

MATERIAL NUMBER 1.4842 · CLASS 1.4

S31080

Material no. 1.4842

also listed as X12CrNi25-20

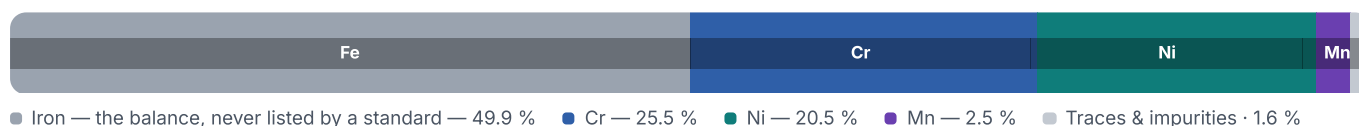
Chemical composition, mechanical and physical property values, and 35 standard designations from 13 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm ³	35 in 13 regions	8 on file

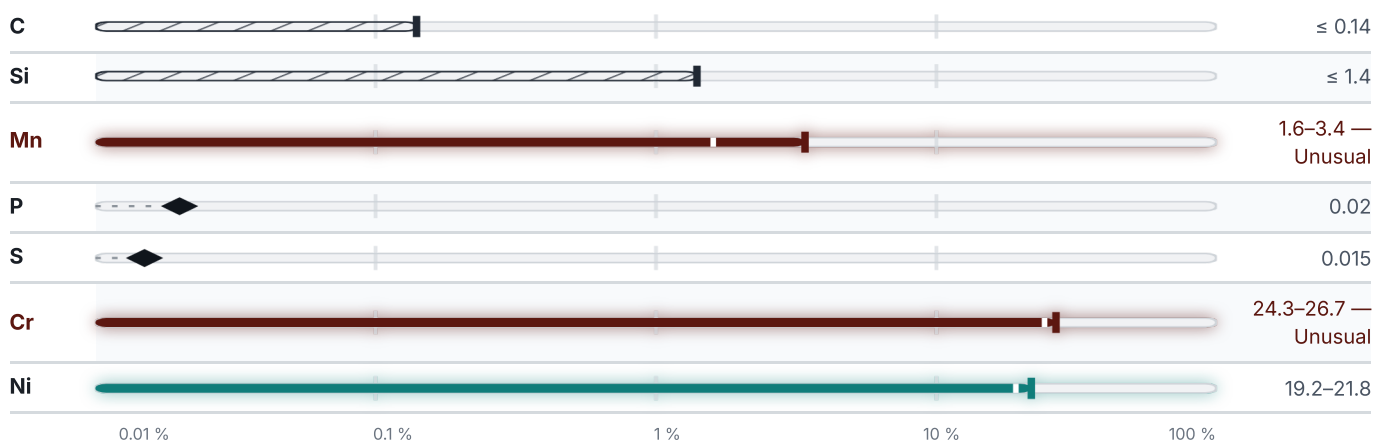
Chemical composition

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.

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

35 designations · 2 documented as identical

United States		11	Russia / CIS	3
S31080	This grade's own name	uns	0X23H18	gost
310 S		aisi-sae	10KH23N18	gost
S31000		aisi-sae	10X23H18	gost
S31008		aisi-sae		
S31009		aisi-sae	Spain	2
A167		astm	F.331	une
A176		astm	X8CrNi25-21	une
A240		astm		
A276		astm	Japan	2
A479		astm	SUH310	jis
A484		astm	SUS310S	jis
United Kingdom		4	Europe	1
310S16		bs	X12CrNi25-20	This grade's own name din-en
310S24		bs		
310S94		bs	China	1
X8CrNi25-21		bs	0Cr25Ni20	gb
United States / Aerospace		4	Italy	1
5521		ams	X6CrNi25-20	uni
5572		ams		
5577		ams	Sweden	1
5651		ams	2361	ss
France		3	Czechia	1
Z12CN25-20		afnor	17 255	csn
Z12CN26-21		afnor		
Z8CN25-20		afnor	Australia / New Zealand	1
			310S	as-nzs

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 S31080

Start an enquiry

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

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

MATERIAL NO.

1.4842

ISSUED

Aug 20, 2026