SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.4125 · CLASS 1.4

1.4125

Chemical composition, mechanical and physical property values, and 50 standard designations from 10 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.7 g/cm³	50 in 10 regions	11 on file

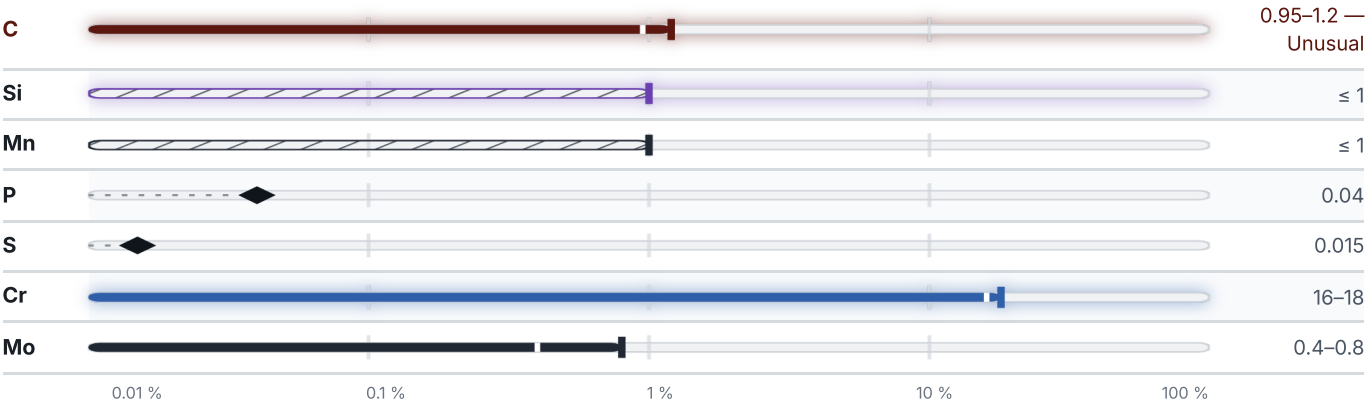
Chemical composition

Mass fraction in %

What this alloy is

Iron — the balance, never listed by a standard — 79.3 % · Cr — 17 % · C — 1.1 % · Si — 1 % · Traces & impurities · 1.7 %

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

Not enough recorded composition to predict a transformation temperature for this grade — missing: Ni.

Mechanical properties

6 values across 3 conditions

SOFT ANNEALED	HB
Soft annealed	285

CONDITION · DIMENSION	RM N/mm²	RE N/mm²	A5 %	Z %
Bar	770	420	15	30

CONDITION · DIMENSION	HB
95KH18 (95X18) (annealing) , Bar GOST 5949-75	269

Physical properties

4 values

CONDITION · DIMENSION	RHO g/cm³	E GPa	ALPHA 10^-6/K	LAMBDA W/(m·K)	CP J/(kg·K)
20	7.75	204	–	24	–
100	7.73	–	11.8	–	483
200	–	–	12.3	–	–
300	–	–	12.7	–	–
400	–	–	13.1	–	–
500	–	–	13.4	–	–

PROPERTY	VALUE	UNIT
Density	7.7	g/cm³
Transformation point Ac1	830	°C
Transformation point Ac3	1100	°C
Transformation point Ar3	810	°C

Designations across standards

50 designations · 5 documented as identical

United States 27

S44002	uns
S44003	uns
S44004 This grade's own name	uns
S44020	uns
S44025 This grade's own name	uns
400C	aisi-sae
440A	aisi-sae
440B	aisi-sae
440C This grade's own name	aisi-sae
440F	aisi-sae
440FSe	aisi-sae
51440C	aisi-sae
617 This grade's own name	aisi-sae
A756	aisi-sae
S44004	aisi-sae
S44025	aisi-sae
A 480	astm
A276	astm
A314	astm
A473	astm
A484	astm
A493	astm
A580	astm
F116	astm
F1613	astm
F2215	astm
F899	astm

United States / Aerospace 7

5618	ams
5630	ams
5631	ams
5632	ams
5880	ams
5899	ams
7445	ams

Russia / CIS 6

110Ch18M-SChD	gost
95Ch18	gost
95KH18	gost
95X18	gost
9X18	gost
ЭИ229	gost

France 2

X105CrMo17	afnor
Z100CD17	afnor

International 2

A-1b	iso
X108CrMo17	iso

China 2

11Cr17	gb
9Cr18	gb

Europe 1

X105CrMo17 This grade's own name	din-en

Japan 1

SUS 440C	jis

Czechia 1

17042	csn

Poland 1

H18	pn

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 1.4125

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	1.4125	Aug 20, 2026