

MATERIAL NUMBER 1.7227 · CLASS 1.7

1.7227

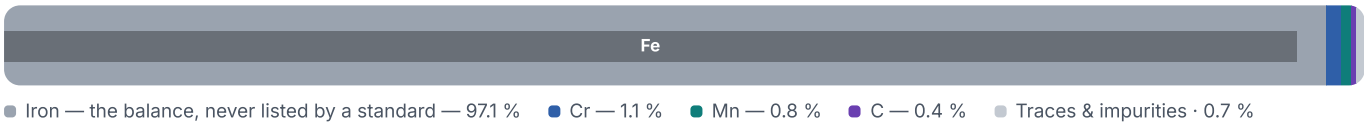
Chemical composition, mechanical and physical property values, and 28 standard designations from 14 regions.

DENSITY 7.72 g/cm³	OTHER DESIGNATIONS 28 in 14 regions	PROPERTY VALUES 8 on file
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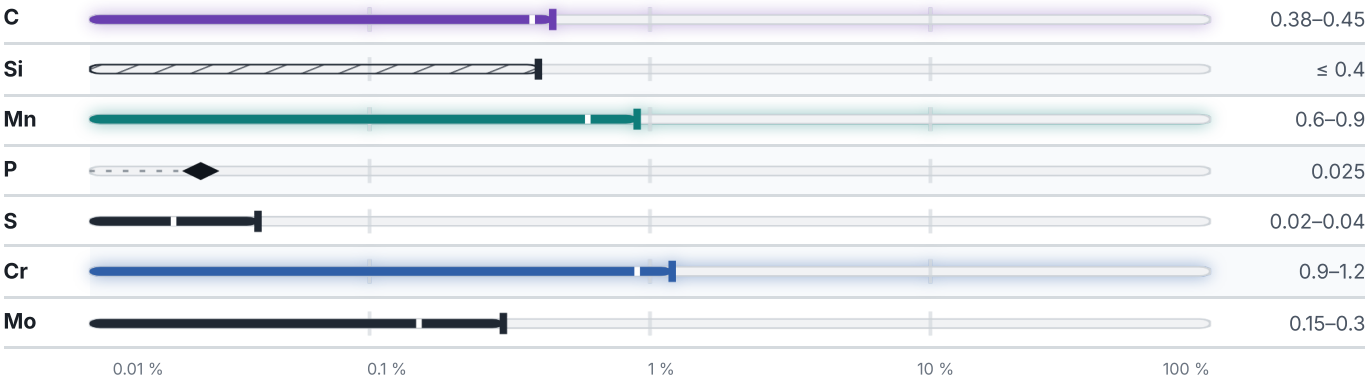
Chemical composition

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

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

Mechanical properties

7 values across 3 conditions

QUENCHED AND TEMPERED · ROUND PRODUCTS	A % · Lo = 5,65 √So
≤ 16	10

QUENCHED AND TEMPERED · ROUND PRODUCTS	A % · Lo = 5,65 √So
16 – 40	11
40 – 100	12
100 – 160	13
160 – 250	14
TREATED TO IMPROVE SHEARABILITY	HB
Treated to improve shearability	255
SOFT ANNEALED	HB
Soft annealed	241

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.72	g/cm ³

Heat treatment

2 regimes

STEP	TEMPERATURE	MEDIUM
Soft annealing	Temperature not stated	—
source joins the operations with + / procedural order		
Quenching	Temperature not stated	—
Tempering	Temperature not stated	—

Designations across standards

28 designations · 3 documented as identical

United States	5	United States / Aerospace	4
G41400 This grade's own name	uns	6349	ams
G4145	uns	6381	ams
4140 This grade's own name	aisi-sae	6382	ams
4145	aisi-sae	6395	ams
A829	astm		
France	4	Russia / CIS	4
40CD4	afnor	38ChM	gost
42CD4	afnor	38ChMA	gost
42CD4S	afnor	38XM	gost
42CD4u	afnor	38XMA	gost

United Kingdom	2	Italy	1
708M40	bs	42CrMo4	uni
709M40	bs		
Europe	1	Poland	1
42CrMoS4 This grade's own name	din-en	40HM	pn
Spain	1	Serbia	1
40CrMo41	une	Č.4782	srps
International	1	Hungary	1
42CrMoS4	iso	CMo4 E	msz
Japan	1	Romania	1
SCM4	jis	41MoCr11	stas

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 1.7227
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	1.7227	Aug 20, 2026