

MATERIAL NUMBER 1.4404 · CLASS 1.4

A 403 Grade WP316L

Material no. 1.4404

also listed as X2CrNiMo17-12-2

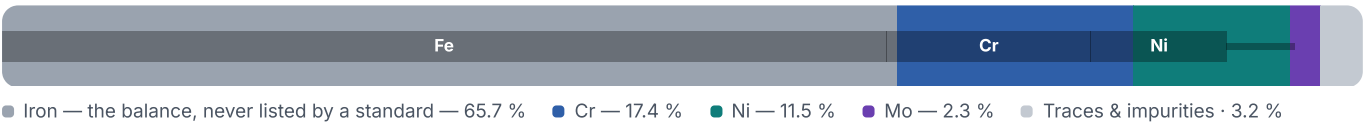
Chemical composition, mechanical and physical property values, and 147 standard designations from 24 regions.

DENSITY 8 g/cm³	OTHER DESIGNATIONS 147 in 24 regions	PROPERTY VALUES 10 on file
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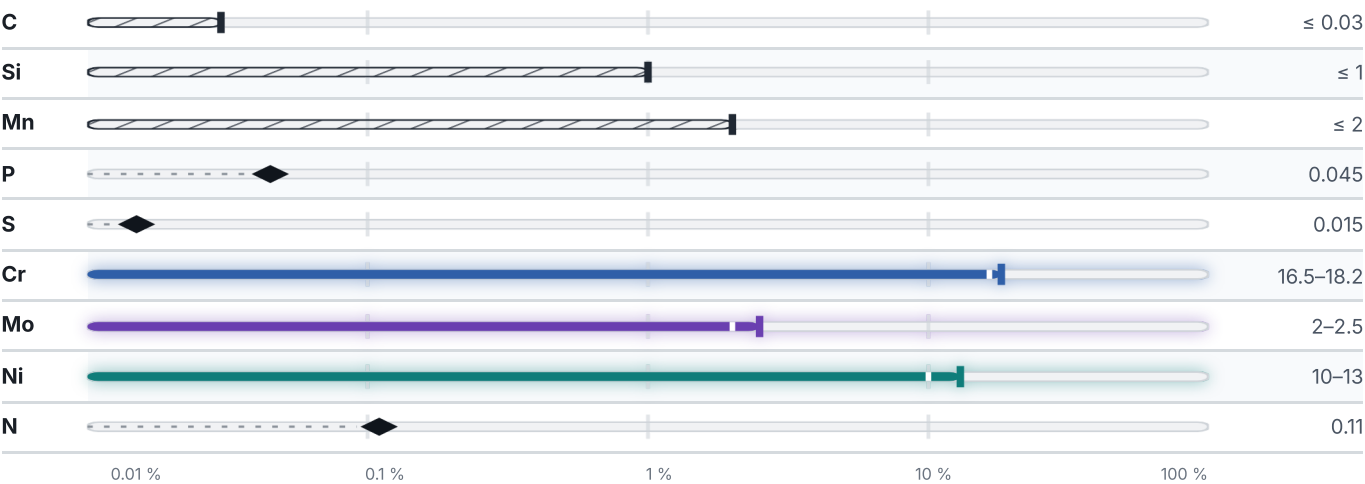
Chemical composition

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

8 values across 3 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %	HB	HRB	HV
Plate/Sheet Hot-rolled	520	205	40	–	–	–
Hot-rolled	–	–	–	187	90	200
SOFT ANNEALED						HB
Soft annealed						215
SOLUTION ANNEALED						HB
Solution annealed						200

Physical properties

1 values

PROPERTY	VALUE	UNIT
Density	8	g/cm ³

Heat treatment

5 regimes

STEP	TEMPERATURE	MEDIUM
source joins the operations with + / procedural order		
Solution annealing	Temperature not stated	—
Solution annealing	Temperature not stated	—
Solution annealing	Temperature not stated	—
source joins the operations with + / procedural order		
Solution annealing	Temperature not stated	—
Solution annealing	Temperature not stated	—
source joins the operations with + / procedural order		
Solution annealing	Temperature not stated	—
Solution annealing	Temperature not stated	—
Quenching and tempering	Temperature not stated	—
source joins the operations with + / procedural order		
Solution annealing	Temperature not stated	—
Annealing	Temperature not stated	—

