

MATERIAL NUMBER 1.1563 · CLASS 1.1

13GS

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

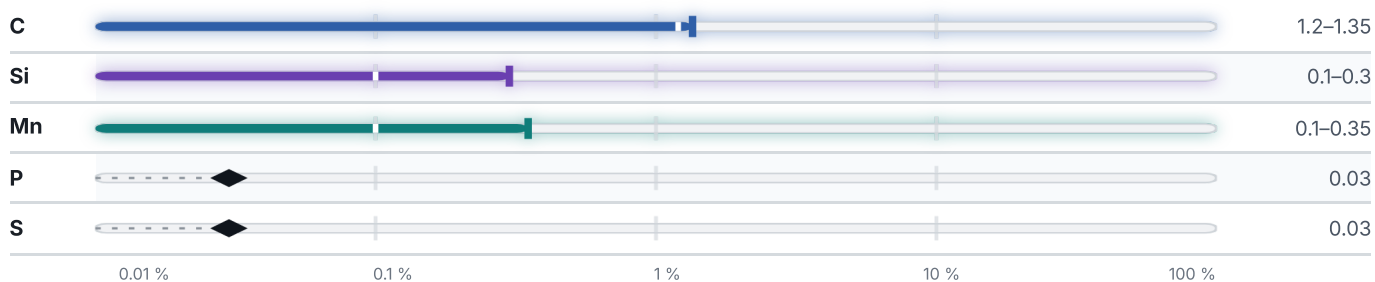
Mass fraction in %

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/cm³	
20	7.8	

PROPERTY	VALUE	UNIT
Density	7.85	g/cm³
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		Japan		2
13ГC-Y	gost		SK1	jis	
PKG13	gost		SK2	jis	
U13	gost		Italy		2
ПКГ13-7.4	gost		C120KU	uni	
Y13	gost		C140KU	uni	
United States		5	Poland		2
T72301	uns		N12	pn	
T72301	aisi-sae		N13	pn	
W1-13	aisi-sae		Hungary		2
W112	This grade's own name	aisi-sae	S131	msz	
W1C 1,20%	This grade's own name	aisi-sae	S132	msz	
France		3	Czechia		1
C120E3U	afnor		19 255	csn	
C140E3U	afnor		Serbia		1
Y240	afnor		Č.1943	srps	
Europe		2	Bulgaria		1
C125U	This grade's own name	din-en	U13	bds	
C125W	This grade's own name	din-en			

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 13GS

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