

45Cr14Ni14W2Mo

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

ELASTIC MODULUS 177 GPa	OTHER DESIGNATIONS 1 in 1 regions	PROPERTY VALUES 12 on file
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Chemical composition

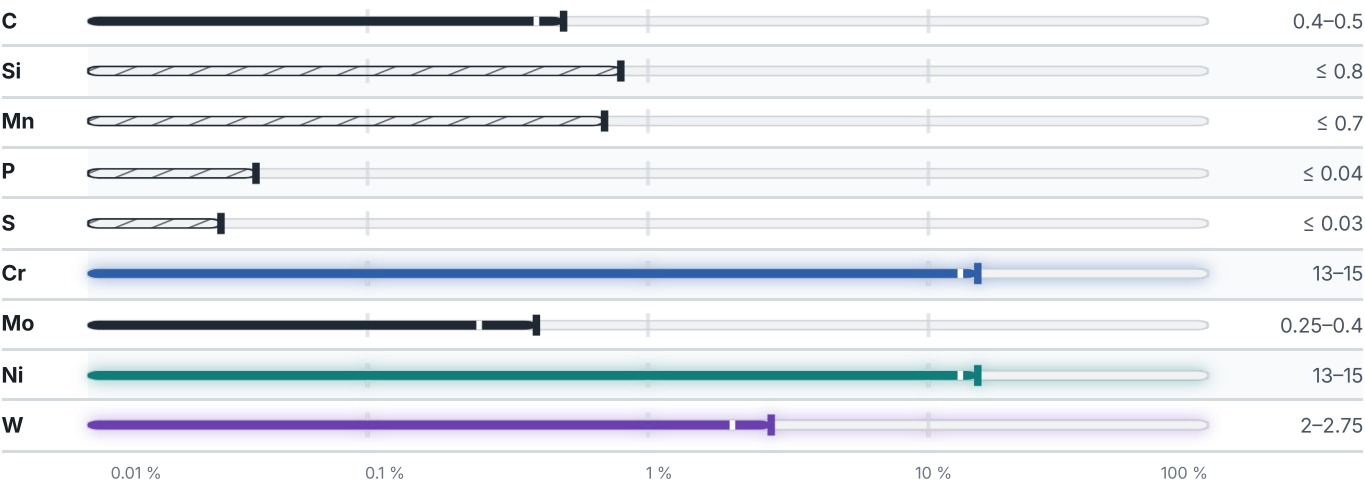
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 67.3 % ● Cr — 14 % ● Ni — 14 % ● W — 2.4 % ● Traces & impurities · 2.3 %

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.

Physical properties

3 values

CONDITION · DIMENSION	LAMBDA W/(m·K)	CP J/(kg·K)
100	15.9	—
500	22.2	510
PROPERTY	VALUE	UNIT
Elastic modulus	177	GPa
Thermal expansion coefficient	16.6	10 ⁻⁶ /K
Electrical resistivity	810	nΩ·m

Heat treatment

3 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with + / procedural order		
Solution annealing	Temperature not stated	—
Ageing	Temperature not stated	—
Solution annealing	Temperature not stated	—
Annealing	820 °C	—

Designations across standards

1 designations · 1 documented as identical

China	1
45Cr14Ni14W2Mo 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 45Cr14Ni14W2Mo

Start an enquiry

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

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

MATERIAL NO.

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ISSUED

Aug 15, 2026