

3N712

also listed as 12Kh2NVFA

Chemical composition, mechanical and physical property values, and 3 standard designations from 1 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
3 in 1 regions	10 on file

Chemical composition

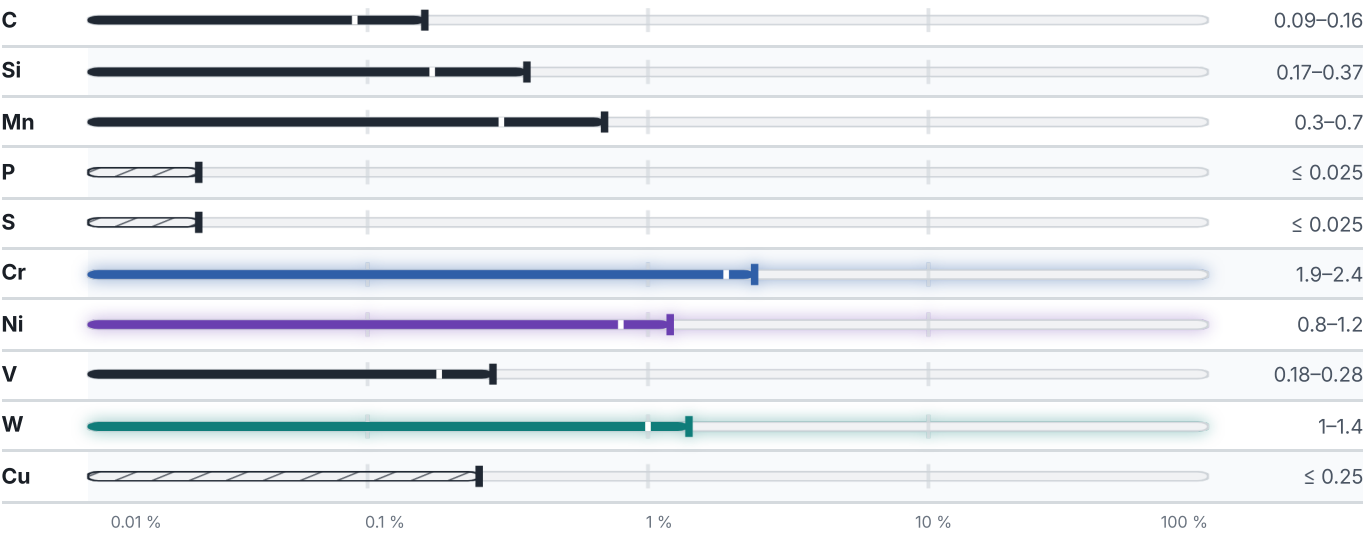
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 94.2 % ● Cr — 2.2 % ● W — 1.2 % ● Ni — 1 % ● Traces & impurities · 1.4 %

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: Mo.

Mechanical properties

12 values across 3 conditions

CONDITION · DIMENSION	RM N/mm ²	A5 %	HB
Pipe, GOST 21729-76	490	16	—
12Kh2NVFA (12X2HBΦA) (normalize) , Sheet trick GOST 11269-76	—	—	156–217
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	1030	10	590
Sheet thin, GOST 11268-76	1030	10	—

Designations across standards

3 designations · 1 documented as identical

Russia / CIS	3
12Kh2NVFA This grade's own name	gost
12X2HBΦA	gost
3И712	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 3И712

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

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MATERIAL NO.

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ISSUED

Aug 15, 2026