

MATERIAL NUMBER 1.4540 · CLASS 1.4

1.4540

Chemical composition, mechanical and physical property values, and 26 standard designations from 5 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 26 in 5 regions	PROPERTY VALUES 9 on file
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Chemical composition

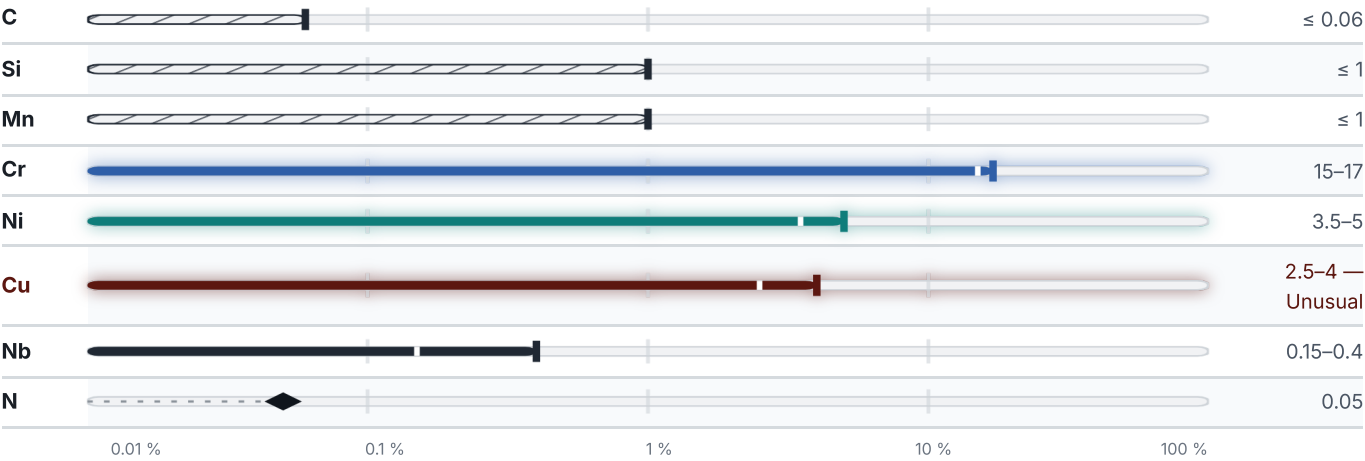
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 74.1 % ● Cr — 16 % ● Ni — 4.3 % ● Cu — 3.3 % ● Traces & impurities · 2.4 %

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

26 designations · 3 documented as identical

United States11		France5	
S15500	This grade's own nameuns	17-4 DP	afnor
S17400	uns	174 PH	afnor
15-5PH	aisi-sae	X17U4	afnor
630	aisi-sae	Z7CNU16-04	afnor
XM-12	This grade's own nameaisi-sae	Z7CNU17-04	afnor
17-4 PH	astm		
A564	astm	United States / Aerospace3	
A564 Type XM-12	astm	5659	ams
A693	astm	5826	ams
A705	astm	5862	ams
A705 Type XM-12	astm		
Russia / CIS6		Europe1	
05Ch16N4D2B	gost	X4CrNiCuNb16-4	This grade's own namedin-en
05X16H4Д2Б	gost		
07Ch14N4DB	gost		
07Ch16N4D4B-Sh	gost		
07X14H4ДБ	gost		
07X16H4Д4Б-Ш	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 1.4540

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	1.4540	Aug 20, 2026