

MATERIAL NUMBER 1.1520 · CLASS 1.1

1.1520

Chemical composition, mechanical and physical property values, and 21 standard designations from 12 regions.

DENSITY 7.85 g/cm ³	OTHER DESIGNATIONS 21 in 12 regions	PROPERTY VALUES 12 on file
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Chemical composition

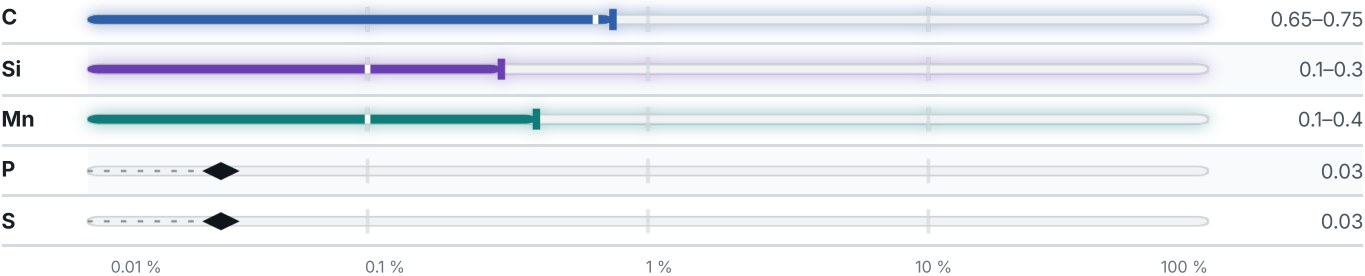
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 98.8 % ● C — 0.7 % ● Mn — 0.3 % ● Si — 0.2 % ● Traces & impurities · 0.1 %

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, Cr, Mo.

Mechanical properties

4 values across 3 conditions

SOFT ANNEALED	HB
Soft annealed	183

AS-DELIVERED STATE	RM N/mm ²	A5 %
to 1	650	15
CONDITION · DIMENSION	HB	
(annealing) , GOST 1435-99	187	

Physical properties

7 values

CONDITION · DIMENSION	RHO g/cm ³	LAMBDA W/(m·K)	CP J/(kg·K)	RHO_EL nΩ·m
20	7.83	46	–	130
100	–	46	–	–
300	–	41	580	–
400	–	–	664	–
500	–	–	819	–
600	–	33	970	–
700	–	–	710	–
800	–	–	706	–
900	–	29	685	–
PROPERTY	VALUE		UNIT	
Density	7.85		g/cm ³	
Transformation point Ac1	730		°C	
Transformation point Ac3	770		°C	
Transformation point Ar1	700		°C	

Technological properties

PROPERTY	VALUE	UNIT
Weldability	is not used.	
Flake sensitivity	not predisposed	
Temper brittleness	not predisposed	

Designations across standards

21 designations · 2 documented as identical

Europe	4	Slovakia	2
1.1620	din-en	19 132	stn
C70U This grade's own name	din-en	19 133	stn
C70W1 This grade's own name	din-en		
C70W2	din-en	Poland	2
		N7	pn
International	2	N7E	pn
C70U	iso		
C70W1	iso	United States	1
		W1-7	aisi-sae
Japan	2		
SK6	jis	France	1
SK7	jis	C70E2U	afnor
Russia / CIS	2	China	1
U7	gost	T7	gb
Y7A	gost		
		Italy	1
Czechia	2	C70KU	uni
19132	csn		
19133	csn	Austria	1
		K970	onorm

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 1.1520

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	1.1520	Aug 20, 2026