

MATERIAL NUMBER 1.4311 · CLASS 1.4

X2CrNi18-10

Material no. 1.4311

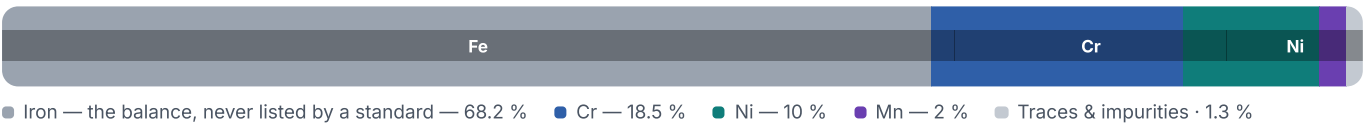
Chemical composition, mechanical and physical property values, and 55 standard designations from 12 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.95 g/cm³	55 in 12 regions	9 on file

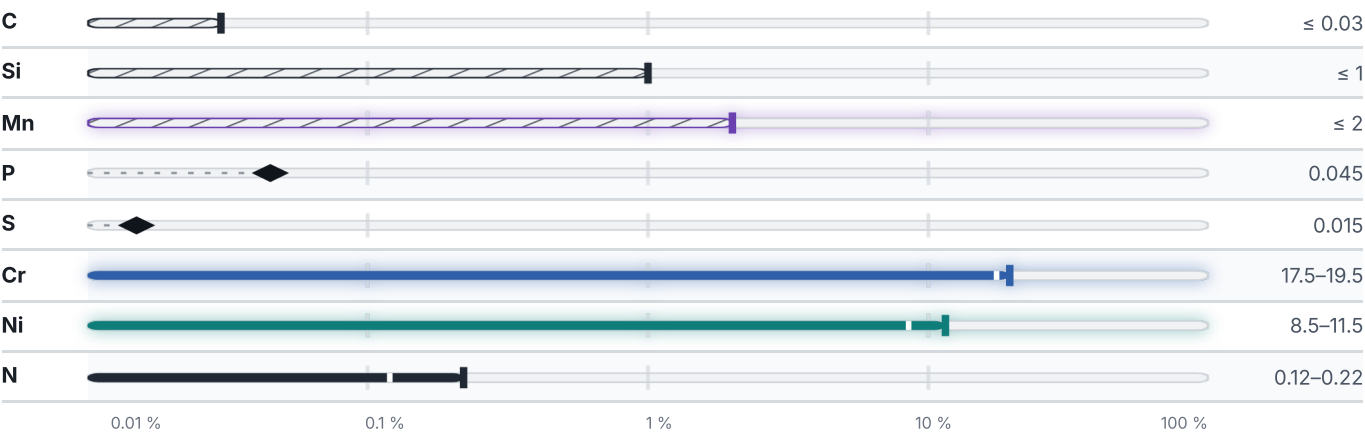
Chemical composition

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	—

Designations across standards

55 designations · 4 documented as identical

United States		35	Europe		3
S30300		uns	1.4311		din-en
S30400		uns	X2CrNi18-10	This grade's own name	din-en
S30403		uns	X2CrNi18-9	This grade's own name	din-en
S30453	This grade's own name	uns			
S30500		uns	France		3
303		aisi-sae	Z2CN18.10		afnor
304		aisi-sae	Z2CN18.10AZ		afnor
304L		aisi-sae	Z3CN18-10Az		afnor
304LN	This grade's own name	aisi-sae	Poland		3
305		aisi-sae			
S30453		aisi-sae	00H18N10		pn
A1012		astm	0H18N10		pn
A182		astm	0H18N9		pn
A193		astm	United Kingdom		2
A194		astm			
A213		astm	304 S 61		bs
A240		astm	304S62		bs
A249		astm	Spain		2
A269		astm			
A276		astm	F. 3541		une
A312		astm	X 2 CrNi18-10		une
A320		astm	Japan		2
A358		astm			
A376		astm	SUS F 304LN		jis
A403		astm	SUS304LN		jis
A479		astm	China		1
A666		astm			
A688		astm	0Cr18Ni10N		gb
A813		astm	Italy		1
A924		astm			
A943		astm	X2CrNi1811		uni
A965		astm	Sweden		1
A988		astm			
TP304		astm	2371		ss
TP304L		astm	Czechia		1
			17259VN		csn
			former Yugoslavia		1
			Č.45707		jus

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 X2CrNi18-10

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

[Start an enquiry](#)

DATASHEET ONLINE

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GRADE SEARCH

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ISSUED

Aug 20, 2026