

MATERIAL NUMBER 1.1563 · CLASS 1.1

C140E3U

Material no. 1.1563

also listed as C125U

Chemical composition, mechanical and physical property values, and 32 standard designations from 13 regions.

DENSITY

7.85 g/cm³

OTHER DESIGNATIONS

32 in 13 regions

PROPERTY VALUES

9 on file

Chemical composition

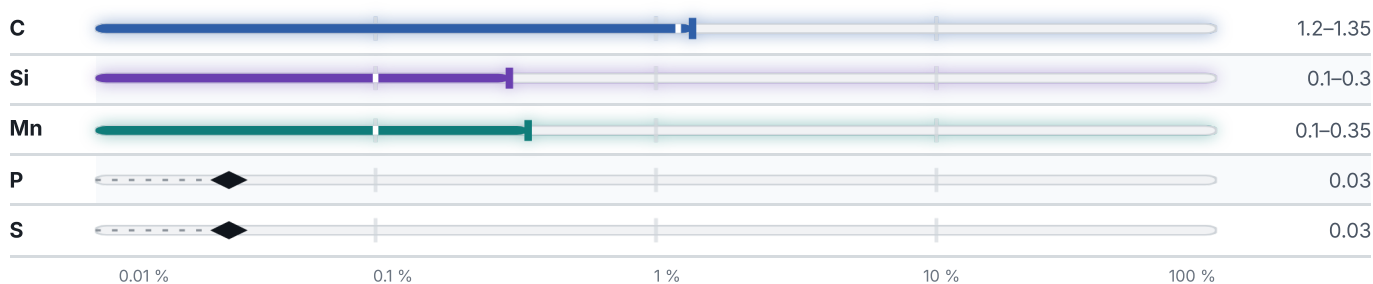
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 98.2 % ● C — 1.3 % ● 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.

Mechanical properties

2 values across 2 conditions

CONDITION · DIMENSION	RM N/mm ²
0.08 - 3	900

CONDITION · DIMENSION	HB
(annealing)	217

Physical properties

4 values

CONDITION · DIMENSION	RHO g/cm ³
20	7.8

PROPERTY	VALUE	UNIT
Density	7.85	g/cm ³
Transformation point Ac1	730	°C
Transformation point Ac3	830	°C
Transformation point Ar1	700	°C

Designations across standards

32 designations · 4 documented as identical

Russia / CIS	8	Spain	2
13GS	gost	C120	une
13KhFA	gost	F.5123	une
13KhFYu	gost		
13ГC-Y	gost	Japan	2
PKG13	gost	SK1	jis
U13	gost	SK2	jis
ПКГ13-7.4	gost		
Y13	gost	Italy	2
		C120KU	uni
United States	5	C140KU	uni
T72301	uns		
T72301	aisi-sae	Poland	2
W1-13	aisi-sae	N12	pn
W112 This grade's own name	aisi-sae	N13	pn
W1C 1,20% This grade's own name	aisi-sae		
		Hungary	2
France	3	S131	msz
C120E3U	afnor	S132	msz
C140E3U	afnor		
Y240	afnor	Czechia	1
		19 255	csn
Europe	2		
C125U This grade's own name	din-en	Serbia	1
C125W This grade's own name	din-en	Č.1943	srps
		Bulgaria	1
		U13	bds

Austria	1
K995	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 C140E3U

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	1.1563	Aug 20, 2026