NOMINAL COMPOSITION OF PRECIPITATION AND HARDENING OF DUPLEX STAINLESS STEELS

Nominal Compostion of Precipitation Hardening and Duplex Stainless Steels										
Type	UNS Number	Composition - Percent (*Single values are maximum values)							ASTM A GRADE	Other
		C	Mn	Si	Cr	Ni	P	S		
Precipitation-Hardening Types										
PH 13-8 Mo	11.14	0.05	0.10	0.10	12.25-13.25	7.5-8.5	0.01	0.008		2.0-2.5 Mo; 0.90-1.35 Al; 0.01 N
15-5 PH	S15500	0.07	1.00	1.00	14.0-15.5	3.5-5.5	0.04	0.03		2.5-4.5 Cu; 0.15-0.45 Nb(Cb) + Ta
17-4 PH	S17400	0.07	1.00	1.00	15.5-17.5	3.0-5.0	0.04	0.03	630	3.0-5.0 Cu; 0.15-0.45 Nb(Cb) + Ta
17-7 PH	S17700	0.09	1.00	1.00	16.0-18.0	6.5-7.75	0.04	0.03	631	0.75-1.15 Al
PH 15-7 Mo	S15700	0.09	1.00	1.00	14.0-16.0	6.5-7.75	0.04	0.03		2.0-3.0 Mo; 0.75-1.5 Al
17-10 P		0.07	0.75	0.50	17.00	10.50	0.28			
A286	S66286	0.08	2.00	1.00	13.5-16.0	24.0-27.0	0.04	0.03	660	1.0-1.5 Mo; 2 Ti; 0.3 V
AM350	S35000	0.07-0.11	0.5-1.25	0.50	16.0-17.0	4.0-5.0	0.04	0.03		2.5-3.25 Mo; 0.07-0.13 N
AM355	S35500	0.10-0.15	0.5-1.25	0.50	15.0-16.0	4.0-5.0	0.04	0.03		2.5-3.25 Mo
AM363		0.04	0.15	0.05	11.00	4.0				0.25 Ti
Custom 450	S45000	0.05	1.00	1.00	14.0-16.0	5.0-7.0	0.03	0.03		1.25-1.75 Cu; 0.5-1.0 Mo 8 x %C - Nb(Cb)
Custom 455	S45500	0.05	0.50	0.50	11.0-12.5	7.5-9.5	0.04	0.03		0.5 Mo; 1.5-2.5 Cu; 0.8-1.4 Ti; 0.1-0.5 Nb(Cb)
Stainless W	S17600	0.08	1.00	1.00	16.0-17.5	6.0-7.5	0.04	0.03		0.4 Al; 0.4-1.2 Ti
Duplex Types										
2205	S32205	0.03	2.00	1.00	22.00	5.5	0.03	0.02		3.0 Mo; 0.18 N
2304	S32304	0.03	2.50	1.00	23.00	4.0				0.1 N
255		0.04	1.50	1.00	25.50	5.5				3.0 Mo; 0.17 N; 2.0 Cu
NU744LN		0.067	1.70	0.44	21.60	4.9				2.4 Mo; 0.10 N; 0.2 Cu
2507	S32750	0.03	1.20	0.80	25.00	5.5	0.035	0.02		4 Mo; 0.28 N

(From ASM Metals Handbook, Ninth Edition, Volume 3) and ASTM A638