

MATERIAL NUMBER 1.4005 · CLASS 1.4

Z11CF13

Material no. 1.4005

also listed as X12CrS13

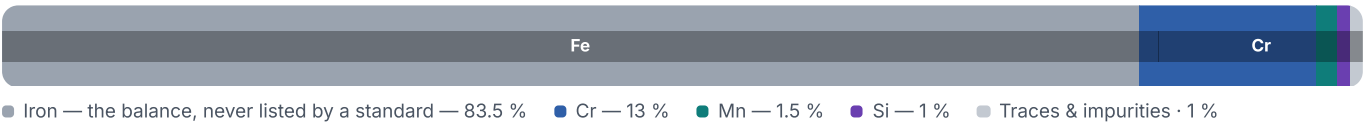
Chemical composition, mechanical and physical property values, and 46 standard designations from 13 regions.

DENSITY 7.7 g/cm ³	OTHER DESIGNATIONS 46 in 13 regions	PROPERTY VALUES 8 on file
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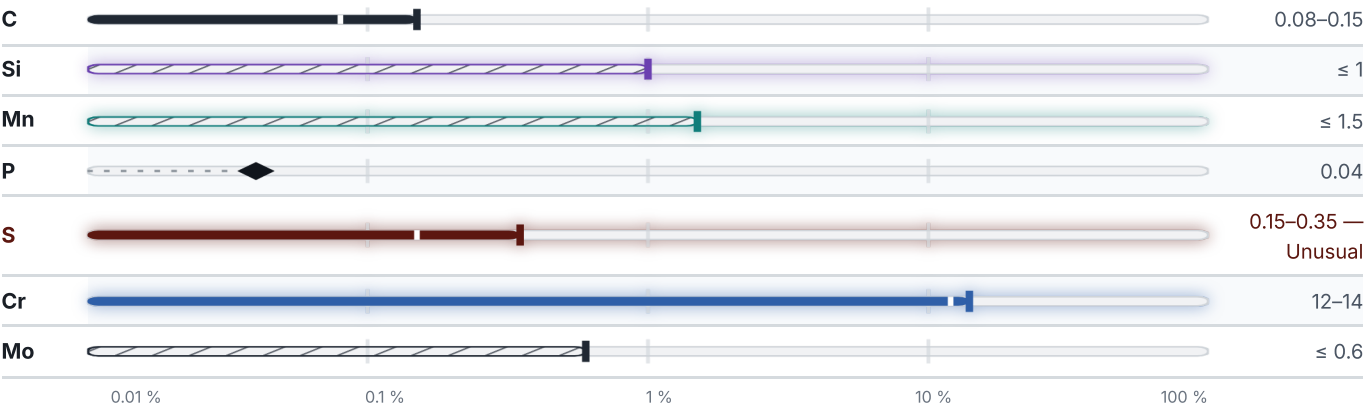
Chemical composition

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: Ni.

Mechanical properties

6 values across 2 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %	Z %	AK J/cm ²
Bars/Rods	540	345	17	45	69
SOFT ANNEALED					HB
Soft annealed					220

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.7	g/cm ³

Designations across standards

46 designations · 4 documented as identical

United States		22	Spain		4
Grade 410		uns	F-3401		une
S41000		uns	F.3411		une
S41600	This grade's own name	uns	F.3411-X12 CrS 13		une
410		aisi-sae	X 10 Cr 13		une
416	This grade's own name	aisi-sae			
51416		aisi-sae	France		3
S41600		aisi-sae	Z11CF13		afnor
A 484		astm	Z12CF13		afnor
A 582		astm	Z12CrS13		afnor
A194		astm			
A314		astm	Russia / CIS		3
A473		astm	12Ch13		gost
A581		astm	12H13		gost
A593		astm	12Kh13		gost
A594		astm			
A895		astm	Europe		2
F1613		astm	1.4005		din-en
F2281		astm	X12CrS13	This grade's own name	din-en
F738		astm			
F836		astm	Sweden		2
F899		astm	2380		ss
Grade 410		astm	SIS 2380	This grade's own name	ss
United Kingdom		4	International		1
410S21		bs	X12Cr13E		iso
416S21		bs			
AMI 4006		bs	United States / Aerospace		1
En 56 AM		bs	5610		ams
			Japan		1
			SUS416		jis

China	1	Poland	1
1Y1Cr13	gb	1H13	pn
Italy	1		
X12CrS13	uni		

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 Z11CF13

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	1.4005	Aug 20, 2026