

MATERIAL NUMBER 1.1645 · CLASS 1.1

W1-9

Material no. 1.1645

also listed as C105W2

Chemical composition, mechanical and physical property values, and 45 standard designations from 18 regions.

DENSITY

7.85 g/cm³

OTHER DESIGNATIONS

45 in 18 regions

PROPERTY VALUES

6 on file

Chemical composition

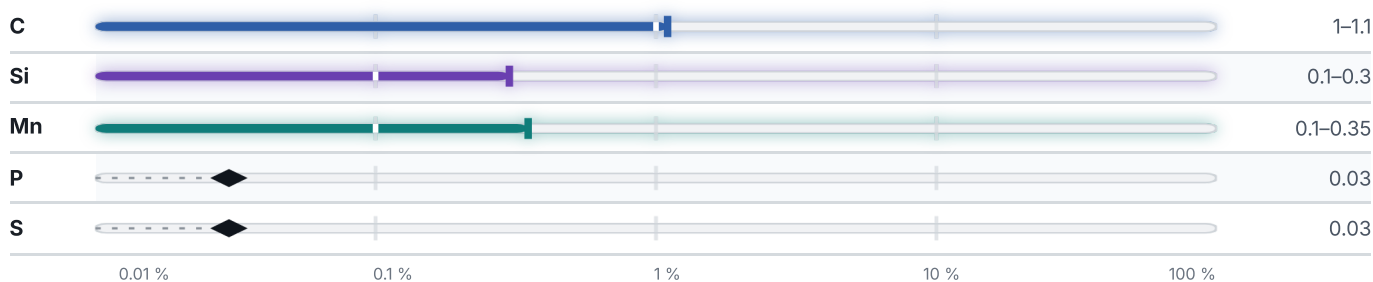
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 98.5 % ● C — 1.1 % ● Mn — 0.2 % ● 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.

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³

Designations across standards

45 designations · 1 documented as identical

United States	7	Bulgaria	3
T72301	uns	U10	bds
G51320	aisi-sae	U11	bds
T72301	aisi-sae	U12	bds
W 1	aisi-sae	Spain	2
W1-9	aisi-sae	C102	une
W110	aisi-sae	F.5117C102	une
W110Extra	aisi-sae		
France	4	Japan	2
C105E2U	afnor	SK3	jis
C120E3U	afnor	SK4	jis
Y1-90	afnor	China	2
Y2105	afnor	T10	gb
Poland	4	T11	gb
N10	pn	Hungary	2
N10E	pn	S101	msz
N11	pn	S102	msz
N11E	pn		
United Kingdom	3	Austria	2
1645	bs	BOHLERK990	onorm
BW1A	bs	K990	onorm
BW1B	bs	Europe	1
International	3	C105W2	This grade's own name din-en
C105U	iso	Italy	1
CT105	iso	C100KU	uni
TC105	iso		
Russia / CIS	3	Sweden	1
U10	gost	1880	ss
U10A	gost	Romania	1
Y10	gost	OSC10	stas
Czechia	3	South Korea	1
19 192 PH	csn	STC3	ks
19191	csn		
19192	csn		

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 W1-9

Quotation, availability, mill certificate or a technical question — directly on the material page.

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ISSUED

Aug 20, 2026