SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.4545 · CLASS 1.4

1.4545

Chemical composition, mechanical and physical property values, and 12 standard designations from 3 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.85 g/cm³	12 in 3 regions	10 on file

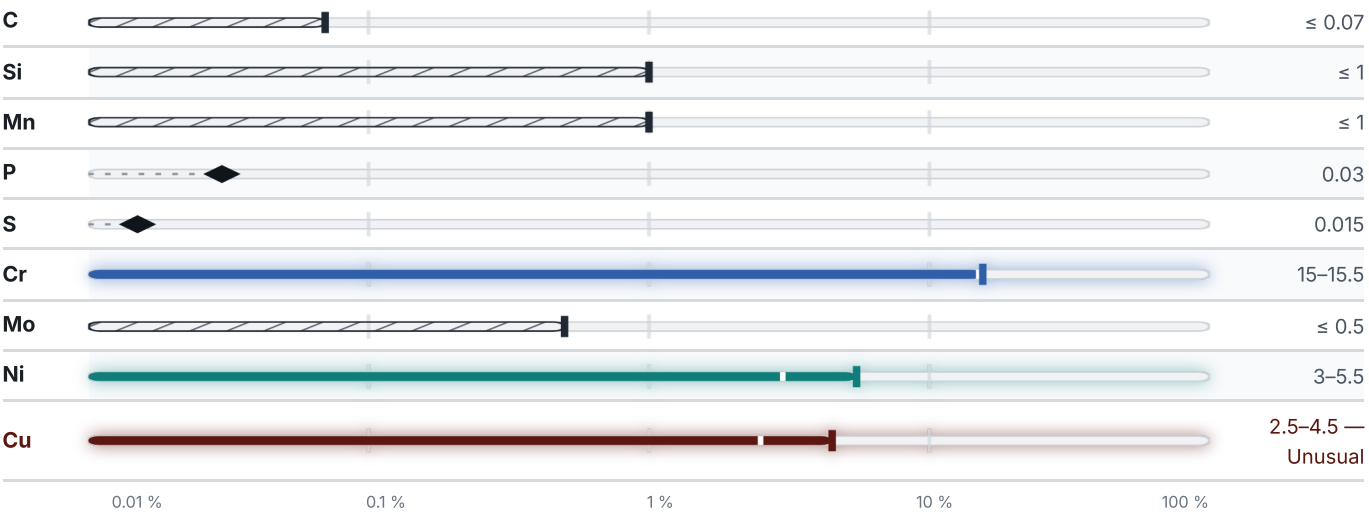
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 74.4 % · Cr — 15.3 % · Ni — 4.3 % · Cu — 3.5 % · Traces & impurities · 2.6 %

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.

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

12 designations · 3 documented as identical

United States 8

S15500 This grade's own name	uns
15-5PH	aisi-sae
XM-12 This grade's own name	aisi-sae
A564	astm
A564 Type XM-12	astm
A693	astm
A705	astm
A705 Type XM-12	astm

United States / Aerospace 3

5659	ams
5826	ams
5862	ams

Europe 1

X5CrNiCu15-5 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 1.4545

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	1.4545	Aug 20, 2026