

MATERIAL NUMBER 1.5023 · CLASS 1.5

1.5023

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

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 7 in 4 regions	PROPERTY VALUES 6 on file
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Chemical composition

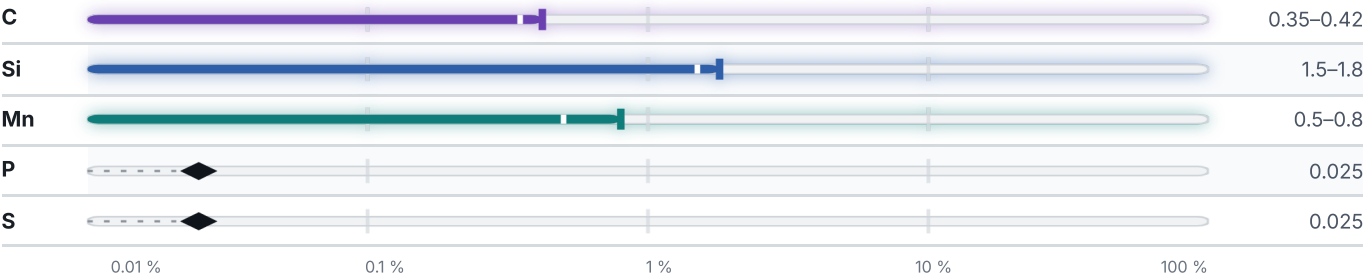
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 97.3 % ● Si — 1.7 % ● Mn — 0.7 % ● C — 0.4 % ● Traces & impurities · 0.1 %

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	217
ANNEALED TO ACHIEVE SPHEROIDIZATION OF THE CARBIDES	HB
Annealed to achieve spheroidization of the carbides	200

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

7 designations · 1 documented as identical

Poland	3	Europe	1
40S2	pn	38Si7	This grade's own name din-en
50S2	pn		
55S2	pn	Serbia	1
		Č.2130	srps
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 1.5023

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	1.5023	Aug 20, 2026