

MATERIAL NUMBER 1.8515 · CLASS 1.8

F.1712

Material no. 1.8515

also listed as 31CrMo12

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

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.73 g/cm ³	15 in 9 regions	8 on file

Chemical composition

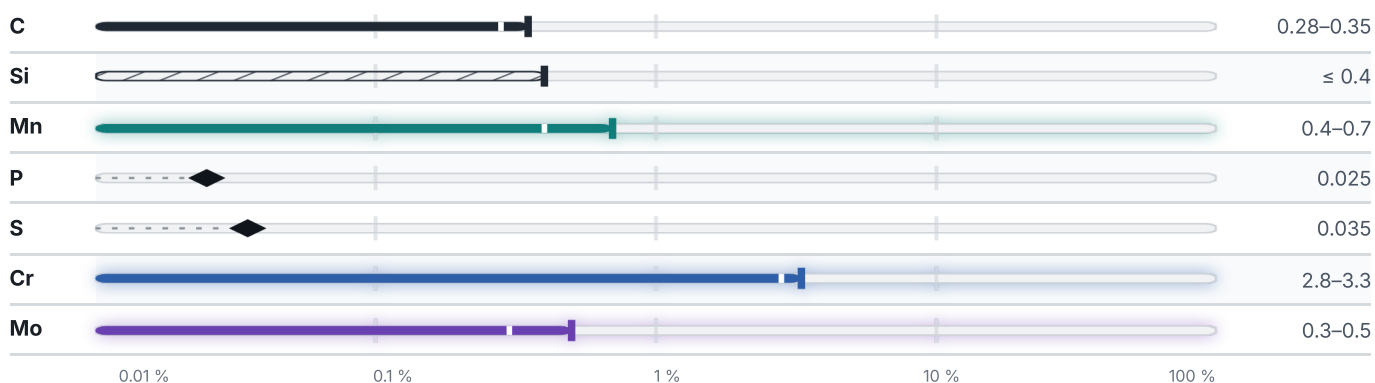
Mass fraction in %

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/mm ²	A %
16 – 40	1030–1230	10
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		
EN40B	bs	Italy	1
HCM5	bs	31CrMo12	uni
Spain	4	Sweden	1
CrMo12	une	2240 This grade's own name	ss
F.1172 This grade's own name	une		
F.1712	une	Czechia	1
F.1712-31	une	15432ŠN	csn
Europe	1	Poland	1
31CrMo12 This grade's own name	din-en	25H3M	pn
		Serbia	1
		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 F.1712

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

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ISSUED

Aug 20, 2026