

Q245R

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

OTHER DESIGNATIONS	PROPERTY VALUES
1 in 1 regions	12 on file

Chemical composition

Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 97.5 % ● Mn — 0.8 % ● Si — 0.4 % ● Cr — 0.3 % ● Traces & impurities · 1 %

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 813 °C	PREDICTED AE1 718 °C	PREDICTED ACM 432 °C	PREDICTED BS 569 °C
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Mechanical properties

18 values across 1 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %
3 – 16	400–520	≥ 245	≥ 25
16 – 36	400–520	≥ 235	≥ 25
36 – 60	400–520	≥ 225	≥ 25
60 – 100	390–510	≥ 205	≥ 24
100 – 150	380–500	≥ 185	≥ 24
150 – 250	370–490	≥ 175	≥ 24

Heat treatment

1 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with (or)		
Normalizing	Temperature not stated	—
Normalizing	Temperature not stated	—

Designations across standards

1 designations · 1 documented as identical

China	1
Q245R 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 Q245R

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	—	Aug 15, 2026