

MATERIAL NUMBER 1.4534 · CLASS 1.4

1.4534

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

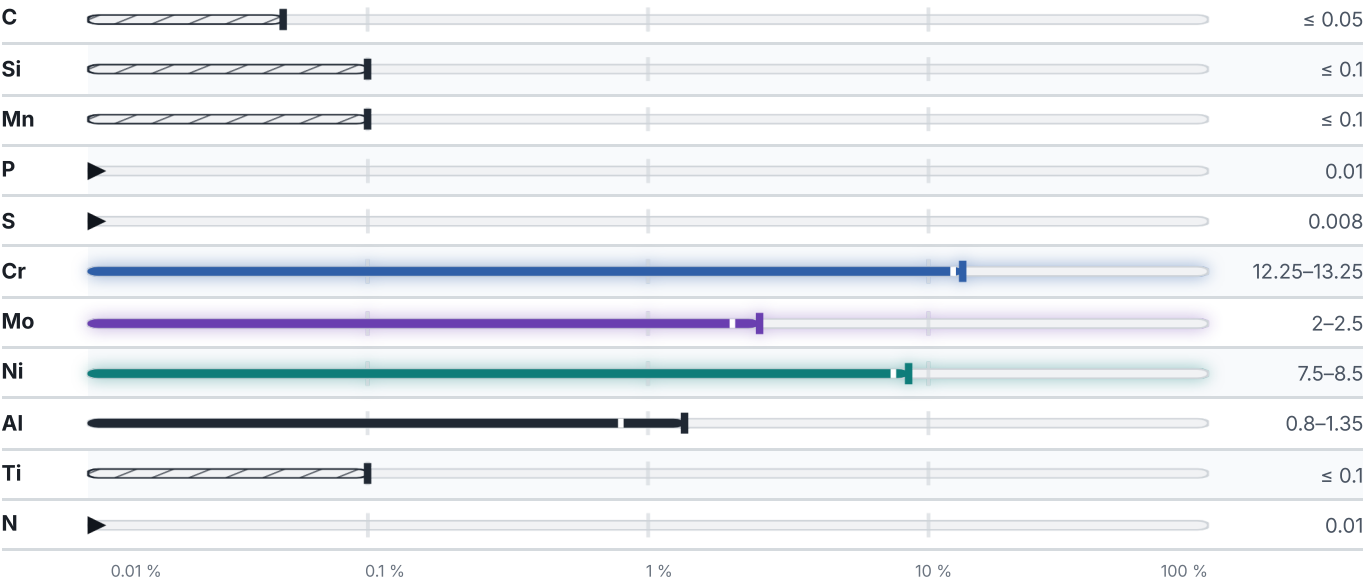
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 75.5 % ● Cr — 12.8 % ● Ni — 8 % ● Mo — 2.3 % ● Traces & impurities · 1.5 %

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

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			
A564 Type XM-13		astm	Europe		1
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 1.4534

Quotation, availability, mill certificate or a technical question — directly on the material page.

Start an enquiry

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

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ISSUED

Aug 20, 2026