

MATERIAL NUMBER 1.4534 · CLASS 1.4

5840

Material no. 1.4534

also listed as X3CrNiMoAl13-8-2

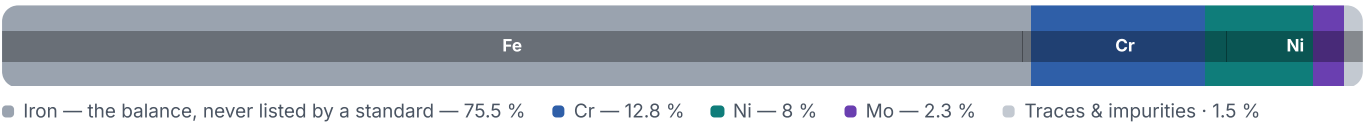
Chemical composition, mechanical and physical property values, and 15 standard designations from 3 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 15 in 3 regions	PROPERTY VALUES 12 on file
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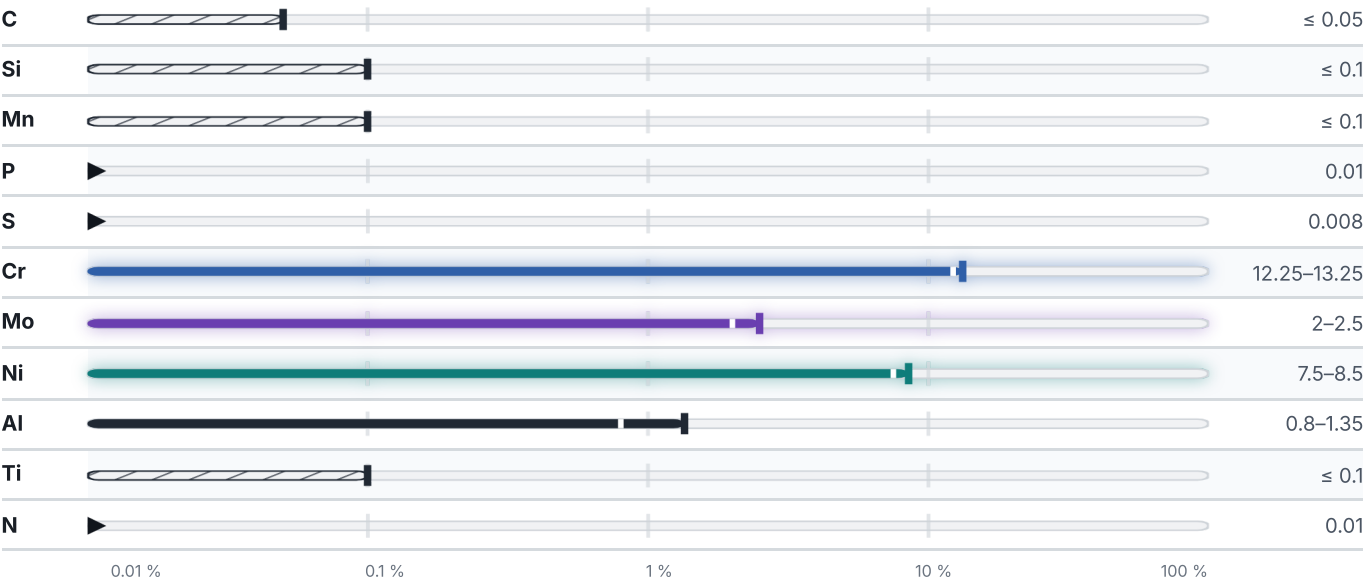
Chemical composition

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.

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

15 designations · 3 documented as identical

United States	9	United States / Aerospace	5
S13800 This grade's own name	uns	5412	ams
PH13-8Mo	aisi-sae	5629	ams
XM-13 This grade's own name	aisi-sae	5840	ams
A 564	astm	5864	ams
A 564 Grade XM13	astm	5934	ams
A 705	astm	Europe	1
A564 Type XM-13	astm		
A693	astm	X3CrNiMoAl13-8-2 This grade's own name	din-en
F899	astm		

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 5840

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	1.4534	Aug 20, 2026