

12G2B-1

Chemical composition, mechanical and physical property values, and 7 standard designations from 1 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
7 in 1 regions	10 on file

Chemical composition

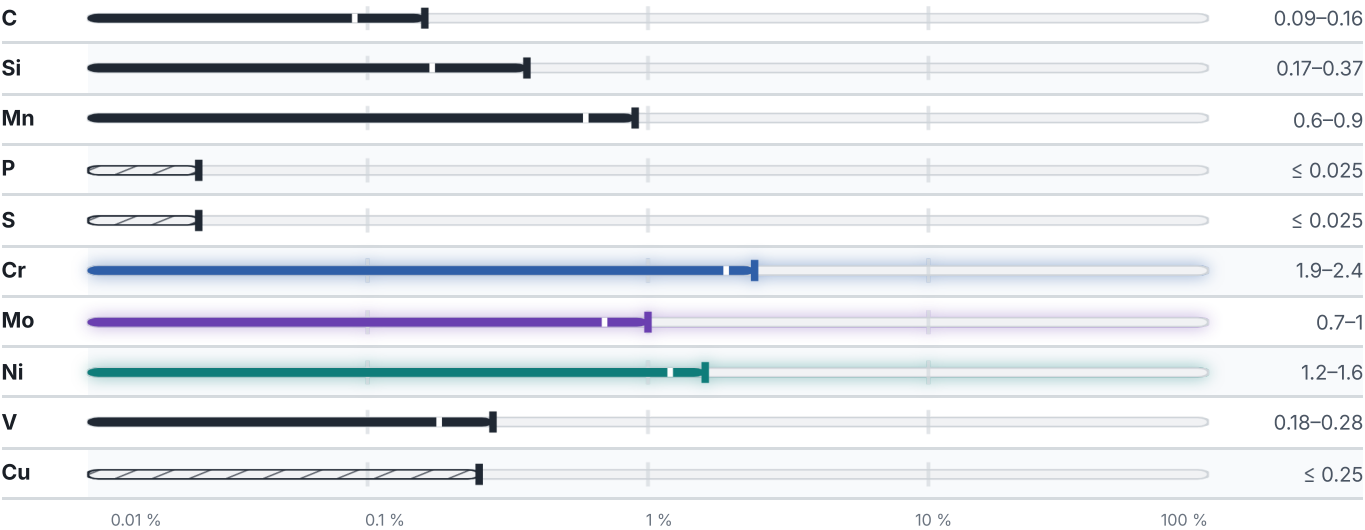
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 93.9 % ● Cr — 2.2 % ● Ni — 1.4 % ● Mo — 0.9 % ● Traces & impurities · 1.7 %

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

10 values across 3 conditions

CONDITION · DIMENSION		RM N/mm ²	A5 %	
Sheet trick, GOST 11269-76		490–740	15	
Sheet thin, GOST 11268-76		490–740	15	
CONDITION · DIMENSION		RM N/mm ²	A5 %	KCU kJ/m ²
Sheet trick, GOST 11269-76		980	11	590
Sheet thin, GOST 11268-76		980	11	–
CONDITION · DIMENSION				HB
(normalize) , Sheet trick GOST 11269-76				156–217

Designations across standards

7 designations · 1 documented as identical

Russia / CIS	7
12G2B-1	gost
12G2F-1	gost
12G2FD-1	gost
12G2S-1	gost
12G2SD-1	gost
12Kh2NM1FA	gost
12X2HM1ΦA	gost

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 12G2B-1

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	—	Aug 15, 2026