

马氏体、铁素体、奥氏体、双相不锈钢的化学成分 对比表

类型	钢号	牌号	化学成分 %											
			C	Cr	Ni	Mn	P	S	Mo	Si	Cu	N	其它	
奥	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		
	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	-	
	氏	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	-	-	-	
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	-	-	-	
型	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 型	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	-	-	-
	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	-	-	-
	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

整理：[常州精密钢管博客](#)