

14Cr18Ni11Si4AlTi

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

ELASTIC MODULUS 180 GPa	OTHER DESIGNATIONS 1 in 1 regions	PROPERTY VALUES 12 on file
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Chemical composition

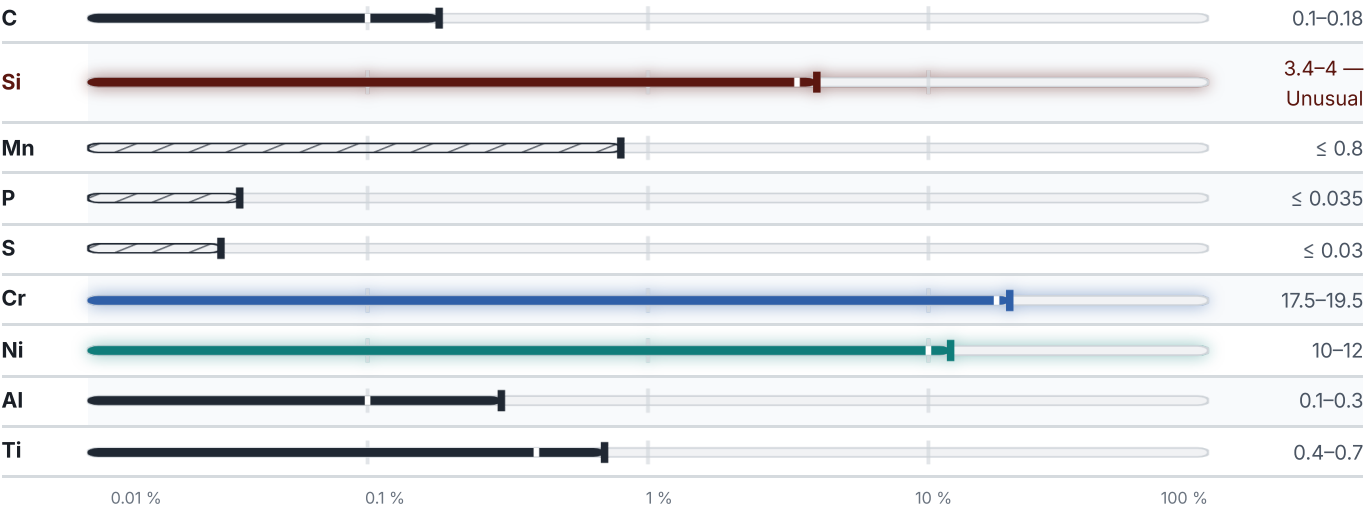
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 65 % ● Cr — 18.5 % ● Ni — 11 % ● Si — 3.7 % ● Traces & impurities · 1.8 %

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: Mo.

Physical properties

3 values

CONDITION · DIMENSION	LAMBDA W/(m·K)	CP J/(kg·K)
100	13	—
500	19	450
PROPERTY	VALUE	UNIT
Elastic modulus	180	GPa
Thermal expansion coefficient	16.3	10 ⁻⁶ /K
Electrical resistivity	1040	nΩ·m

Heat treatment

1 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with (or)		
Quenching	Temperature not stated	—
Solution annealing	1000–1050 °C	Water

Designations across standards

1 designations · 1 documented as identical

China	1
14Cr18Ni11Si4AlTi 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 14Cr18Ni11Si4AlTi

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