

MATERIAL NUMBER 1.2067 · CLASS 1.2

Y100C6

Material no. 1.2067

also listed as 100Cr6

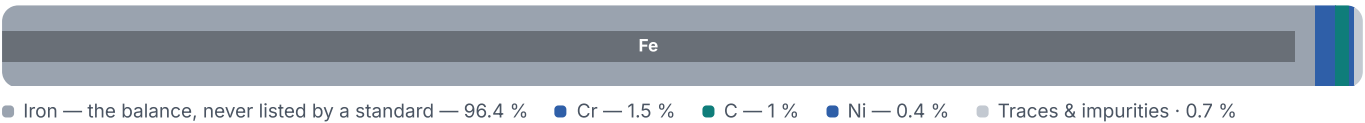
Chemical composition, mechanical and physical property values, and 53 standard designations from 20 regions.

DENSITY 7.85 g/cm³	OTHER DESIGNATIONS 53 in 20 regions	PROPERTY VALUES 15 on file
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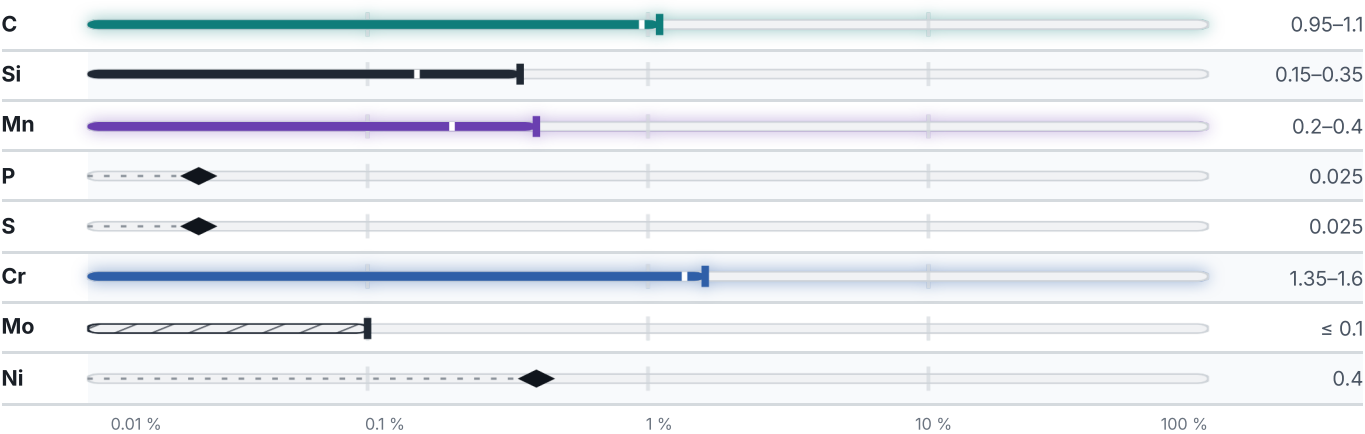
Chemical composition

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

This grade's composition falls outside the published model's validated range (a low-alloy composition window), so no transformation temperature is predicted here.

Mechanical properties

13 values across 7 conditions

SOFT ANNEALED		RM N/mm ²	A80 %		
0.3 – 3		750	11		
CONDITION · DIMENSION		HB			
Hot rolled		201			
QUENCHED AND TEMPERED		RM N/mm ²			
0.3 – 3		1300–2100			
SOFT ANNEALED		HB	HV		
Soft annealed		223	235		
QUENCHED AND TEMPERED		HV			
Quenched and tempered		405–630			
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²
Steel	590–730	370–410	20	45	440
CONDITION · DIMENSION		HB			
SHKH15 (ШХ15) , GOST 801-78		179–207			

Physical properties

7 values

CONDITION · DIMENSION	RHO g/cm ³	E GPa	ALPHA 10 ⁻⁶ /K	LAMBDA W/(m·K)	RHO_EL nΩ·m
20	7.812	211	–	–	–
100	7.79	–	11.9	–	390
200	7.75	–	15.1	40	470
300	7.72	–	15.5	–	520
400	7.68	–	15.6	37	–
500	7.64	–	15.7	32	–
PROPERTY	VALUE	UNIT			
Density	7.85	g/cm ³			
Transformation point Ac1	724	°C			
Transformation point Ac3	900	°C			

PROPERTY	VALUE	UNIT
Transformation point Ar3	713	°C
Transformation point Ar1	700	°C

Technological properties

PROPERTY	VALUE	UNIT
Flake sensitivity	predisposed	
Temper brittleness	predisposed	

Heat treatment

3 regimes

STEP	TEMPERATURE	MEDIUM
Quenching	Temperature not stated	—
Quenching	820–860 °C	Oil
Annealing	Temperature not stated	—

Designations across standards

53 designations · 5 documented as identical

United States	12	China	4
AMS 6440	uns	9SiCr	gb
G52986	uns	Cr2	gb
J19965 This grade's own name	uns	CrV	gb
K23080	uns	GCr15	gb
S-22141	uns		
T61203 This grade's own name	uns	Europe	3
52100	aisi-sae	1.2067	din-en
E 52100	aisi-sae	100Cr6 This grade's own name	din-en
L1	aisi-sae	102Cr6 This grade's own name	din-en
L3 This grade's own name	aisi-sae		
T61203	aisi-sae	France	3
A646	astm	100Cr6	afnor
		100Cr6RR	afnor
United Kingdom	4	Y100C6	afnor
2067	bs		
534A99	bs	Russia / CIS	3
535A99	bs	KH	gost
BL3	bs	ShCh15	gost
		ShKh15	gost
Spain	4		
100	une	Poland	3
100Cr6	une	ŁH15	pn
Cr6	une	LH15	pn
F.5230	une	NC4	pn

International	2	Japan	1
100Cr6	iso	SUJ2	jis
3505	iso		
United States / Aerospace	2	Sweden	1
6440	ams	2258	ss
6444	ams	Slovakia	1
Italy	2	14 100	stn
100Cr6	uni	Serbia	1
102Cr6KU	uni	Č.4145	srps
Czechia	2	Hungary	1
14100	csn	K4	msz
14109	csn	Austria	1
Bulgaria	2	BOHLERK200	onorm
102Cr6	bds	South Korea	1
Ch	bds	STB2	ks

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 Y100C6

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

[Start an enquiry](#)

DATASHEET ONLINE

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GRADE SEARCH

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ISSUED

Sep 8, 2026