

MATERIAL NUMBER 1.4310 · CLASS 1.4

CrNi17/7

Material no. 1.4310

also listed as X 12 CrNi 17 7

Chemical composition, mechanical and physical property values, and 97 standard designations from 17 regions.

DENSITY 8 g/cm ³	OTHER DESIGNATIONS 97 in 17 regions	PROPERTY VALUES 10 on file
---------------------------------------	---	--------------------------------------

Chemical composition

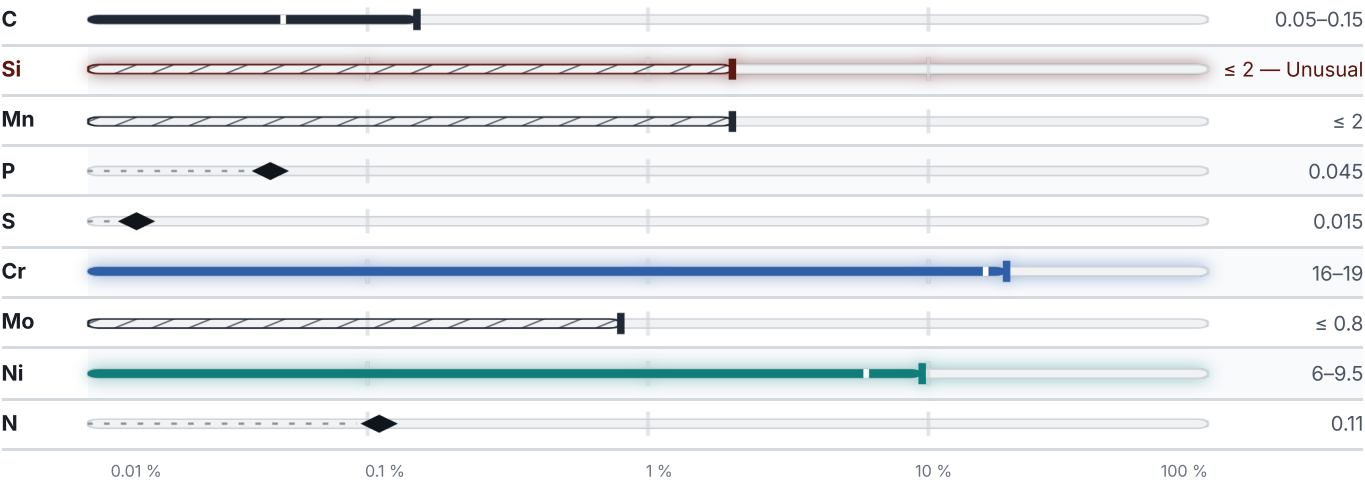
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 69.7 % ● Cr — 17.5 % ● Ni — 7.8 % ● Si — 2 % ● Traces & impurities · 3.1 %

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

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

23 values across 5 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A5 %	Z %	KCU kJ/m ²	HB
Bar, GOST 5949-75	1080	880	12	50	690	–
Forging, GOST 25054-81	1176	980	12–13	50	690	–
07KH16N6 (07X16H6) , Forging GOST 25054-81	–	–	–	–	–	341–415
CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %	HB	HRB	HV
Plate/Sheet Hot-rolled	520	205	40	–	–	–
Hot-rolled	–	–	–	207	95	218
SOFT ANNEALED						HB
Soft annealed						230
CONDITION · DIMENSION	RM N/mm ²		RE N/mm ²		A5 %	
Sheet trick, GOST 7350-77	1180		390		15	
CONDITION · DIMENSION	RM N/mm ²		A5 %			
Sheet thin, GOST 5582-75	1180		20			

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	8	g/cm ³

Designations across standards

97 designations · 7 documented as identical

United States		31	United States / Aerospace		22
S30100	This grade's own name	uns	5358		ams
S30200	This grade's own name	uns	5500		ams
S45500		uns	5515		ams
301	This grade's own name	aisi-sae	5516		ams
302	This grade's own name	aisi-sae	5517		ams
30301		aisi-sae	5518		ams
30302		aisi-sae	5519		ams
J 230 (1994)		aisi-sae	5600		ams
J230	This grade's own name	aisi-sae	5617		ams
S30100		aisi-sae	5636		ams
S30200		aisi-sae	5637		ams
A240		astm	5688		ams
A264		astm	5693		ams
A276		astm	5866		ams
A313		astm	5901		ams
A314		astm	5902		ams
A368		astm	5903		ams
A473		astm	5904		ams
A478		astm	5905		ams
A479		astm	5906		ams
A480		astm	6693		ams
A492		astm	7241		ams
A493		astm			
A511		astm	Russia / CIS		9
A554		astm	07KH16N6		gost
A580		astm	07X16H6		gost
A666		astm	07X16H6		gost
F1669		astm	12Ch18N9		gost
F2215		astm	12Kh18N9		gost
F599		astm	ст.07X16H6		gost
F899		astm	X16H6		gost
			X17H8		gost
			ЭП288		gost
			United Kingdom		5
			301 S 22		bs
			301S21		bs
			302S25		bs
			302S26		bs
			CrNi17/7		bs
			France		5
			Z11CN17-08		afnor
			Z11CN18-08		afnor
			Z12CN17.07		afnor
			Z12CN18-09		afnor
			Z12CN18.08		afnor

Japan	5	Czechia	2
SUS 301	jis	17241	csn
SUS 301-CSP	jis	17242	csn
SUS 302	jis		
SUS 302FB	jis	Brazil	2
SUS301J1	jis	301	abnt
		302	abnt
Europe	3	International	1
1.4310	din-en	X9CrNi18-8	iso
X 12 CrNi 17 7	din-en		
X10CrNi18-8	din-en	Sweden	1
		2331	ss
Spain	3	Slovakia	1
F-3507	une	17 241	stn
F.3517	une		
X10CrNi18-9	une	Poland	1
		1H18N9	pn
China	3	Serbia	1
1Cr17Ni7	gb	Č.4571	srps
1Cr18Ni9	gb		
Cr17Ni7	gb		
Italy	2		
X10CrNi18-8	uni		
X12CrNi17-07	uni		

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 CrNi17/7

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

[Start an enquiry](#)

DATASHEET ONLINE

View the material page

GRADE SEARCH

Search all grades

MATERIAL NO.

1.4310

ISSUED

Aug 20, 2026