SteelEquivalents.com

Material datasheet
As of Aug 15, 2026

13Cr11Ni2W2MoV

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

ELASTIC MODULUS	OTHER DESIGNATIONS	PROPERTY VALUES
196 GPa	**1** in 1 regions	**14** on file

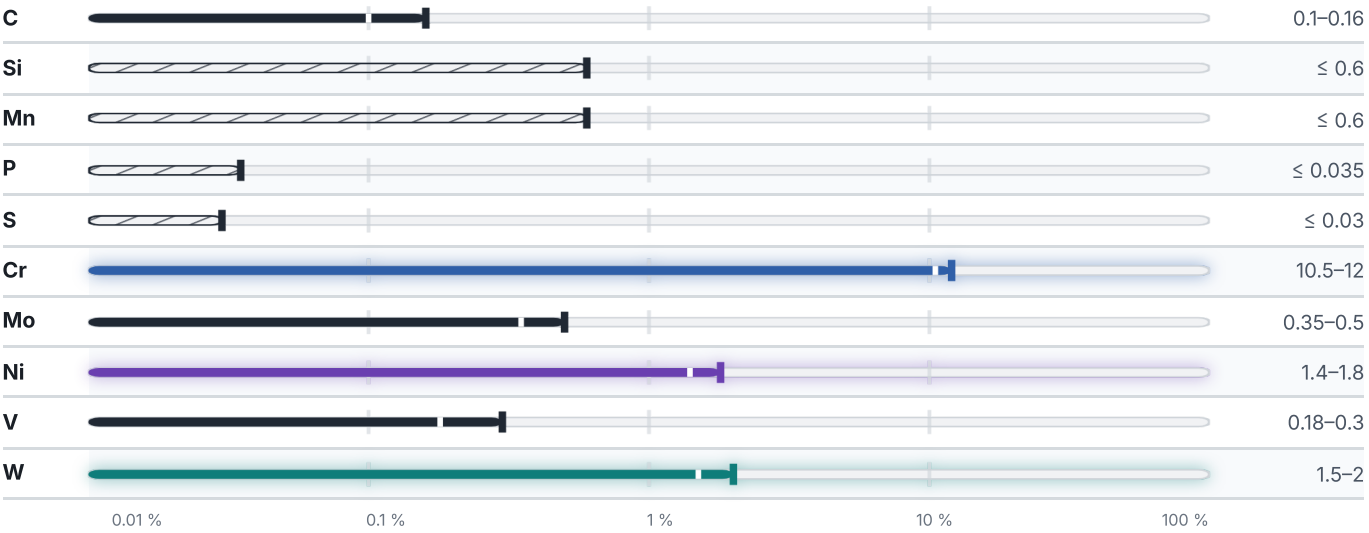
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 83.3 % · Cr — 11.3 % · W — 1.8 % · Ni — 1.6 % · 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.

Physical properties

4 values

CONDITION · DIMENSION	E GPa	ALPHA 10^-6/K	LAMBDA W/(m·K)	CP J/(kg·K)
20	200	–	–	–
100	195	9.3	22.2	–
200	185	10.3	–	–
300	175	10.8	–	–
400	170	11.3	–	–
500	–	11.7	28.1	480

PROPERTY	VALUE	UNIT
Elastic modulus	196	GPa
Thermal expansion coefficient	9.3	10^-6/K
Thermal conductivity	20.9	W/(m·K)
Specific heat capacity	480	J/(kg·K)

Heat treatment

2 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with + / procedural order		
Normalizing	1000–1020 °C	—
Tempering	Temperature not stated	—
Ageing	660–710 °C	—
source joins the operations with + / procedural order		
Normalizing	1000–1020 °C	—
Tempering	Temperature not stated	—
Ageing	540–590 °C	—

Designations across standards

1 designations · 1 documented as identical

China	1
13Cr11Ni2W2MoV 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 13Cr11Ni2W2MoV

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