

Q390E

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

OTHER DESIGNATIONS	PROPERTY VALUES
1 in 1 regions	14 on file

Chemical composition

Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 95.9 % ● Mn — 1.7 % ● Si — 0.5 % ● Ni — 0.5 % ● Traces & impurities · 1.4 %

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 808 °C	PREDICTED AE1 710 °C	PREDICTED ACM 438 °C	PREDICTED BS 544 °C
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Mechanical properties

19 values across 2 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %
≤ 16	490-650	≥ 390	≥ 20
16 – 40	490-650	≥ 370	≥ 20
40 – 63	490-650	≥ 350	≥ 19
63 – 80	490-650	≥ 330	≥ 19
80 – 100	490-650	≥ 330	≥ 19
100 – 150	470-620	≥ 310	≥ 18
CONDITION · DIMENSION	RM N/mm ²		
≤ 40	490-650		

Designations across standards

1 designations · 1 documented as identical

China	1
Q390E This grade's own name	gb

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 Q390E

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

[Start an enquiry](#)

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MATERIAL NO.
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ISSUED
Aug 15, 2026