

MATERIAL NUMBER 1.0489 · CLASS 1.0

1.0489

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
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Chemical composition

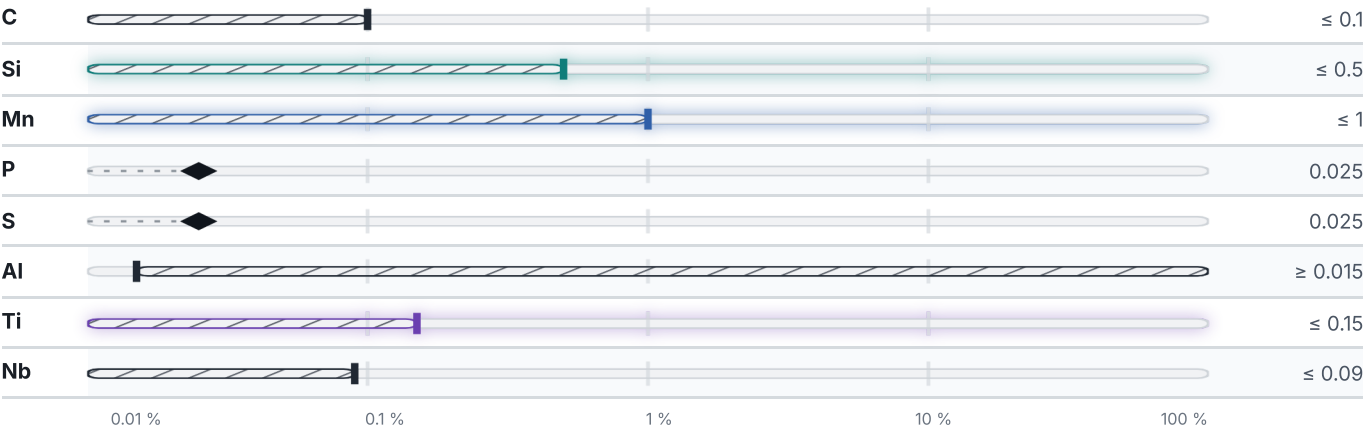
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 98.1 % ● Mn — 1 % ● Si — 0.5 % ● Ti — 0.2 % ● Traces & impurities · 0.3 %

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 1 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %
Sheet/Strip	440	265	26–27

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

7 designations · 4 documented as identical

Europe	3	France	1
H 280 LA This grade's own name	din-en	E280C	afnor
HC 300 LA This grade's own name	din-en		
ZStE 300 This grade's own name	din-en	Japan	1
		SPFC440	jis
United States	2		
K02703 This grade's own name	uns		
Gr.45	aisi-sae		

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 1.0489

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.

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ISSUED

Aug 20, 2026