

20CrMo

also listed as 18CrMo4

Chemical composition, mechanical and physical property values, and 2 standard designations from 2 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
2 in 2 regions	9 on file

Chemical composition

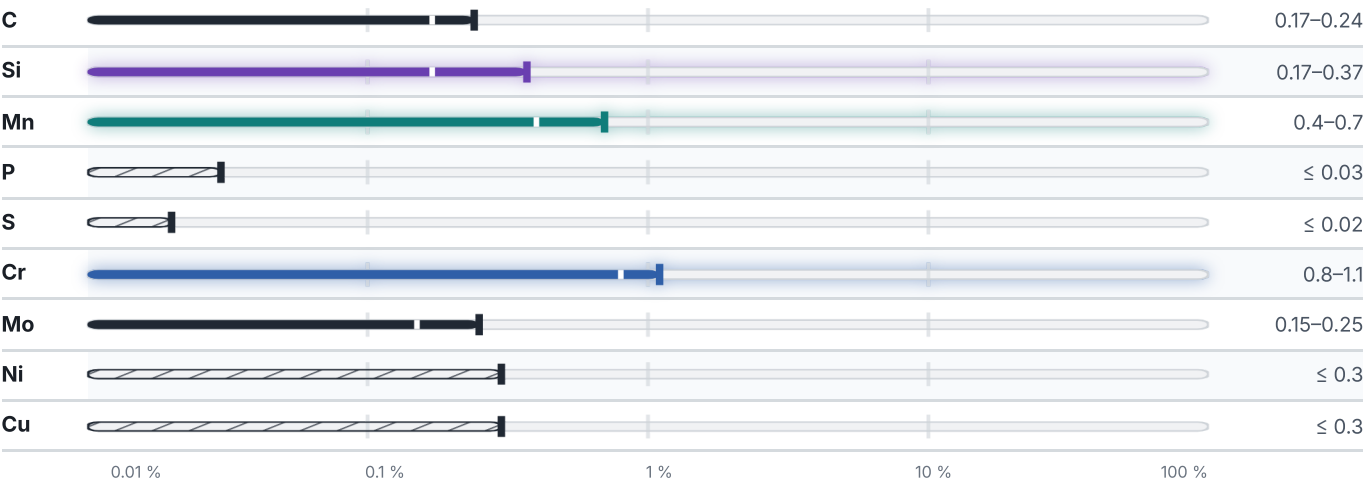
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 97.2 % ● Cr — 1 % ● Mn — 0.6 % ● Ni — 0.3 % ● Traces & impurities · 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

computed from composition · °C

PREDICTED AE3 811 °C	PREDICTED AE1 743 °C	PREDICTED ACM 494 °C	PREDICTED BS 546 °C
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Physical properties

0 values

CONDITION · DIMENSION	E GPa	CP J/(kg·K)	G GPa
20	205	461	79
100	200	—	74
200	188	—	72

Heat treatment

4 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with + / procedural order		
Quenching	Temperature not stated	—
Tempering	Temperature not stated	—
source joins the operations with + / procedural order		
Quenching	860–870 °C	Oil
Tempering	690–700 °C	Furnace
source joins the operations with + / procedural order		
Annealing	Temperature not stated	—
Annealing	Temperature not stated	—
Tempering	Temperature not stated	—
Normalizing	Temperature not stated	—
Tempering	Temperature not stated	—
Spheroidize annealing	Temperature not stated	—

Designations across standards

2 designations · 1 documented as identical

France	1	China	1
18CrMo4	afnor	20CrMo	This grade's own namegb

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 20CrMo

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