

MATERIAL NUMBER 1.8834 · CLASS 1.8

1.8834

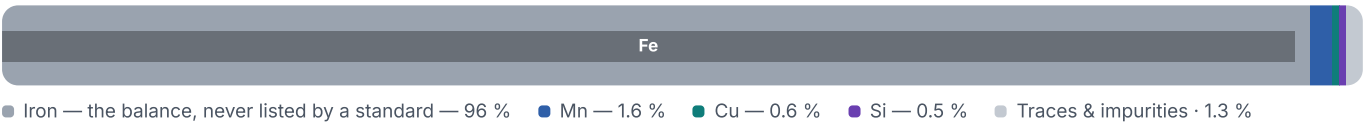
Chemical composition, mechanical and physical property values, and 11 standard designations from 6 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 11 in 6 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

computed from composition · °C

PREDICTED AE3 820 °C	PREDICTED AE1 711 °C	PREDICTED ACM 386 °C	PREDICTED BS 551 °C
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Mechanical properties

11 values across 1 conditions

CONDITION · DIMENSION	REH N/mm²	RM N/mm²
≤ 16	355	–
16 – 40	345	–
≤ 40	–	470–630
40 – 63	335	450–610
63 – 80	325	440–600
80 – 100	325	440–600
100 – 120	320	430–590

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

11 designations · 3 documented as identical

Europe	4	Italy	2
FeE355KTTM	din-en	FeE355KT	uni
S355ML This grade's own name	din-en	FeE355KTTM	uni
TStE 355 TM This grade's own name	din-en		
TStE355	din-en	United Kingdom	1
		50EE	bs
United States	2		
K12000 This grade's own name	uns	France	1
A633Gr.C	aisi-sae	E355FP	afnor
		Sweden	1
		2135-01	ss

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 1.8834

Quotation, availability, mill certificate or a technical question — directly on the material page.

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DATASHEET ONLINE

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GRADE SEARCH

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ISSUED

Aug 20, 2026