

表 1 国内不锈钢标准钢号对照表

中国	日本	美国	英国	德国	法国	前苏联
GB1220-92GB3280-92	JIS	AISIUNS	BS970BS1449	DIN17440DIN17224	NFA35-575NFA35-576	Г О C T 5632
0Cr13	SUS410S	S410				
1Cr13	SUS410	410	410S21	X7Cr13	Z6C13	08X13
2Cr13	SUS420J1	420J1	420S29	X20Cr13	Z20C13	20x13
1Cr17	SUS430	430				
7Cr17	SUS440A	440A				
9Cr18	SUS440C	440C		X105CrMo17	Z100CD17	95X18
0Cr18Ni9	SUS304	304	304S15	X5CrNi189	Z6CN18.09	08X18H10
00Cr19Ni10	SUS304L	304L	304S12	X2CrNi189	Z2CN18.09	03X18H11
0Cr17Ni12Mo2	SUS316	316	316S16	X5CrNiMo1812	Z6CND17.12	
00Cr17Ni14Mo2	SUS316L	316L	316S12	X2CrNiMo1812	Z2CND17.12	03X17H14M2
0Cr18Ni11Ti	SUS321	321		X10CrNiTi189	Z6CNT18.10	08X18H10T
0Cr18Ni11Nb	SUS347	347	347S17	X10CrNiNb189	Z6CNNb18.10	08X18H12F

表 2 马氏体、铁素体、奥氏体、双相不锈钢的化学成分

类型	钢号	牌号	化学成分 %										
			C	Cr	Ni	Mn	P	S	Mo	Si	Cu	N	其它
奥氏体	201	1Cr17Mn6Ni5N	≤0.15	16.00-18.00	3.50-5.50	5.50-7.50	≤0.060	≤0.030	-	≤1.00	-	≤0.25	-
	201L	03Cr17Mn6Ni5N	≤0.030	16.00-18.00	3.50-5.50	5.50-7.50	≤0.060	≤0.030	-	≤1.00	-	≤0.25	-
	202	1Cr18Mn8Ni5N	≤0.15	17.00-19.00	4.00-6.00	7.50-10.00	≤0.060	≤0.030	-	≤1.00	-	≤0.25	-
	204	03Cr16Mn8Ni2N	≤0.030	15.00-17.00	1.50-3.50	7.00-9.00	-	-	-	-	-	0.15-0.30	-
铁素体	国内研制	1Cr18Mn10Ni5Mo3N	≤0.10	17.00-19.00	4.00-6.00	8.50-12.00	-	-	2.80-3.50	-	-	0.20-0.30	-
	前苏联	2Cr13Mn9Ni4	0.15-0.25	12.00-14.00	3.70-5.00	8.00-10.00	-	-	-	-	-	-	-
	国内研制	2Cr15Mn15Ni2N	0.15-0.25	14.00-16.00	1.50-3.00	14.00-16.00	-	-	-	-	-	0.15-0.30	-
		1Cr18Mn10Ni5Mo3N	≤0.15	17.00-19.00	4.00-6.00	8.50-12.00	≤0.060	≤0.030	2.8-3.5	≤1.00	-	0.20-0.30	-
双相型	301	1Cr17Ni7	≤0.15	16.00-18.00	6.00-8.00	≤2.00	≤0.065	≤0.030	-	≤1.00	-	-	-
	302	1Cr18Ni9	≤0.15	17.00-19.00	8.00-10.00	≤2.00	≤0.035	≤0.030	-	≤1.00	-	-	-
	303	Y1Cr18Ni9	≤0.15	17.00-19.00	8.00-10.00	≤2.00	≤0.20	≤0.030	1)	≤1.00	-	-	-
	303se	Y1Cr18Ni9Se	≤0.15	17.00-19.00	8.00-10.00	≤2.00	≤0.20	≤0.030	-	≤1.00	-	-	Se≥0.15
	304	0Cr18Ni9	≤0.07	17.00-19.00	8.00-10.00	≤2.00	≤0.035	≤0.030	-	≤1.00	-	-	-

