

MATERIAL NUMBER 1.4542 · CLASS 1.4

Z7CNU15-05

Material no. 1.4542

also listed as X5CrNiCuNb16-4

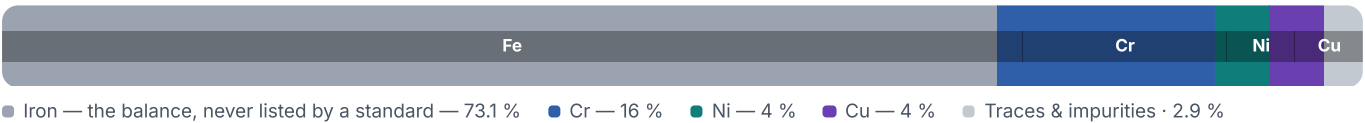
Chemical composition, mechanical and physical property values, and 48 standard designations from 6 regions.

DENSITY 7.8 g/cm³	OTHER DESIGNATIONS 48 in 6 regions	PROPERTY VALUES 10 on file
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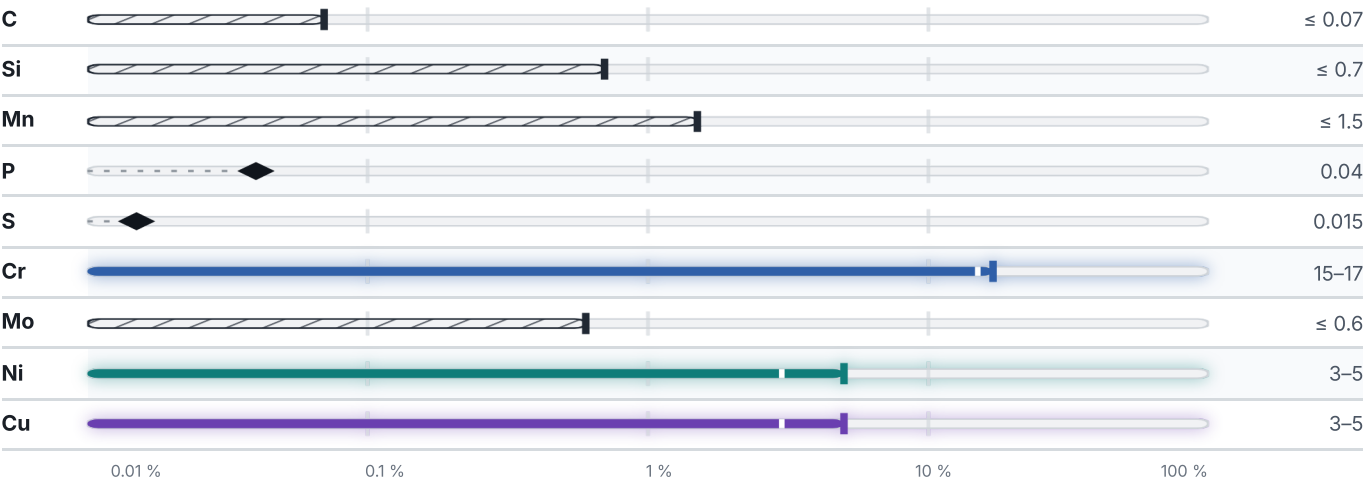
Chemical composition

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

This grade's composition falls outside the published model's validated range (a low-alloy composition window), so no transformation temperature is predicted here.

4 values across 2 conditions

SOLUTION ANNEALED	HB		
Solution annealed	360		
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %
Casting Precipitation hardening treatment	850–1240	665–1030	6–10

1 values

PROPERTY	VALUE	UNIT
Density	7.8	g/cm ³

48 designations · 9 documented as identical

United States	22	France	8
S17400	This grade's own name uns	17-4 DP	afnor
17-4 PH	This grade's own name aisi-sae	174 PH	afnor
630	aisi-sae	X17U4	afnor
AISI630	This grade's own name aisi-sae	Z67CNU15.05	afnor
S17400	aisi-sae	Z6CNU1704	afnor
17-4 PH	astm	Z7CNU15-05	This grade's own name afnor
A 484	astm	Z7CNU16-04	afnor
A 564	astm	Z7CNU17-04	This grade's own name afnor
A 564 630	This grade's own name astm		
A 564 T 630	astm	United States / Aerospace	6
A 693	astm	5604	ams
A1028	astm	5622	ams
A56	astm	5642	ams
A564 Grade 630	astm	5643	ams
A564 Type 630	astm	5825	ams
A705	astm	5827	ams
A982	astm		
F593	astm	Russia / CIS	6
F594	astm	05Ch16N4D2B	gost
F738	astm	05X16H4Д2Б	gost
F836	astm	07Ch14N4DB	gost
F899	astm	07Ch16N4D4B-Sh	gost
		07X14H4ДБ	gost
		07X16H4Д4Б-Ш	gost
		Japan	4
		SCS 24	This grade's own name jis
		SUS 630	This grade's own name jis
		SUS 630FB	jis
		SUS F 630	jis

Europe	2
1.4542	din-en
X5CrNiCuNb16-4 This grade's own name	din-en

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 Z7CNU15-05

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	1.4542	Aug 20, 2026