

12Cr2Mo1VR(HIC)

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

OTHER DESIGNATIONS

1 in 1 regions

PROPERTY VALUES

20 on file

Chemical composition

Mass fraction in %

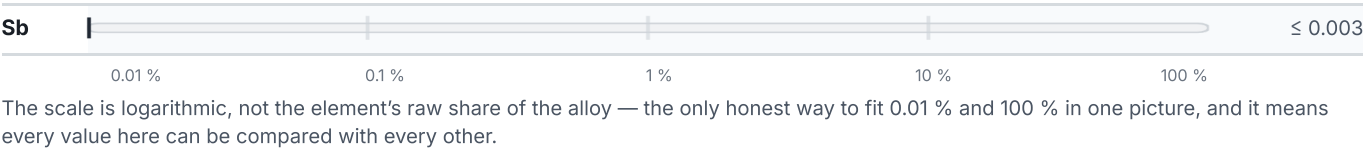
What this alloy is



● Iron — the balance, never listed by a standard — 95.2 % ● Cr — 2.3 % ● Mo — 1 % ● Mn — 0.4 % ● Traces & impurities · 1.1 %

Logarithmic scale, 0.01 % to 100 % — every value here compares directly, decade by decade.

C		0.11–0.15
Si		≤ 0.1
Mn		0.3–0.6
P		≤ 0.01
S		≤ 0.005
Cr		2–2.5
Mo		0.9–1.1
Ni		≤ 0.25
V		0.25–0.35
Cu		≤ 0.2
Ti		≤ 0.03
Nb		≤ 0.07
N		≤ 0.007
B		≤ 0.002
Sn		≤ 0.01
Ca		≤ 0.0015
As		≤ 0.01
H		≤ 0.0002
O		≤ 0.002



Predicted transformation temperatures

computed from composition · °C

PREDICTED AE3 815 °C	PREDICTED AE1 771 °C	PREDICTED ACM 444 °C	PREDICTED BS 473 °C
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Mechanical properties

3 values across 1 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %
6 – 200	590-760	≥ 415	≥ 17

Heat treatment

1 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with + / procedural order		
Normalizing	Temperature not stated	—
Tempering	Temperature not stated	—

Designations across standards

1 designations · 1 documented as identical

China	1
12Cr2Mo1VR(HIC) 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 12Cr2Mo1VR(HIC)

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