

MATERIAL NUMBER 1.4305 · CLASS 1.4

12Ch18N10E

Material no. 1.4305

also listed as X 10 CrNiS 18 9

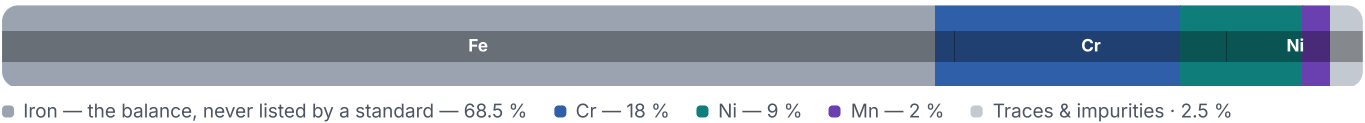
Chemical composition, mechanical and physical property values, and 77 standard designations from 16 regions.

DENSITY 7.9 g/cm³	OTHER DESIGNATIONS 77 in 16 regions	PROPERTY VALUES 10 on file
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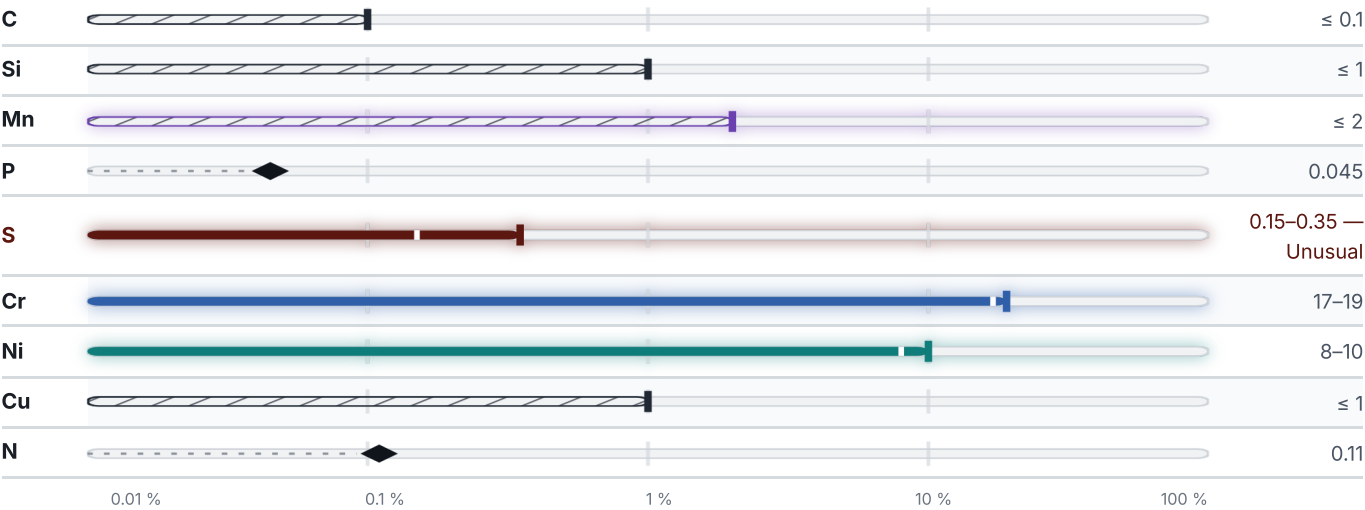
Chemical composition

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

11 values across 2 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %	Z %	HB	HRB	HV
Plate/Sheet Hot-rolled	520	205	35	–	–	–	–
Bars/Rods	520	205	40	50	–	–	–
Hot-rolled	–	–	–	–	187	90	200
SOFT ANNEALED							HB
Soft annealed							230

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.9	g/cm ³

77 designations · 7 documented as identical

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Czechia	2	Slovakia	1
17 243 PH	csn	17 243	stn
17243	csn		
Italy	1	Serbia	1
X10CrNiS18-09	uni	Č.4590	srps
		former Yugoslavia	1
		Č.4590	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 12Ch18N10E

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	1.4305	Sep 8, 2026