

MATERIAL NUMBER 1.4311 · CLASS 1.4

X2CrNiN18-9

Material no. 1.4311

also listed as X2CrNiN18-10

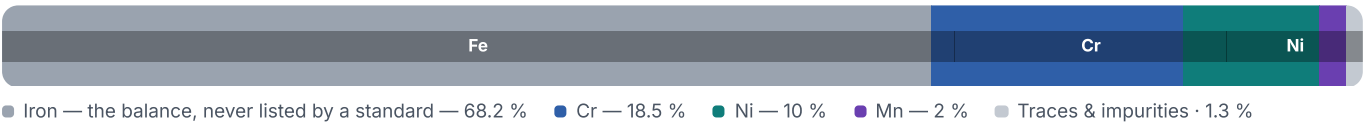
Chemical composition, mechanical and physical property values, and 55 standard designations from 12 regions.

DENSITY 7.95 g/cm ³	OTHER DESIGNATIONS 55 in 12 regions	PROPERTY VALUES 9 on file
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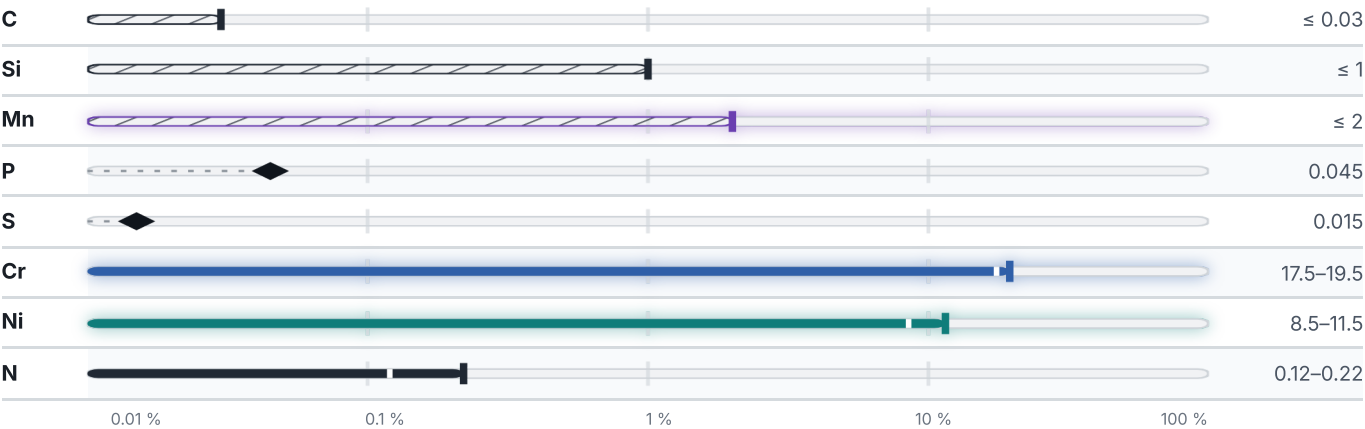
Chemical composition

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: Mo.

Mechanical properties

8 values across 3 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %	HB	HRB	HV
Plate/Sheet Hot-rolled	550	245	40	–	–	–
Hot-rolled	–	–	–	217	95	220
SOFT ANNEALED						HB
Soft annealed						230
SOLUTION ANNEALED						HB
Solution annealed						210

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.95	g/cm ³

Heat treatment

2 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with + / procedural order		
Solution annealing	Temperature not stated	—
Annealing	Temperature not stated	—
Solution annealing	Temperature not stated	—

55 designations · 4 documented as identical

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 X2CrNiN18-9

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

[Start an enquiry](#)

DATASHEET ONLINE

[View the material page](#)

GRADE SEARCH

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ISSUED

Aug 20, 2026