

MATERIAL NUMBER 1.5021 · CLASS 1.5

1.5021

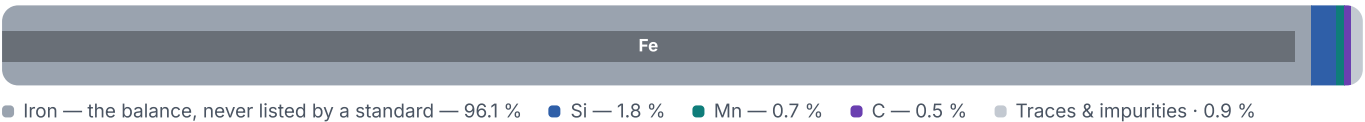
Chemical composition, mechanical and physical property values, and 7 standard designations from 4 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 7 in 4 regions	PROPERTY VALUES 9 on file
------------------------------	---	-------------------------------------

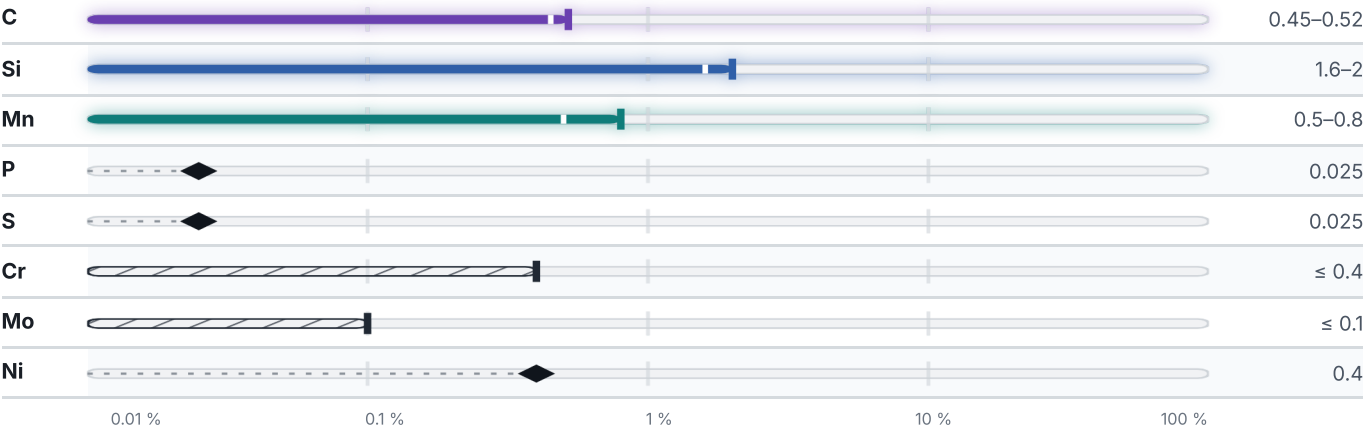
Chemical composition

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 831 °C	PREDICTED AE1 760 °C	PREDICTED ACM 674 °C	PREDICTED BS 555 °C
--------------------------------	--------------------------------	--------------------------------	-------------------------------

Mechanical properties

5 values across 4 conditions

SOFT ANNEALED	RM N/mm ²	A80 %
0.3 – 3	720	13
QUENCHED AND TEMPERED	RM N/mm ²	
0.3 – 3		1200–1700
SOFT ANNEALED		HV
Soft annealed		225
QUENCHED AND TEMPERED		HV
Quenched and tempered		370–520

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

7 designations · 1 documented as identical

Poland	3	Europe	1
40S2	pn	48Si7	This grade's own name din-en
50S2	pn		
55S2	pn	France	1
		46SiCr7	afnor
Russia / CIS	2		
40C2	gost		
55C2	gost		

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 1.5021

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.

1.5021

ISSUED

Aug 20, 2026