

MATERIAL NUMBER 1.0644 · CLASS 1.0

E590K2

Material no. 1.0644

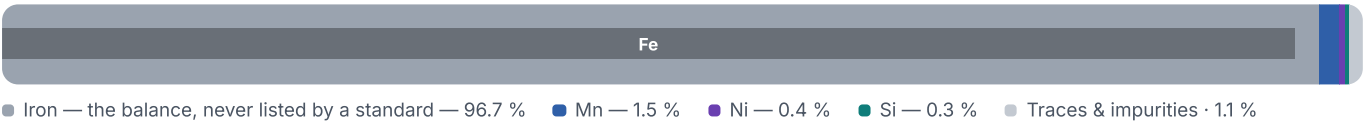
Chemical composition, mechanical and physical property values, and 1 standard designations from 1 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 1 in 1 regions	PROPERTY VALUES 15 on file
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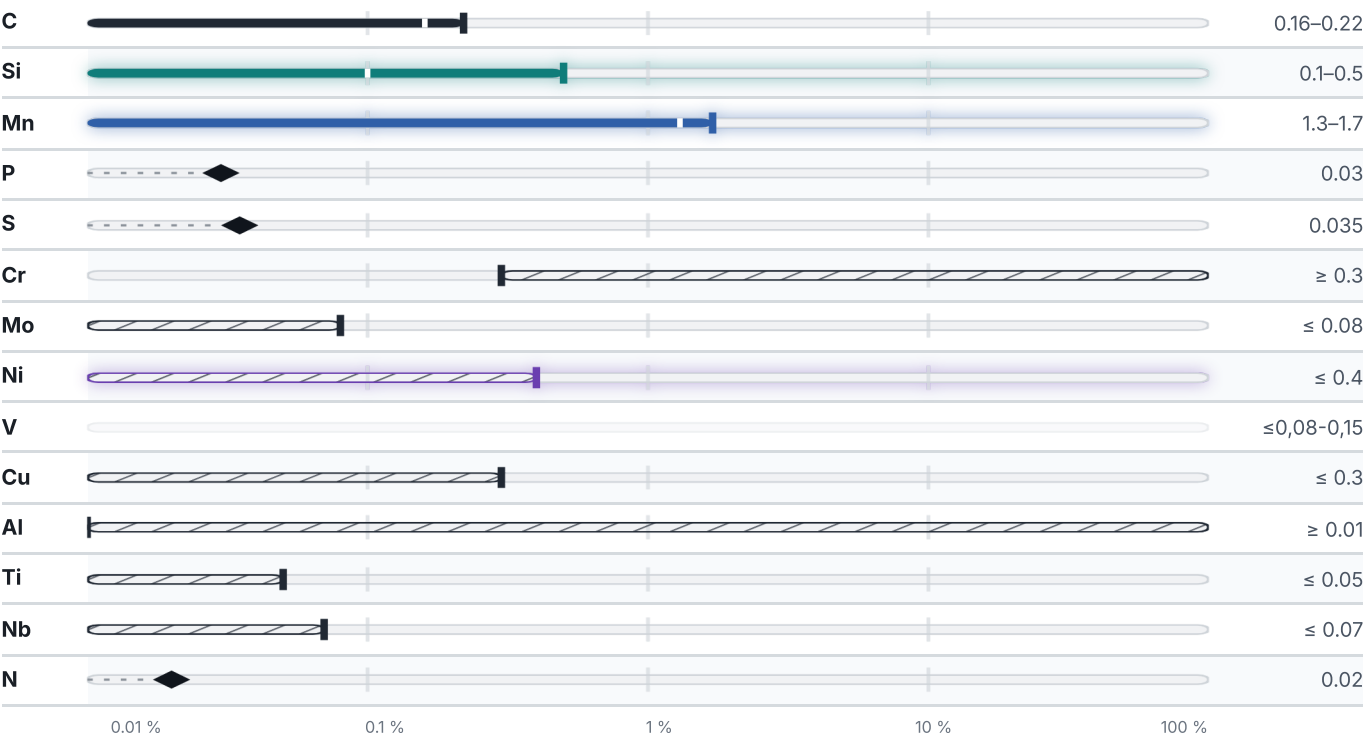
Chemical composition

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: Cr.

Mechanical properties

9 values across 1 conditions

QUENCHED AND TEMPERED	REH N/mm²	RM N/mm²
≤ 16	590	700
16 – 40	540	650
40 – 65	480	570
65 – 100	–	520
65 – 80	455	–
80 – 100	420	–

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

1 designations · 1 documented as identical

Europe	1
E590K2	This grade's own name din-en

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 E590K2

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	1.0644	Aug 20, 2026