

MATERIAL NUMBER 1.0533 · CLASS 1.0

1.0533

Chemical composition, mechanical and physical property values, and 8 standard designations from 4 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 8 in 4 regions	PROPERTY VALUES 4 on file
------------------------------	---	-------------------------------------

Chemical composition

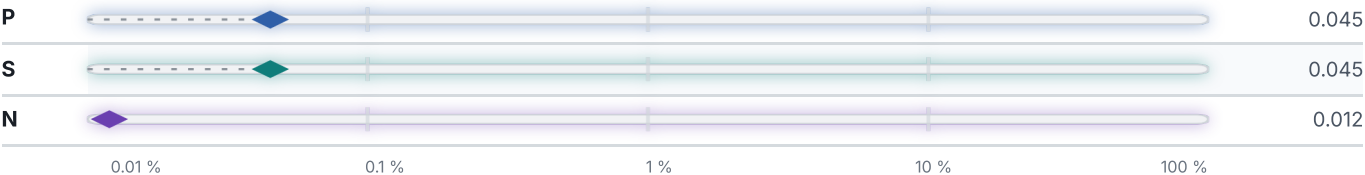
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 99.9 % ● P — 0 % ● S — 0 % ● N — 0 %

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: C, Mn, Si, Ni, Cr, Mo.

Mechanical properties

11 values across 2 conditions

COLD DRAWN / HARD	RM N/mm²	A %
5 – 10	650–950	6
10 – 16	600–900	7
16 – 40	550–850	8
40 – 63	520–770	9

COLD DRAWN / HARD	RM N/mm ²	A %
63 – 100	470–740	9
AS ROLLED AND TURNED		HB
As rolled and turned		140–181

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

8 designations · 2 documented as identical

Europe		5	France		1
E295GC	This grade's own name	din-en	A50-2		afnor
Fe490-2		din-en			
St50-2		din-en	China		1
St50-2KG		din-en	Q275		gb
ZSt 50-2	This grade's own name	din-en			
			Italy		1
			Fe490		uni

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 1.0533

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	1.0533	Aug 20, 2026