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304L	00Cr19Ni10	≤0.030	18.00-20.00	8.00-10.00	≤2.00	≤0.035	≤0.030	-	≤1.00	-	-	-
304N1	0Cr19Ni9N	≤0.08	18.00-20.00	7.00-10.50	≤2.00	≤0.035	≤0.030	-	≤1.00	-	0.10-0.25	-
304N2	0Cr18Ni10NbN	≤0.08	18.00-20.00	7.50-10.50	≤2.00	≤0.035	≤0.030	-	≤1.00	-	0.15-0.30	Nb≤0.15
304LN	00Cr18Ni10N	≤0.030	17.00-19.00	8.50-11.50	≤2.00	≤0.035	≤0.030	-	≤1.00	-	0.12-0.22	-
305	1Cr18Ni12	≤0.12	17.00-19.00	10.50-13.00	≤2.00	≤0.035	≤0.030	-	≤1.00	-	-	-
309S	0Cr23Ni13	≤0.08	22.00-24.00	12.00-15.00	≤2.00	≤0.035	≤0.030	-	≤1.00	-	-	-
310S	0Cr25Ni20	≤0.08	24.00-26.00	19.00-22.00	≤2.00	≤0.035	≤0.030	-	≤1.00	-	-	-
316	0Cr17Ni12Mo2	≤0.08	16.00-18.50	10.00-14.00	≤2.00	≤0.035	≤0.030	2.00-3.00	≤1.00	-	-	-
	1Cr18Ni12Mo2Ti6)	≤0.12	16.00-19.00	11.00-14.00	≤2.00	≤0.035	≤0.030	1.80-2.50	≤1.00	-	-	Ti5(C%-0.02)~0.08
	0Cr18Ni12Mo2Ti	≤0.08	16.00-19.00	11.00-14.00	≤2.00	≤0.035	≤0.030	1.80-2.50	≤1.00	-	-	Ti5*C%-0.70
316L	00Cr17Ni14Mo2	≤0.030	16.00-18.00	12.00-15.00	≤2.00	≤0.035	≤0.030	2.00-3.00	≤1.00	-	-	-
316N	0Cr17Ni12Mo2N	≤0.08	16.00-18.00	10.00-14.00	≤2.00	≤0.035	≤0.030	2.00-3.00	≤1.00	-	0.10-0.22	-
316N	00Cr17Ni13Mo2N	≤0.030	16.00-18.50	10.50-14.50	≤2.00	≤0.035	≤0.030	2.00-3.00	≤1.00	-	0.12-0.22	-
316J1	0Cr18Ni12Mo2Cu2	≤0.08	17.00-19.00	10.00-14.50	≤2.00	≤0.035	≤0.030	1.20-2.75	≤1.00	1.00-2.50	-	-
316J1L	00Cr18Ni14Mo2Cu2	≤0.030	17.00-19.00	12.00-16.00	≤2.00	≤0.035	≤0.030	1.20-2.75	≤1.00	1.00-2.50	-	-

	317	0Cr19Ni13Mo3	≤0.12	18.00-20.00	11.00-15.00	≤2.00	≤0.035	≤0.030	3.00-4.00	≤1.00	-	-	-
	317L	00Cr19Ni13Mo3	≤0.08	18.00-20.00	11.00-15.00	≤2.00	≤0.035	≤0.030	3.00-4.00	≤1.00	-	-	-
		1Cr18Ni12Mo3Ti6)	≤0.12	16.00-19.00	11.00-14.00	≤2.00	≤0.035	≤0.030	2.50-3.50	≤1.00	-	-	Ti5(C%-0.02)~0.08
		0Cr18Ni12Mo3Ti	≤0.08	16.00-19.00	11.00-14.00	≤2.00	≤0.035	≤0.030	2.50-3.50	≤1.00	-	-	Ti5*C%-0.70
	317J1	0Cr18Ni16Mo5	≤0.040	16.00-19.00	15.00-17.00	≤2.00	≤0.035	≤0.030	4.00-6.00	≤1.00	-	-	-
	321	1Cr18Ni9Ti6)	≤0.12	17.00-19.00	8.00-11.00	≤2.00	≤0.035	≤0.030	-	≤1.00	-	-	Ti5(C%-0.02)~0.08
		0Cr18Ni10Ti	≤0.08	17.00-19.00	9.00-12.00	≤2.00	≤0.035	≤0.030	-	≤1.00	-	-	Ti≥5*C%
	347	0Cr18Ni11Nb	≤0.08	17.00-19.00	9.00-13.00	≤2.00	≤0.035	≤0.030	-	≤1.00	-	-	Nb≥10*C%
	XM7	0Cr18Ni9Cu3	≤0.08	17.00-19.00	8.50-10.50	≤2.00	≤0.035	≤0.030	-	≤1.00	3.00-4.00	-	-
	XM15J1	0Cr18Ni13Si4	≤0.08	15.00-20.00	11.50-15.00	≤2.00	≤0.035	≤0.030	-	3.00-5.00	-	-	2)
奥氏体   铁素体	329J1	0Cr26Ni5Mo2	≤0.08	23.00-28.00	3.00-6.00	≤1.50	≤0.035	≤0.030	1.00-3.00	≤1.00	-	-	2)
		1Cr18Ni11Si4AlTi	0.10-0.18	17.50-19.50	10.--120..	≤0.80	≤0.035	≤0.030	-	3.40-4.00	-	-	Al 0.10-0.30; Ti 0.40-0.70
		00Cr18Ni5MoSi2	≤0.030	18.00-19.50	4.50-5.50	1.00-2.00	≤0.035	≤0.030	2.50-3.00	1.30-2.00	-	-	-
铁素体	405	0Cr13Al	≤0.08	11.50-14.50	3)	≤1.00	≤0.035	≤0.030	-	≤1.00	-	-	Al 0.10-0.30
	410L	00Cr12	≤0.030	11.00-13.00	3)	≤1.00	≤0.035	≤0.030	-	≤1.00	-	-	-

