

MATERIAL NUMBER 1.2714 · CLASS 1.2

W501

Material no. 1.2714

also listed as 55NiCrMoV7

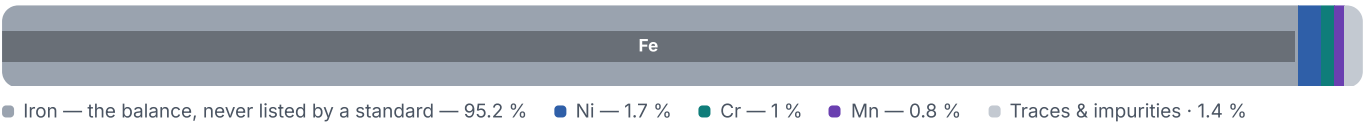
Chemical composition, mechanical and physical property values, and 31 standard designations from 15 regions.

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

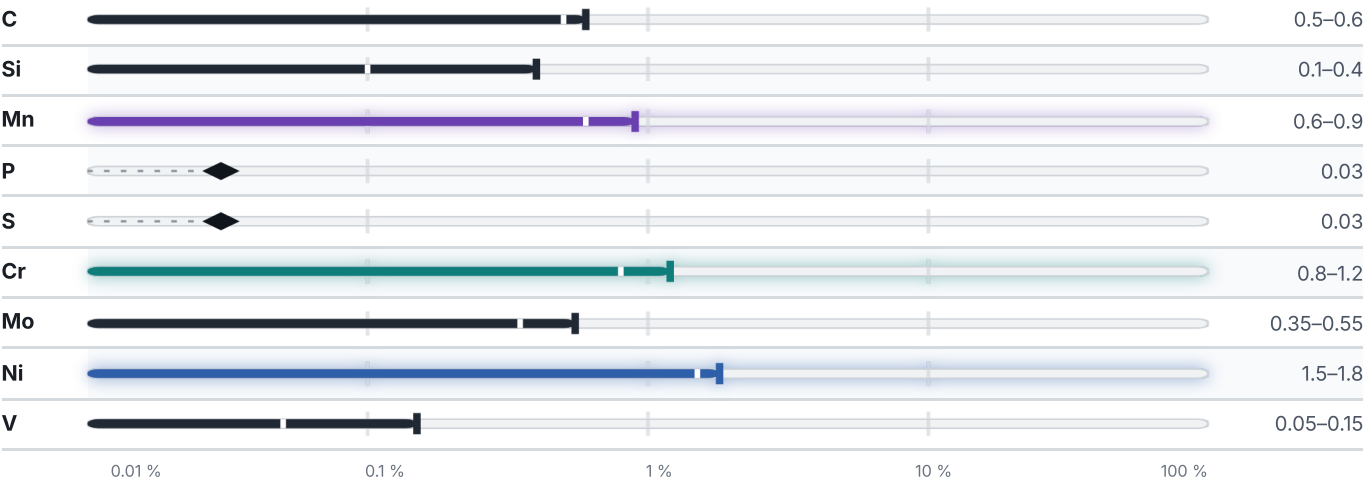
Chemical composition

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
--------------------------------	--------------------------------	--------------------------------	-------------------------------

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/cm³	
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
		SKS51	jis
Europe	3	SKT4	jis
55NiCrMoV6	din-en	Czechia	2
55NiCrMoV7	This grade's own name din-en	19662	csn
56NiCrMoV7	This grade's own name din-en	19663	csn
United States	3	Austria	2
T61206	This grade's own name uns	W501	onorm
T61206 / L6	uns	W502	onorm
L6	This grade's own name aisi-sae		
Italy	3	France	1
44NiCrMoV7-KU	uni	55NCDV7	afnor
55NiCrMoV7KU	uni		
56NiCrMoV7-KU	uni	China	1
		5CrNiMo	gb
Poland	3	Sweden	1
WNL	pn	2550	ss
WNL1	pn		
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 W501

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