

ML40CrMo

also listed as 42CrMo4

Chemical composition, mechanical and physical property values, and 5 standard designations from 5 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
5 in 5 regions	8 on file

Chemical composition

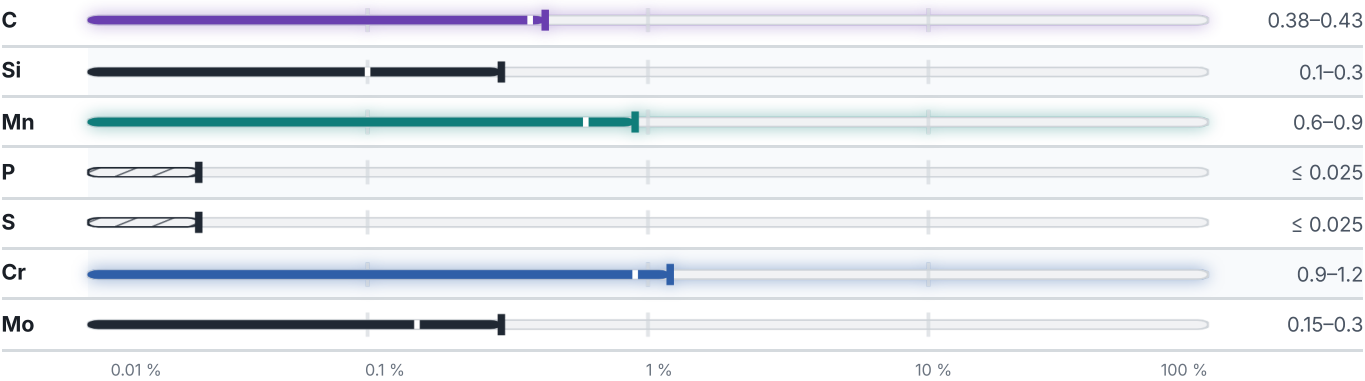
Mass fraction in %

What this alloy is



Iron — the balance, never listed by a standard — 97.3 % Cr — 1.1 % Mn — 0.8 % C — 0.4 % Traces & impurities · 0.5 %

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

Not enough recorded composition to predict a transformation temperature for this grade — missing: Ni.

Mechanical properties

3 values across 1 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %
25 – 25	≥ 1080	≥ 930	≥ 12

Heat treatment

1 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with + / procedural order		
Quenching	830–870 °C	Oil
Tempering	500–600 °C	—

Designations across standards

5 designations · 1 documented as identical

Europe	1	Japan	1
42CrMo4	din-en	SCM440	jis
United States	1	China	1
4140	astm	ML40CrMo This grade's own name	gb
International	1		
42CrMo4	iso		

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 ML40CrMo

[Start an enquiry](#)

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

DATASHEET ONLINE

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GRADE SEARCH

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MATERIAL NO.

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ISSUED

Aug 15, 2026