

MATERIAL NUMBER 1.4312 · CLASS 1.4

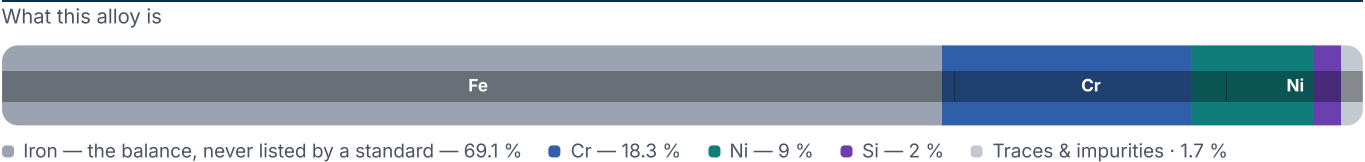
1.4312

Chemical composition, mechanical and physical property values, and 43 standard designations from 15 regions.

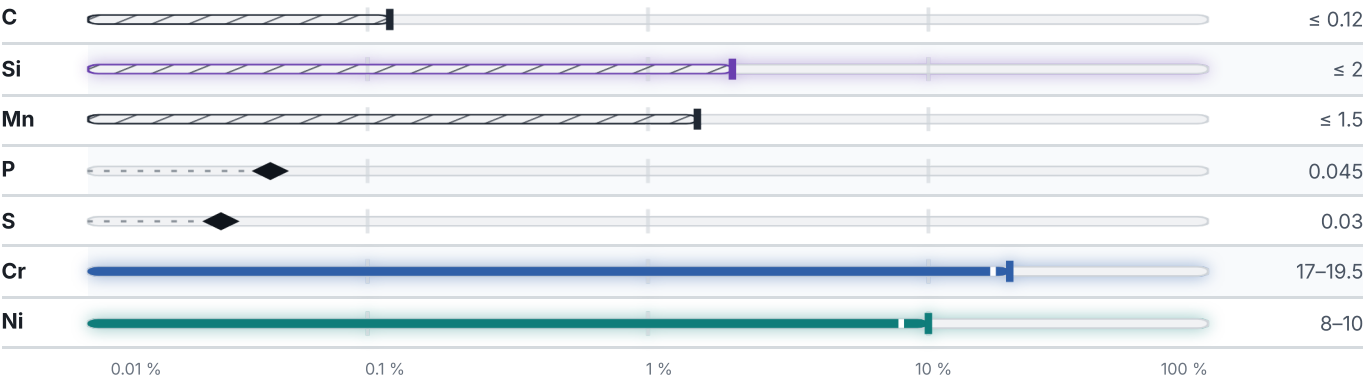
DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 43 in 15 regions	PROPERTY VALUES 8 on file
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Chemical composition

Mass fraction in %



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

5 values across 1 conditions

QUENCHING 1050 - 1100°C	RM N/mm²	RE N/mm²	A5 %	Z %	KCU kJ/m²
to 100	441	177	25	35	981

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Heat treatment

2 regimes

STEP	TEMPERATURE	MEDIUM
Quenching	950–1050 °C	Water
Quenching	1050–1100 °C	—

Designations across standards

43 designations · 2 documented as identical

Russia / CIS		12	France		2
10Ch18N9L	gost		Z10CN18-9M	afnor	
10Kh18N9BL	gost		Z6CN18-10M	afnor	
10KH18N9L	gost		Czechia		2
10X18H9Л	gost		422 931	csn	
12KH18N9TL	gost		422933	csn	
12X18H9ТЛ	gost		Poland		2
PK10Kh18N9T	gost		LH18N9	pn	
ПК10Х18Н9Т-6.4	gost		LH18N9T	pn	
ПК10Х18Н9Т-6.8	gost		Hungary		2
ПК10Х18Н9Т-7.2	gost		AoX12CrNi18-9	msz	
ПК10Х18Н9Т-7.6	gost		AoX12CrNiTi18-9	msz	
X18H9БЛ	gost		Romania		2
United States		5	T15NiCr180	stas	
J92701	This grade's own name	uns	T15TiNiCr180	stas	
CF-16F	aisi-sae		Bulgaria		2
J92630	aisi-sae		Ch18N10SL	bds	
J92701	aisi-sae		Ch18N10TSL	bds	
J92710	aisi-sae		South Korea		2
United Kingdom		3	SSC12	ks	
302C25	bs		SSC13A	ks	
ANC 3 grade A	bs		Europe		1
ANC3A	bs		GX10CrNi18-8	This grade's own name	din-en
Japan		3	Italy		1
SCS12	jis		GX6CrNi20-10	uni	
SCS13	jis				
SCS13A	jis				
China		3			
ZG12Cr18Ni9Ti	gb				
ZG1Cr18Ni9	gb				
ZG1Cr18Ni9Ti	gb				

Sweden	1
2333	SS

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 1.4312
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	1.4312	Aug 20, 2026