

MATERIAL NUMBER 1.7707 · CLASS 1.7

1.7707

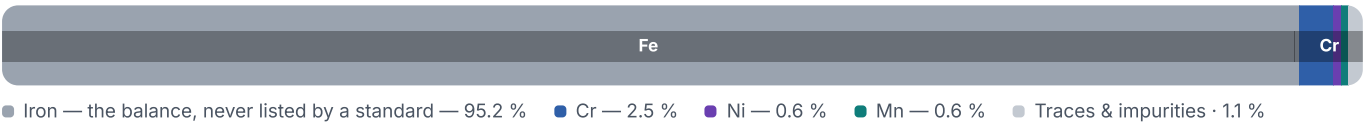
Chemical composition, mechanical and physical property values, and 19 standard designations from 7 regions.

DENSITY 7.73 g/cm³	OTHER DESIGNATIONS 19 in 7 regions	PROPERTY VALUES 12 on file
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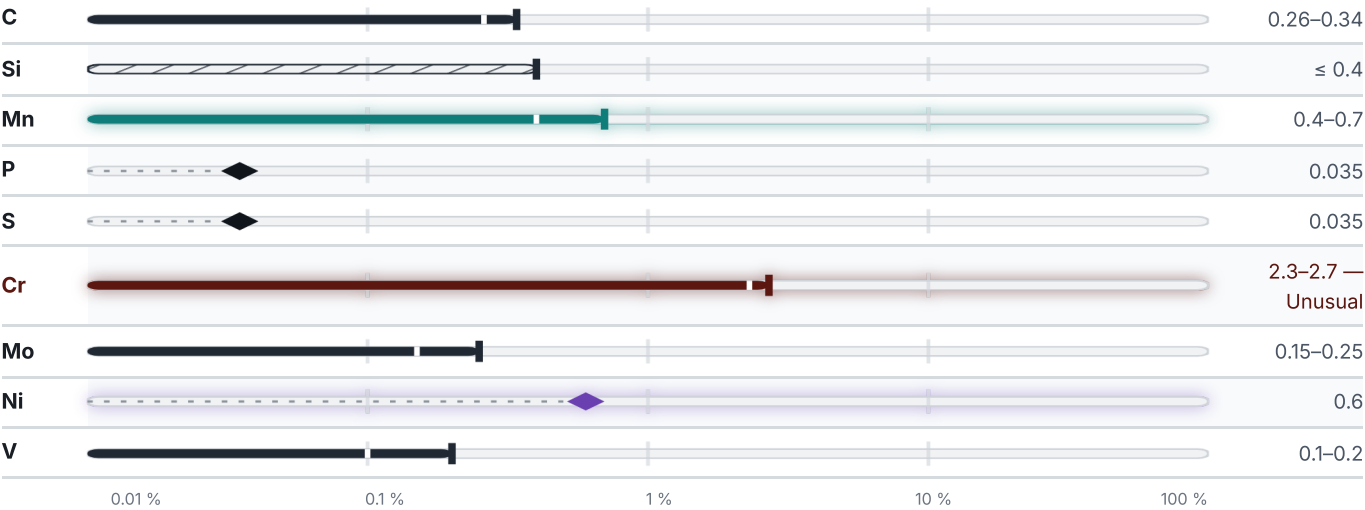
Chemical composition

Mass fraction in %

What this alloy is



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 786 °C	PREDICTED AE1 776 °C	PREDICTED ACM 610 °C	PREDICTED BS 482 °C
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Mechanical properties

10 values across 3 conditions

QUENCHED AND TEMPERED		RM N/mm ²		A %	
≤ 160		900		12	
160 – 330		800		14	
QUENCHING 870°C, OIL, DRAWING 620°C, WATER	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
Ø 25	980	835	12	55	980
CONDITION · DIMENSION					HB
(annealing) , GOST 4543-71					229

Physical properties

3 values

PROPERTY	VALUE	UNIT
Density	7.73	g/cm ³

Technological properties

PROPERTY	VALUE	UNIT
Flake sensitivity	predisposed	
Temper brittleness	predisposed	

Designations across standards

19 designations · 1 documented as identical

United States		5	Russia / CIS		3
G43406	uns		30Ch3MF		gost
4340	aisi-sae		30KH3MF		gost
E4340	aisi-sae		30X3MΦ		gost
A322	astm		Czechia		2
A331	astm		15241		csn
United States / Aerospace		5	15330		csn
6359	ams		Poland		2
6409	ams		30H2MF		pn
6414	ams		33H3MF		pn
6415	ams		Europe		1
6484	ams		30CrMoV9	This grade's own name	din-en
			Serbia		1
			Č.4734		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 1.7707
Quotation, availability, mill certificate or a technical question — directly on the material page.

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ISSUED
Aug 20, 2026