

MATERIAL NUMBER 1.7701 · CLASS 1.7

1.7701

Chemical composition, mechanical and physical property values, and 5 standard designations from 3 regions.

DENSITY 7.68 g/cm ³	OTHER DESIGNATIONS 5 in 3 regions	PROPERTY VALUES 9 on file
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Chemical composition

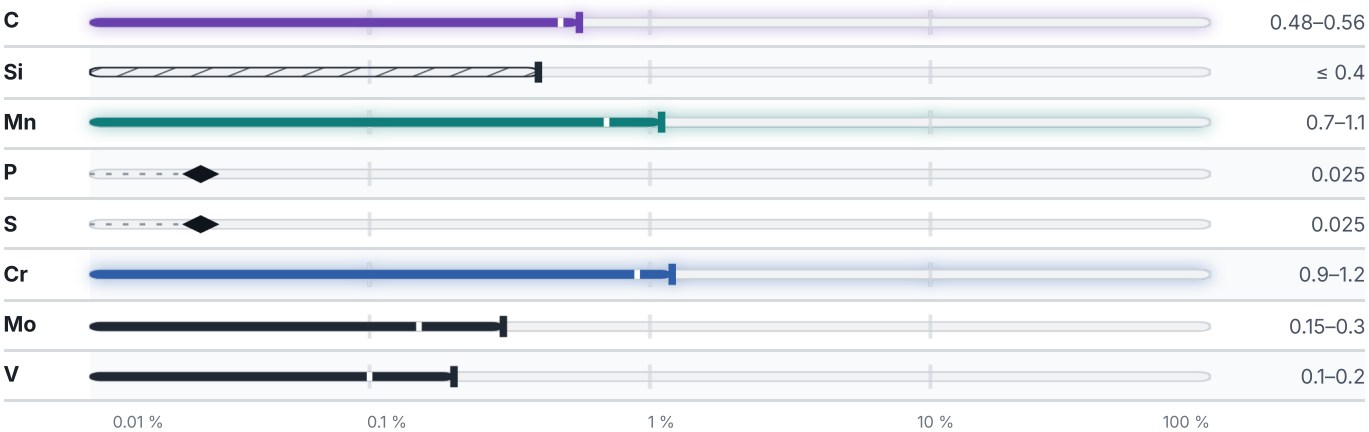
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 96.7 % ● Cr — 1.1 % ● Mn — 0.9 % ● C — 0.5 % ● Traces & impurities · 0.8 %

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 3 conditions

TREATED TO IMPROVE SHEARABILITY	HB
Treated to improve shearability	280
SOFT ANNEALED	HB
Soft annealed	248
ANNEALED TO ACHIEVE SPHEROIDIZATION OF THE CARBIDES	HB
Annealed to achieve spheroidization of the carbides	230

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.68	g/cm ³

Designations across standards

5 designations · 4 documented as identical

Europe	2	United States	2
51CrMoV4 This grade's own name	din-en	G41500 This grade's own name	uns
52CrMoV4 This grade's own name	din-en	4150 This grade's own name	aisi-sae
		Spain	1
		F-1460	une

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 1.7701

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	1.7701	Aug 20, 2026