34	567	580
600	166	14.6	33	600	720
700	141	14.7	31	672	870
800	129	11.2	27	697	1060

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³
Transformation point Ac1	758	°C
Transformation point Ac3	805	°C
Transformation point Ar3	725	°C
Transformation point Ar1	650	°C

Designations across standards

3 designations · 1 documented as identical

Russia / CIS	2	Europe	1
38KHM	gost	37CrMo4	This grade's own name
38XMA	gost		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 37CrMo4

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

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ISSUED

Aug 20, 2026