

MATERIAL NUMBER 1.8515 · CLASS 1.8

1.8515

Chemical composition, mechanical and physical property values, and 15 standard designations from 9 regions.

DENSITY 7.73 g/cm³	OTHER DESIGNATIONS 15 in 9 regions	PROPERTY VALUES 8 on file
------------------------------	--	-------------------------------------

Chemical composition

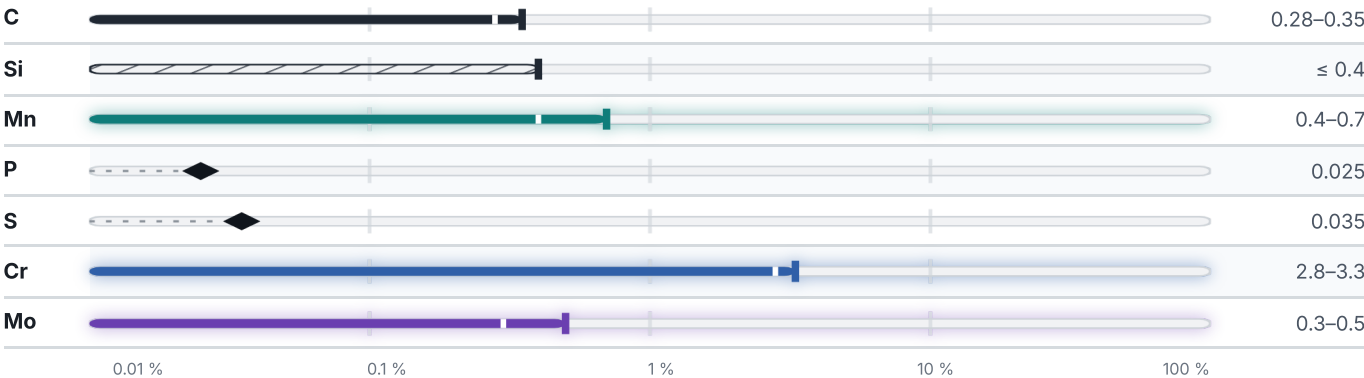
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 95.2 % ● Cr — 3.1 % ● Mn — 0.6 % ● Si — 0.4 % ● 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

9 values across 2 conditions

QUENCHED AND TEMPERED	RM N/mm²	A %
16 – 40	1030–1230	10

QUENCHED AND TEMPERED	RM N/mm ²	A %
40 – 100	980–1180	11
100 – 160	930–1130	12
160 – 250	880–1080	12
SOFT ANNEALED		HB
Soft annealed		248

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.73	g/cm ³

Designations across standards

15 designations · 3 documented as identical

United Kingdom		4	France		1
40B	bs		30CD12		afnor
722M24	bs		Italy		1
EN40B	bs		31CrMo12		uni
HCM5	bs		Sweden		1
Spain		4	2240	This grade's own name	ss
CrMo12	une		Czechia		1
F.1172	une	This grade's own name	15432ŠN		csn
F.1712	une		Poland		1
F.1712-31	une		25H3M		pn
Europe		1	Serbia		1
31CrMo12	This grade's own name	din-en	Č.4738		srps

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 1.8515

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

Start an enquiry

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

MATERIAL NO.

1.8515

ISSUED

Aug 20, 2026