

MATERIAL NUMBER 1.4534 · CLASS 1.4

# 5412

## Material no. 1.4534

also listed as X3CrNiMoAl13-8-2

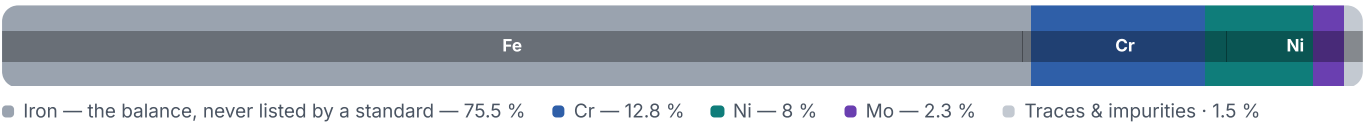
Chemical composition, mechanical and physical property values, and 15 standard designations from 3 regions.

|                                          |                                              |                                      |
|------------------------------------------|----------------------------------------------|--------------------------------------|
| DENSITY<br><b>7.85</b> g/cm <sup>3</sup> | OTHER DESIGNATIONS<br><b>15</b> in 3 regions | PROPERTY VALUES<br><b>12</b> on file |
|------------------------------------------|----------------------------------------------|--------------------------------------|

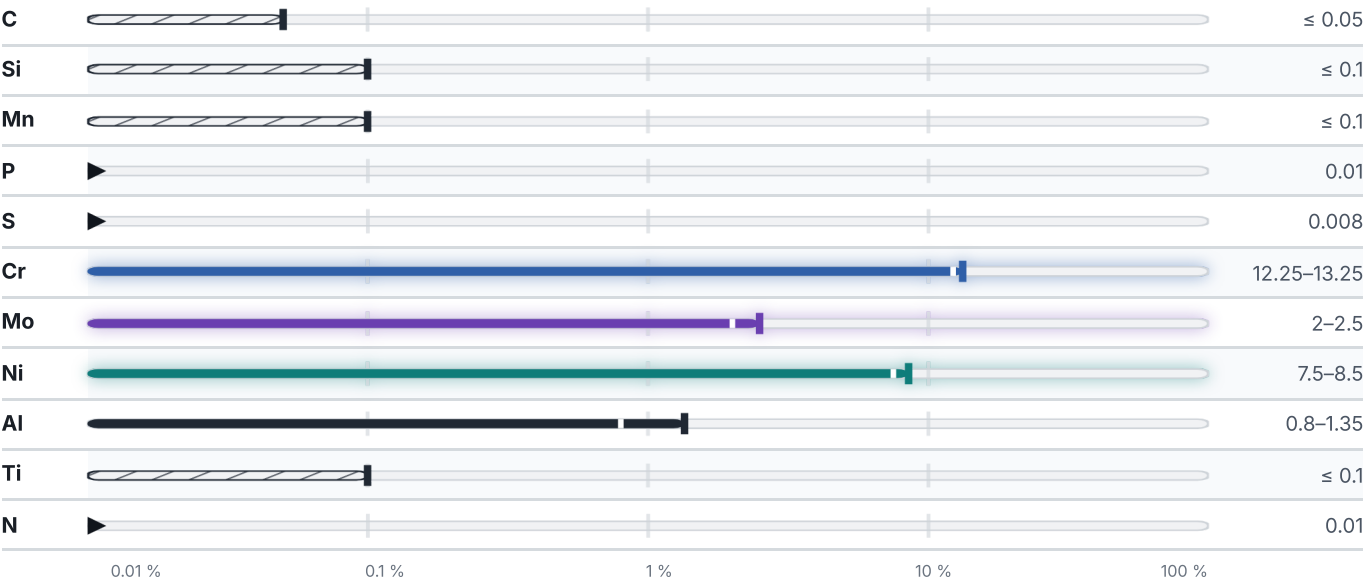
### Chemical composition

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 <sup>3</sup> |

Designations across standards

15 designations · 3 documented as identical

|                                           |          |                                                     |        |
|-------------------------------------------|----------|-----------------------------------------------------|--------|
| United States                             | 9        | United States / Aerospace                           | 5      |
| S13800 <span>This grade's own name</span> | uns      | 5412                                                | ams    |
| PH13-8Mo                                  | aisi-sae | 5629                                                | ams    |
| XM-13 <span>This grade's own name</span>  | 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 <span>This grade's own name</span> | 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 5412

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

[Start an enquiry](#)

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1.4534

ISSUED  
Aug 20, 2026