

MATERIAL NUMBER 1.2714 · CLASS 1.2

5KhNMF

Material no. 1.2714

also listed as 55NiCrMoV7

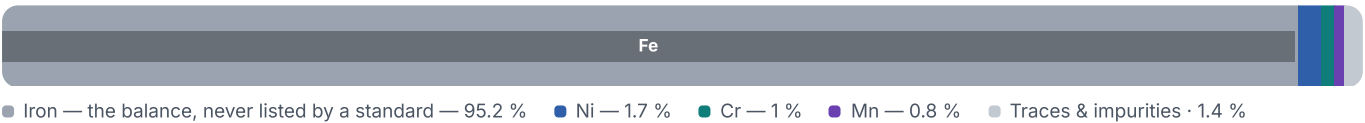
Chemical composition, mechanical and physical property values, and 31 standard designations from 15 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 31 in 15 regions	PROPERTY VALUES 17 on file
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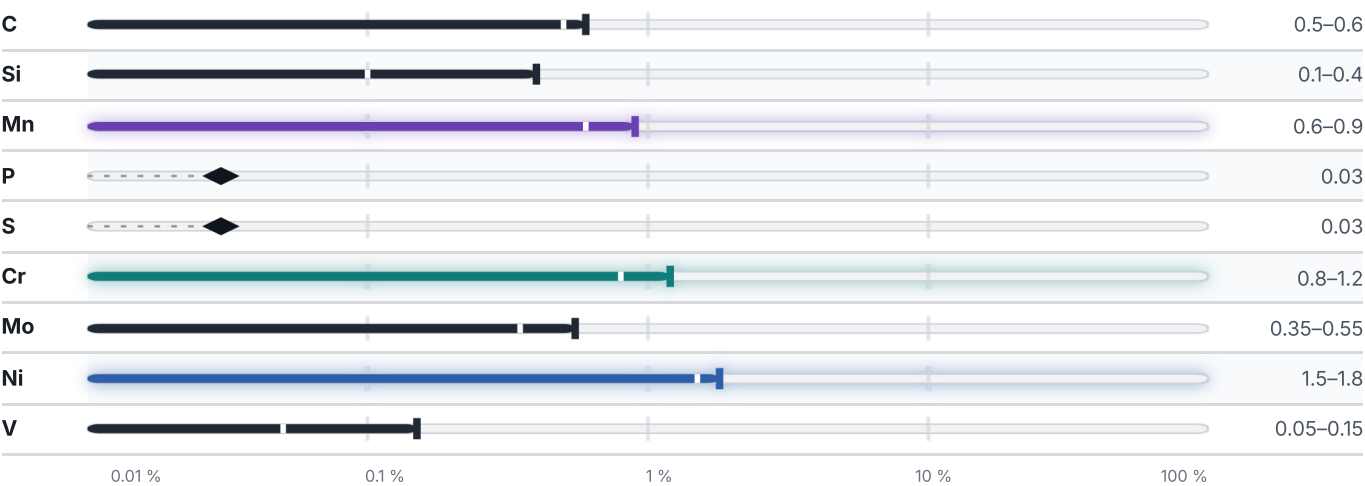
Chemical composition

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

computed from composition · °C

PREDICTED AE3 718 °C	PREDICTED AE1 721 °C	PREDICTED ACM 716 °C	PREDICTED BS 480 °C
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Mechanical properties

9 values across 4 conditions

CONDITION · DIMENSION		HB			HRC
Annealed		248			–
Quenched and tempered		–			42
SOFT ANNEALED					HB
Soft annealed					248
QUENCHING 850°C, OIL, DRAWING 460 - 520°C	RM N/mm²	RE N/mm²	A5 %	Z %	KCU kJ/m²
100 - 200	1570	1420	9	35	340
CONDITION · DIMENSION					HB
(annealing) , GOST 5950-2000					241

Physical properties

8 values

CONDITION · DIMENSION	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)	RHO_EL nΩ·m
100	–	38	300
200	12.6	40	250
300	–	42	200
400	–	42	160
500	–	44	–
600	14.2	46	–
PROPERTY		VALUE	UNIT
Density		7.85	g/cm ³
Transformation point Ac1		730	°C
Transformation point Ac3		780	°C
Transformation point Ar3		640	°C
Transformation point Ar1		610	°C

Technological properties

PROPERTY	VALUE	UNIT
Weldability	is not used.	
Flake sensitivity	predisposed	

PROPERTY	VALUE	UNIT
Temper brittleness	not predisposed	

Designations across standards

31 designations · 4 documented as identical

Russia / CIS		4	International		2
5KHNM		gost	55NiCrMoV7		iso
5KhNMF		gost	56NiCrMoV7		iso
5KHNV		gost			
5XHB		gost	Japan		2
Europe		3	SKS51		jis
55NiCrMoV6		din-en	SKT4		jis
55NiCrMoV7	This grade's own name	din-en	Czechia		2
56NiCrMoV7	This grade's own name	din-en	19662		csn
United States		3	19663		csn
T61206	This grade's own name	uns	Austria		2
T61206 / L6		uns	W501		onorm
L6	This grade's own name	aisi-sae	W502		onorm
Italy		3	France		1
44NiCrMoV7-KU		uni	55NCDV7		afnor
55NiCrMoV7KU		uni			
56NiCrMoV7-KU		uni	China		1
Poland		3	5CrNiMo		gb
WNL		pn	Sweden		1
WNL1		pn	2550		ss
WNLV		pn	Slovakia		1
United Kingdom		2	19 663		stn
BH224-5		bs	Serbia		1
BL6		bs	Č.5742		srps

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 5KhNMF

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	1.2714	Aug 20, 2026