

MATERIAL NUMBER 1.5024 · CLASS 1.5

45S7

Material no. 1.5024

also listed as 46Si7

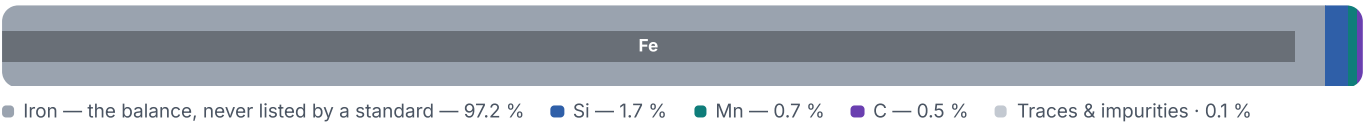
Chemical composition, mechanical and physical property values, and 11 standard designations from 7 regions.

DENSITY 7.45 g/cm ³	OTHER DESIGNATIONS 11 in 7 regions	PROPERTY VALUES 7 on file
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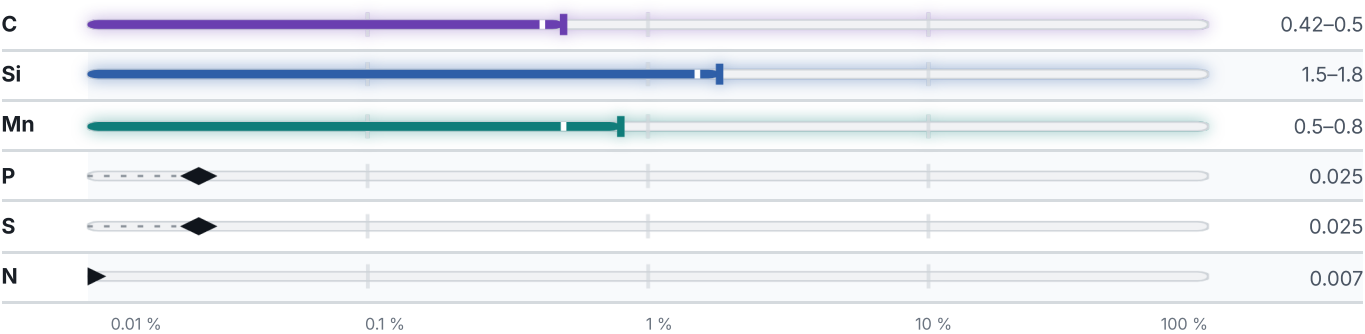
Chemical composition

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, Cr, Mo.

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	7.45	g/cm ³

Designations across standards

11 designations · 3 documented as identical

Poland	3	Europe	1
40S2	pn	46Si7 This grade's own name	din-en
50S2	pn		
55S2	pn	United States	1
		9250 This grade's own name	aisi-sae
Russia / CIS	2		
40C2	gost	France	1
55C2	gost	45S7 This grade's own name	afnor
Czechia	2	Serbia	1
13 151	csn	Č.2131	srps
13251	csn		

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 45S7

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	1.5024	Aug 20, 2026