

MATERIAL NUMBER 1.4573 · CLASS 1.4

320S33

Material no. 1.4573

also listed as GX3CrNiMoCuN24-6-5

Chemical composition, mechanical and physical property values, and 31 standard designations from 12 regions.

DENSITY 7.95 g/cm ³	OTHER DESIGNATIONS 31 in 12 regions	PROPERTY VALUES 12 on file
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Chemical composition

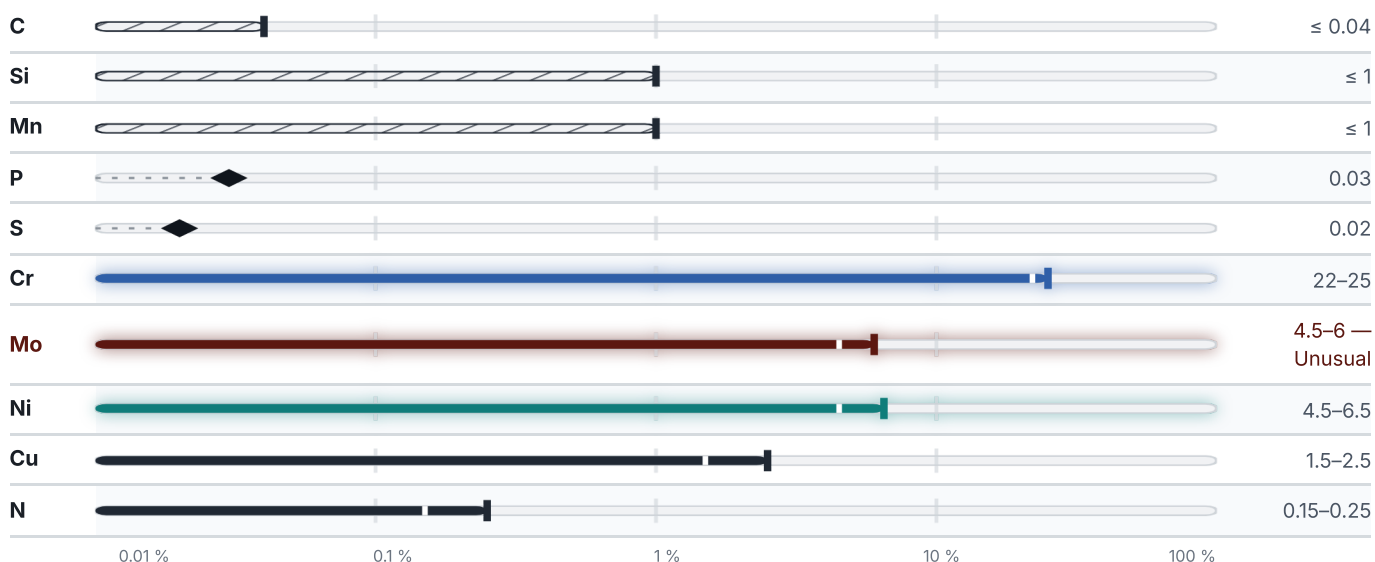
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 61.5 % ● Cr — 23.5 % ● Ni — 5.5 % ● Mo — 5.3 % ● Traces & impurities · 4.3 %

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

18 values across 5 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %	HB
Wire, GOST 18143-72	540–830	–	20–25	–	–
Forging, GOST 25054-81	510	196	30–38	40–50	–
10KH17N13M3T (10X17H13M3T) , Forging GOST 25054-81	–	–	–	–	200
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %	
Bar, GOST 5949-75	530	196	40		55
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %		
Sheet trick, GOST 7350-77	530	235			37
CONDITION · DIMENSION	RM N/mm ²	A5 %			
Sheet thin, GOST 5582-75	530				38
CONDITION · DIMENSION	RM N/mm ²	A5 %			
Sheet thin, GOST 4986-79	530				20–40

Physical properties

2 values

CONDITION · DIMENSION			RHO g/cm³
20			8
PROPERTY		VALUE	UNIT
Density		7.95	g/cm³

Technological properties

PROPERTY	VALUE	UNIT
Weldability	without limitations.	

Designations across standards

31 designations · 1 documented as identical

Russia / CIS	10	China	3
08KH17N13M2T	gost	0Cr18Ni12Mo3Ti	gb
08X17H13M2T	gost	1Cr18Ni12Mo2Ti	gb
0X17H13M2T	gost	1Cr18Ni12Mo3Ti	gb
10Ch17N13M2T	gost		
10Ch17N13M3T	gost	Spain	2
10KH17N13M3T	gost	F.3535	une
10X17H13M2T	gost	X6CrNiMoTi17-12-2	une
10X17H13M3T	gost		
X17H13M3T	gost	Czechia	2
ЭИ432	gost	17353	csn
		17356	csn
United States	3		
S31635	uns	Europe	1
316Ti	aisi-sae	GX3CrNiMoCuN24-6-5	din-en
S31635	aisi-sae	This grade's own name	
		France	1
United Kingdom	3	Z6 CNDT 17.12	afnor
2 1	bs		
320S33	bs	Italy	1
4 Ti	bs	X6CrNiMoTi17-13	uni
Japan	3	Sweden	1
SUS 316Ti	jis	2350	ss
SUS 316TiTB	jis		
SUS 316TiTP	jis	Poland	1
		H17N13M2T	pn

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 320S33

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

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ISSUED

Aug 20, 2026