

MATERIAL NUMBER 1.3505 · CLASS 1.3

G52986 / G52950

Material no. 1.3505

also listed as 100Cr6

Chemical composition, mechanical and physical property values, and 61 standard designations from 21 regions.

DENSITY	OTHER DESIGNATIONS	PROPERTY VALUES
7.8 g/cm ³	61 in 21 regions	17 on file

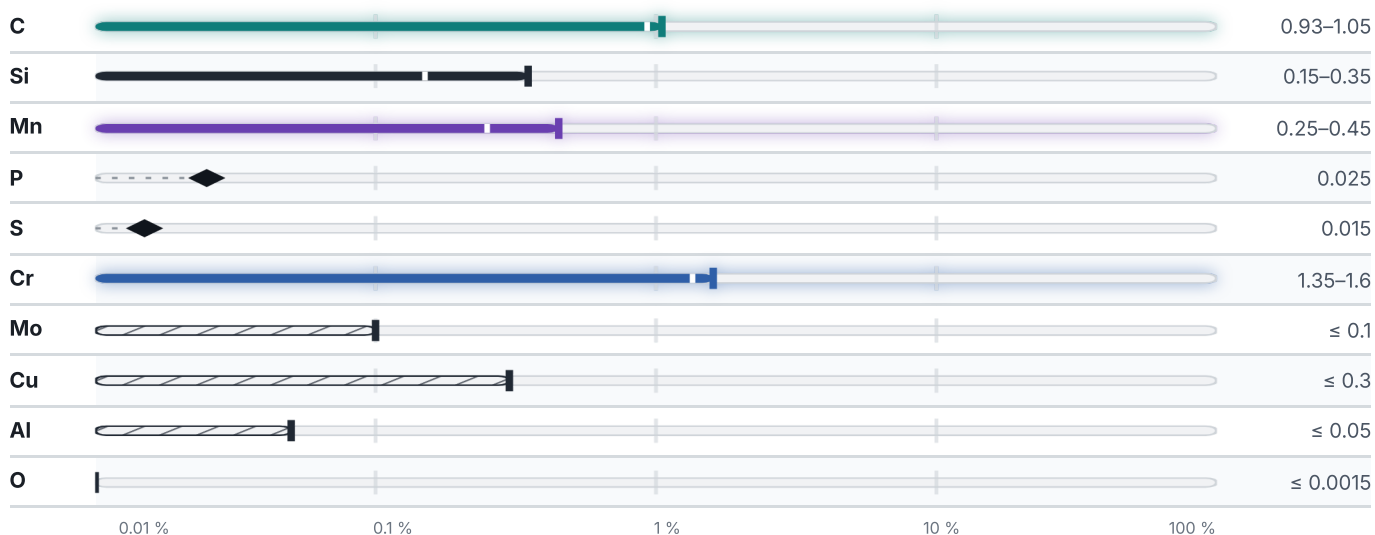
Chemical composition

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.

Mechanical properties

6 values across 2 conditions

QUENCHING 850°C, OIL, DRAWING 600°C, AIR	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
Ø 25	620	370	15	40	490
CONDITION · DIMENSION					HB
(annealing) , GOST 4543-71					229

Physical properties

7 values

PROPERTY	VALUE	UNIT
Density	7.8	g/cm ³
Transformation point Ac1	715	°C
Transformation point Ac3	735	°C
Transformation point Ar3	710	°C
Transformation point Ar1	635	°C

Technological properties

PROPERTY	VALUE	UNIT
Weldability	hard weldability.	
Temper brittleness	weakly predisposed	

Heat treatment

5 regimes

STEP	TEMPERATURE	MEDIUM
Quenching	Temperature not stated	—
Quenching	830–860 °C	Oil
Annealing	Temperature not stated	—
Spheroidize annealing	Temperature not stated	—
Annealing	Temperature not stated	—

Designations across standards

61 designations · 4 documented as identical

United States		13	Poland		3
AMS 6440		uns	LH15		pn
G52985		uns	ŁH15		pn
G52986		uns	NC4		pn
G52986 / G52950		uns			
J19965	This grade's own name	uns	Europe		2
K23080		uns	1.3505		din-en
S-22141		uns	100Cr6	This grade's own name	din-en
52100		aisi-sae			
ASTM 52100		aisi-sae	International		2
E52100		aisi-sae	100Cr6		iso
G52986		aisi-sae	3505		iso
J19965		aisi-sae			
A646		astm	United States / Aerospace		2
			6440		ams
			6444		ams
Russia / CIS		7			
Šch15		gost	Japan		2
SchCh15	This grade's own name	gost	SUJ2		jis
ShCh15		gost	SUJ4		jis
SHKH15		gost			
ШХ15		gost	Czechia		2
ШХ15-В		gost	14100		csn
ШХ15-Ш		gost	14109		csn
United Kingdom		5	Romania		2
2S135		bs	RUL1		stas
534A99		bs	RUL1v		stas
535A99	This grade's own name	bs			
EN31		bs	South Korea		2
S135		bs	STB2		ks
			STB4		ks
Spain		5			
100		une	Italy		1
100Cr6		une	100Cr6		uni
Cr6		une			
F.131		une	Sweden		1
F.1310		une	2258		ss
China		4	Slovakia		1
45G		gb	14 109		stn
Cr2		gb			
GCr15		gb	Latin America		1
Gr15		gb	52100		copant
France		3	Hungary		1
100C6		afnor	GO3		msz
100Cr6		afnor			
100Cr6RR		afnor			

Australia / New Zealand		1	Bulgaria		1
5210	as-nzs		SchCh15		bds

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 G52986 / G52950

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	1.3505	Sep 8, 2026