

MATERIAL NUMBER 1.1730 · CLASS 1.1

C45W

Material no. 1.1730

also listed as C45U

Chemical composition, mechanical and physical property values, and 19 standard designations from 13 regions.

DENSITY**7.85** g/cm³**OTHER DESIGNATIONS****19** in 13 regions**PROPERTY VALUES****6** on file

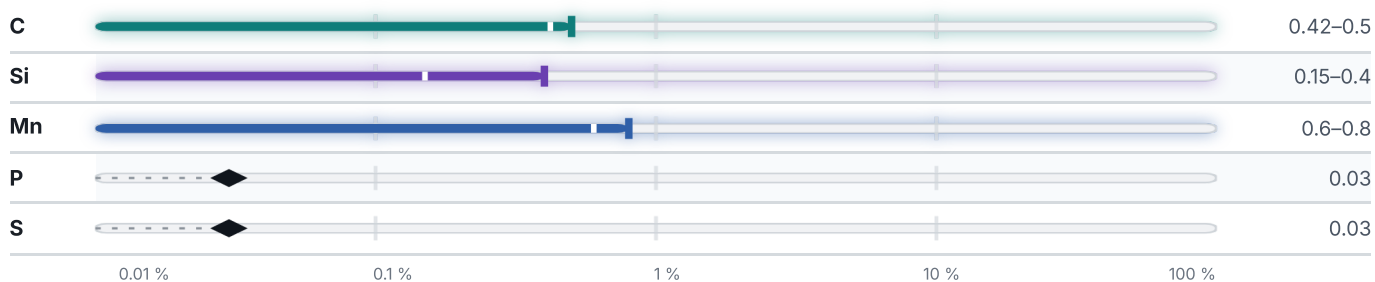
Chemical composition

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

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

Mechanical properties

1 values across 1 conditions

SOFT ANNEALED

HB

Soft annealed

207

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³

Designations across standards

19 designations · 4 documented as identical

United States		4	France		1
G10450	This grade's own name	uns	XC48 / C45E		afnor
1045	This grade's own name	aisi-sae	Spain		1
W1045 przybliż		aisi-sae			
A830		astm	F.114		une
Europe		2	Japan		1
C45U	This grade's own name	din-en	S45C przybliż.		jis
C45W	This grade's own name	din-en	China		1
Czechia		2			
19065		csn	45		gb
19083		csn	Russia / CIS		1
Poland		2	45		gost
N7E		pn	Italy		1
stal narzędziowa węglowa		pn	C45		uni
United Kingdom		1	Sweden		1
080M46		bs	1672		ss
			Slovakia		1
			19 083		stn

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 C45W

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	1.1730	Aug 20, 2026