体 型	430	1Cr17	≤0.12	16.00-18.00	3)	≤1.25	≤0.035	≤0.030	-	≤0.75	-	-	-
	430F	Y1Cr17	≤0.12	16.00-18.00	3)	≤1.00	≤0.035	≥0.15	1)	≤1.00	-	-	-
	434	1Cr17Mo	≤0.12	16.00-18.00	3)	≤1.00	≤0.035	≤0.030	0.75-1.25	≤1.00	-	-	-
	447J1	00Cr30Mo2	≤0.010	28.50-32.00	-	≤0.40	≤0.035	≤0.030	1.50-2.50	≤0.40	-	≤0.015	-
	XM27	00Cr27Mo	≤0.010	25.00-27.50	-	≤0.40	≤0.035	≤0.030	0.75-1.50	≤0.40	-	≤0.015	-
马 氏 体 型	403	1Cr12	≤0.15	11.50-13.00	3)	≤1.00	≤0.035	≤0.030	-	≤0.50	-	-	-
	410	1Cr13	≤0.15	11.50-13.50	3)	≤1.00	≤0.035	≤0.030	-	≤1.00	-	-	-
	405	0Cr13	≤0.08	11.50-13.50	3)	≤1.00	≤0.035	≤0.030	-	≤1.00	-	-	-
	416	Y1Cr13	≤0.15	12.00-14.00	3)	≤1.25	≤0.035	≥0.15	1)	≤1.00	-	-	-
	410J1	1Cr13Mo	≤0.08-0.18	11.50-14.00	3)	≤1.00	≤0.035	≤0.030	0.30-0.60	≤0.60	-	-	-
	420J1	2Cr13	0.16-0.25	12.00-14.00	3)	≤1.00	≤0.035	≤0.030	-	≤1.00	-	-	-
	420J2	3Cr13	0.26-0.35	12.00-14.00	3)	≤1.00	≤0.035	≤0.030	-	≤1.00	-	-	-
	420F	Y3Cr13	0.26-0.40	12.00-14.00	3)	≤1.25	≤0.035	≥0.15	1)	≤1.00	-	-	-
		3Cr13Mo	0.28-0.35	12.00-14.00	3)	≤1.00	≤0.035	≤0.030	0.50-1.00	≤0.80	-	-	-
		4Cr13	0.36-0.45	12.00-14.00	3)	≤0.80	≤0.035	≤0.030	-	≤0.60	-	-	-
431	1Cr17Ni2	0.11-0.17	16.00-18.00	1.50-2.50	≤0.80	≤0.035	≤0.030	-	≤0.80	-	-	-	

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440A	7Cr17	0.60-0.75	16.00-18.00	3)	≤1.00	≤0.035	≤0.030	4)	≤1.00	-	-	-
440B	8Cr17	0.75-0.95	16.00-18.00	3)	≤1.00	≤0.035	≤0.030	4)	≤1.00	-	-	-
	9Cr18	0.90-1.00	17.00-19.00	3)	≤0.80	≤0.035	≤0.030	4)	≤0.80	-	-	-
440C	11Cr17	0.95-1.20	16.00-18.00	3)	≤1.00	≤0.035	≤0.030	4)	≤1.00	-	-	-
440F	Y11Cr17	0.95-1.20	16.00-18.00	3)	≤1.25	≤0.035	≥0.15	4)	≤1.00	-	-	-
	9Cr18Mo	0.95-1.10	16.00-18.00	3)	≤0.80	≤0.035	≤0.030	0.40-0.70	≤0.80	-	-	-
	9Cr18MoV	0.85-0.95	17.00-19.00	3)	≤0.80	≤0.035	≤0.030	1.00-1.30	≤0.80	-	-	V0.07-0.12
沉淀硬化型	630	0Cr17Ni4Cu4Nb	≤0.07	15.50-17.50	6.50-7.50	≤1.00	≤0.035	≤0.030	-	≤1.00	3.00-5.00	Nb 0.15-0.45
	631	0Cr17Ni7Al	≤0.09	16.00-18.00	6.50-7.50	≤1.00	≤0.035	≤0.030	-	≤1.00	≤0.50	Al 0.75-1.50
	632	0Cr15Ni7Mo2Al	≤0.09	14.00-16.00	6.50-7.50	≤1.00	≤0.035	≤0.030	2.00-3.00	≤1.00	-	Al 0.75-1.50