

MATERIAL NUMBER 1.4873 · CLASS 1.4

45WNiCr180

Material no. 1.4873

also listed as X45CrNiW18-9

Chemical composition, mechanical and physical property values, and 25 standard designations from 12 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm ³	25 in 12 regions	9 on file

Chemical composition

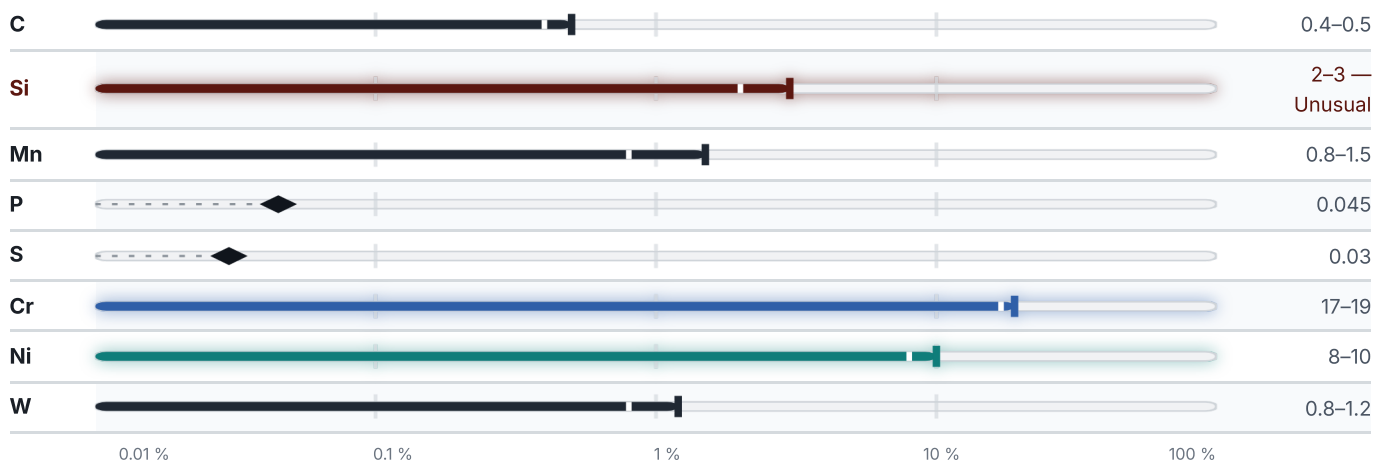
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 67.8 % ● Cr — 18 % ● Ni — 9 % ● Si — 2.5 % ● Traces & impurities · 2.7 %

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

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

25 designations · 1 documented as identical

Spain		5	United Kingdom		2
28-09	une		331S40		bs
F.320.C	une		331S42		bs
F.3211	une		Bulgaria		2
F.3211-X45CrNiSiW	une		4Ch18N9S2WG		bds
X 45 CrNiSiW 18-09	une		4X18H9C2BF		bds
Japan		4	Europe		1
F SUH 31	jis		X45CrNiW18-9	This grade's own name	din-en
SUH 31	jis		Czechia		1
SUH 31 TK	jis		17 322		csn
SUH 31 TP	jis		Poland		1
France		3	4H14N14W2M		pn
X19T4	afnor		Serbia		1
Z35CNWS14.14	afnor		Č.4571.1		srps
Z45CNW18-09	afnor		Hungary		1
Russia / CIS		3	SZ 12		msz
45Ch14N14V2M	gost		Romania		1
45Kh14N14V2M	gost		45WNiCr180		stas
EL189	gost				

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 45WNiCr180

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	1.4873	Aug 20, 2026