147 designations · 4 documented as identical

United States	56	F2281	astm
S31600	uns	F593	astm
S31603 This grade's own name	uns	F594	astm
30316L	aisi-sae	F738	astm
316	aisi-sae	F836	astm
316L This grade's own name	aisi-sae	F837	astm
J92700	aisi-sae	F879	astm
J92800	aisi-sae	TP316	astm
S31600	aisi-sae	TP316L	astm
S31603	aisi-sae		
S31673	aisi-sae		
S31683	aisi-sae		
A 182 Grade F316L	astm		
A 312 Grade TP316L	astm		
A 403 Grade WP316L	astm		
A1022	astm		
A1049	astm		
A182	astm		
A213	astm		
A240	astm		
A249	astm		
A269	astm		
A270	astm		
A276	astm		
A312	astm		
A314	astm		
A336	astm		
A358	astm		
A403	astm		
A409	astm		
A473	astm		
A478	astm		
A479	astm		
A493	astm		
A511	astm		
A554	astm		
A580	astm		
A632	astm		
A666	astm		
A688	astm		
A774	astm		
A778	astm		
A793	astm		
A813	astm		
A814	astm		
A943	astm		
A965	astm		
A988	astm		
		United Kingdom	18
		316	bs
		316 S 30	bs
		316L	bs
		316S11	bs
		316S12	bs
		316S13	bs
		316S14	bs
		316S31	bs
		316S33	bs
		4S14	bs
		LW22	bs
		LWCF22	bs
		S 161	bs
		S.537	bs
		S13	bs
		S14	bs
		X2CrNiMo17-12-3	bs
		X2CrNiMo18-14-3	bs
		France	15
		X2CrNiMo18-14-3	afnor
		X2CrNiMo18-15-4	afnor
		Z2CND17.12	afnor
		Z2CND18.13	afnor
		Z3CND17-11-02	afnor
		Z3CND17-12-02	afnor
		Z3CND17-12-03	afnor
		Z3CND17-12-2	afnor
		Z3CND18-12-03	afnor
		Z3CND18-14-03	afnor
		Z3CND18-14-08	afnor
		Z3CND18.12.02	afnor
		Z3CND19-15-04	afnor
		Z6CND18-12-03	afnor
		Z7CND17-11-02	afnor

Japan	7
SCS16	jis
SUS 316LFB	jis
SUS 316LTBS	jis
SUS 316LTP	jis
SUS F 316L	jis
SUS316	jis
SUS316L	jis

Spain	6
12-03	une
F.310.K	une
F.3533	une
F.3533-X2CrNiMo17	une
F.3537	une
X2CrNiMo17132	une

Italy	6
316LM1	uni
X2CrNiMo17-12	uni
X2CrNiMo17-13	uni
X2CrNiMo17-13KG	uni
X2CrNiMo17-17-12	uni
X2CrNiMo18-14-3	uni

Russia / CIS	5
000X17H13M2	gost
03Ch17N13M2	gost
03KH17N14M3	gost
03X17H13M2	gost
03X17H14M3	gost

Czechia	4
17346	csn
17349	csn
17350	csn
17359VN	csn

Europe	3
1.4404	din-en
X2CrNiMo17-12-2	This grade's own name din-en
X2CrNiMo17-13-2	This grade's own name din-en

United States / Aerospace	3
5507	ams
5584	ams
5653	ams

China	3
00Cr17Ni14Mo2	gb
00Cr17Ni14Mo3	gb
0Cr18Ni12Mo2Ti	gb

Sweden	3
2343	ss
2348	ss
2353	ss

Poland	3
00H17N13M2	pn
00H17N14M2	pn
00H17N14M2	pn

Hungary	2
KO38LC	msz
X2CrNiMo18-14-3	msz

Austria	2
X2CrNiMo17-13-2KKW	onorm
X2CrNiMo18-14-3KW	onorm

Finland	2
750	sfs
X2CrNiMo17-13-3	sfs

South Korea	2
STS316L	ks
STSF316L	ks

International	1
Type19	iso

Slovakia	1
17 349	stn

Brazil	1
316 L	abnt

former Yugoslavia	1
Č.45707	jus

Romania	1
2MoNiCr175	stas

Australia / New Zealand	1
316L	as-nzs

Bulgaria	1
X2CrNiMo18-14-3	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 A 403 Grade WP316L
Quotation, availability, mill certificate or a technical question — directly on the material page.

Start an enquiry

DATASHEET ONLINE
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GRADE SEARCH
Search all grades

MATERIAL NO.
1.4404

ISSUED
Aug 20, 2026