

MATERIAL NUMBER 1.8550 · CLASS 1.8

34CrAlNi7-10

Material no. 1.8550

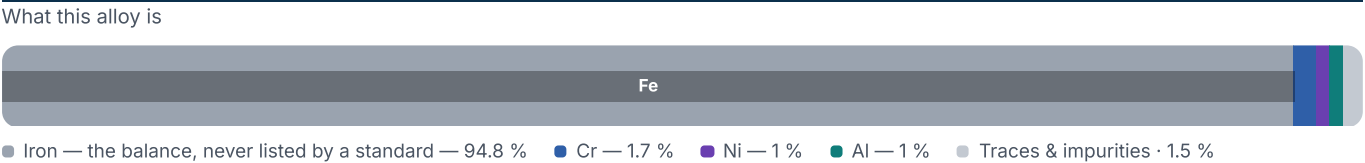
also listed as 34CrAlNi7

Chemical composition, mechanical and physical property values, and 5 standard designations from 4 regions.

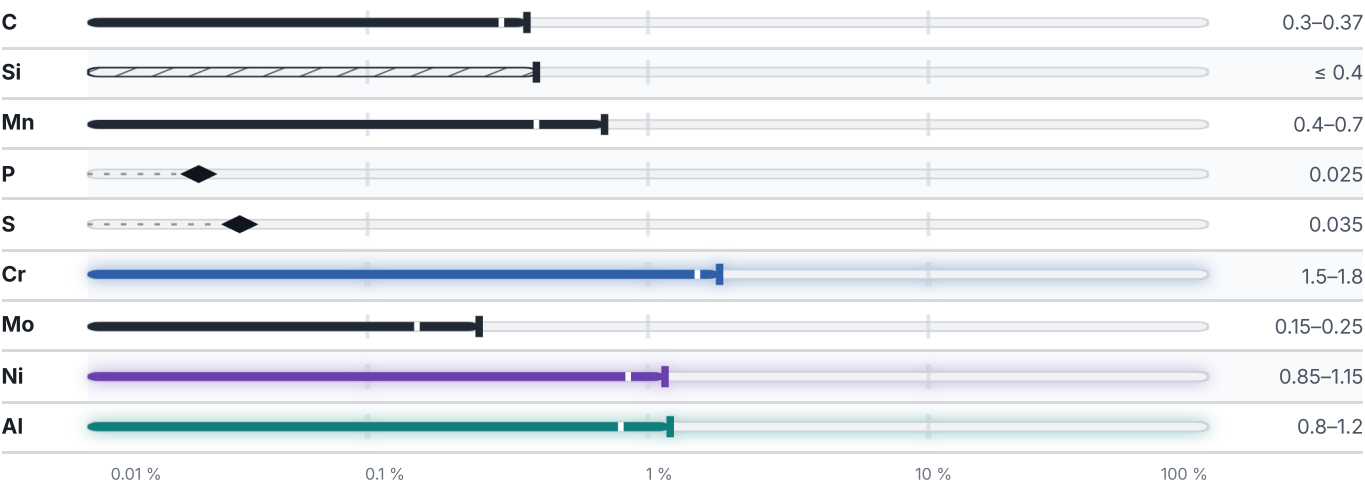
DENSITY 7.6 g/cm³	OTHER DESIGNATIONS 5 in 4 regions	PROPERTY VALUES 10 on file
-----------------------------	---	--------------------------------------

Chemical composition

Mass fraction in %



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

computed from composition · °C

PREDICTED AE3 773 °C	PREDICTED AE1 747 °C	PREDICTED ACM 605 °C	PREDICTED BS 502 °C
--------------------------------	--------------------------------	--------------------------------	-------------------------------

Mechanical properties

9 values across 2 conditions

QUENCHED AND TEMPERED	RM N/mm ²	A %
16 – 40	900–1100	10
40 – 100	850–1050	12
100 – 160	800–1000	13
160 – 250	800–1000	13
SOFT ANNEALED		HB
Soft annealed		248

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.6	g/cm ³

Heat treatment

4 regimes

STEP	TEMPERATURE	MEDIUM
Soft annealing	Temperature not stated	—
Nitriding	Temperature not stated	—
source joins the operations with + / procedural order		
Quenching	Temperature not stated	—
Tempering	Temperature not stated	—
source joins the operations with + / procedural order		
Quenching	Temperature not stated	—
Tempering	Temperature not stated	—

Designations across standards

5 designations · 3 documented as identical

Europe	2	Poland	1
34CrAlNi7 This grade's own name	din-en	33H2NMJ	pn
34CrAlNi7-10 This grade's own name	din-en		
		Serbia	1
United States	1	Č.4531	srps
K52440 This grade's own name	uns		

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 34CrAlNi7-10
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

MATERIAL NO.
1.8550

ISSUED
Aug 20, 2026