

18Cr12MoVNbN

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

ELASTIC MODULUS 218 GPa	OTHER DESIGNATIONS 1 in 1 regions	PROPERTY VALUES 13 on file
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Chemical composition

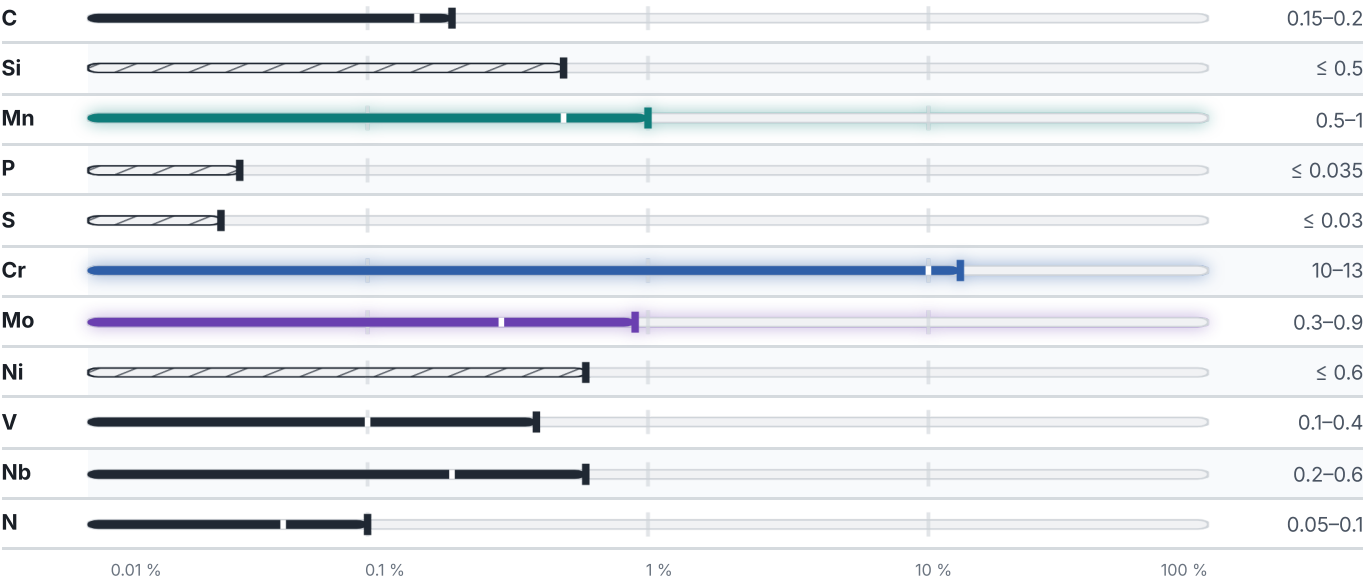
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 85.1 % ● Cr — 11.5 % ● Mn — 0.8 % ● Mo — 0.6 % ● Traces & impurities · 2.1 %

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

1 values across 1 conditions

CONDITION · DIMENSION	HB
d≤75	+ ≤321

Physical properties

2 values

CONDITION · DIMENSION			LAMBDA W/(m·K)
100			27.2
PROPERTY		VALUE	UNIT
Elastic modulus		218	GPa
Thermal expansion coefficient		9.3	10^-6/K

Designations across standards

1 designations · 1 documented as identical

China	1
18Cr12MoVNbN This grade's own name	gb

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 18Cr12MoVNbN

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

Start an enquiry

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

MATERIAL NO.

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ISSUED

Aug 15, 2026