

Stainless & High Temperature Steels, Page 1 of 6

RM#	Grade	UNS	Al	As	B	Ca	C	Cr	Co	Cu	Pb	Mn	Mo	Ni
			Nb	N	P	Se	Si	S	Ta	Sn	Ti	W	V	Fe Bal.
T250-C	Alloy T-250	K92150	0.18	---	---	---	0.009	0.022	0.045	0.039	---	0.049	2.82	18.7
			---	---	0.002	---	0.10	0.001	---	0.002	1.25	<0.005	0.009	76.8
C250-A	Alloy C250	K92890	0.09	---	0.003	---	0.003	0.034	8.20	0.006	---	0.011	5.08	17.86
			<0.005	---	0.004	---	0.014	<0.001	---	0.001	0.49	0.010	0.010	68.2
C250-C	Alloy C-250	K92890	0.096	---	---	---	0.006	0.074	8.48	0.072	---	0.016	4.67	18.7
			---	---	0.001	---	0.13	0.001	---	---	0.43	0.005	---	67.4
InvarFC-D	Invar FC	K93050	0.002	---	0.001	---	0.056	0.089	0.038	0.029	---	0.73	0.01	36.1
			---	---	0.01	0.19	0.27	0.001	---	0.002	0.002	---	---	62.5
T300-C	Alloy T-300	NA	0.14	---	---	---	0.008	0.12	0.47	0.21	---	0.027	3.89	18.3
			---	---	0.001	---	0.068	0.002	---	---	1.78	<0.005	---	75.0
C300-C	Alloy C-300	K93120	0.11	---	---	---	0.006	0.092	8.9	0.009	---	0.012	5.02	18.6
			---	---	0.004	---	0.025	0.002	---	---	0.65	0.046	---	66.6
Kovar-C	Kovar	K94610	0.007	---	---	---	0.005	0.14	17.8	0.089	---	0.23	0.084	29.0
			---	---	0.003	---	0.068	0.002	---	0.003	---	---	0.010	52.6
138Mo-D	PH13-8 Mo	S13800	1.05	---	0.0004	---	0.035	12.4	0.072	0.027	---	0.078	2.18	8.4
			---	0.003	0.004	---	0.026	0.001	---	0.003	0.013	0.016	0.003	75.7
155PH-A	15-5 PH	S15500	0.002	---	---	<0.0002	0.045	14.40	0.076	3.23	---	0.49	0.36	4.53
			0.30	0.023	0.026	---	0.34	0.002	---	0.003	0.003	0.031	0.066	76.1
155PH-D	15-5 PH	S15500	0.013	---	0.0002	---	0.032	15.1	0.025	3.27	---	0.40	0.024	4.60
			0.26	0.012	0.015	---	0.42	0.001	---	0.001	0.002	0.017	0.034	75.8
166PH-D	16-6 PH	S16600	0.41	---	0.0004	---	0.040	15.6	0.09	0.08	---	0.80	0.30	7.5
			<0.005	0.011	0.022	---	0.39	0.002	---	0.004	0.46	0.047	0.059	74.2
174PH-D	17-4 PH	S17400	0.003	---	0.001	---	0.041	15.8	0.062	3.32	---	0.37	0.19	4.24
			0.24	0.028	0.022	---	0.52	0.019	---	0.007	0.001	0.027	0.044	75.1
177PH-D	17-7 PH	S17700	0.80	---	0.001	---	0.06	16.7	0.12	0.29	---	0.71	0.36	6.9
			0.19	---	0.02	---	0.44	<0.001	---	0.007	0.037	0.04	0.16	73.1
182FM-C	18-2 FM	S18200	0.001	0.005	0.002	---	0.044	18.2	0.025	0.077	---	1.9	2.1	0.42
			0.009	---	0.019	---	0.44	0.51	---	0.004	0.002	0.017	0.13	76.1
203-C	AISI 203EZ	S20300	0.002	0.008	0.001	---	0.054	16.2	0.070	1.83	---	5.67	0.073	5.8
			0.012	---	0.026	---	0.50	0.36	---	0.010	---	0.016	0.059	69.3

Stainless & High Temperature Steels, Page 2 of 6

RM#	Grade	UNS	Al	As	B	Ca	C	Cr	Co	Cu	Pb	Mn	Mo	Ni
			Nb	N	P	Se	Si	S	Ta	Sn	Ti	W	V	Fe Bal.
Nit50-A	Nitronic 50	S20910	0.003	---	0.005	0.001	0.035	21.0	0.11	0.30	---	4.85	2.11	12.1
			0.14	0.33	0.026	---	0.38	0.002	---	0.005	0.006	0.083	0.15	58.5
Nit50-D	Nitronic 50	S20910	0.001	---	0.001	0.001	0.021	22.1	0.33	0.15	<0.005	4.8	2.30	12.6
			0.16	0.31	0.021	---	0.43	0.003	---	0.003	0.005	0.049	0.17	56.6
Nit60-A	Nitronic 60	S21800	0.011	---	0.001	---	0.074	16.7	0.074	0.20	---	8.00	0.27	8.2
			0.039	0.16	0.022	---	4.15	0.001	0.01	0.005	0.012	0.019	0.072	62.0
Nit60-B	Nitronic 60	S21800	0.020	---	---	---	0.086	16.4	0.075	0.38	---	7.74	0.28	8.11
			0.026	0.14	0.026	---	4.25	---	---	0.009	0.008	0.023	0.070	62.4
Nit40-C	Nitronic 40	S21900	0.007	---	0.001	---	0.015	19.4	0.06	0.20	---	9.4	0.33	7.1
			0.032	0.31	0.021	---	0.41	0.001	---	0.004	---	0.13	0.12	62.5
1818-C	18-18 Plus	S28200	0.016	---	0.002	---	0.069	17.2	0.026	1.14	---	17.9	0.93	0.76
			---	0.43	0.023	---	0.43	0.003	---	---	0.002	0.017	0.048	61.0
303-D	AISI 303	S30300	0.002	---	0.0004	---	0.06	17.3	0.14	0.38	---	1.9	0.55	8.6
			0.03	0.03	0.03	---	0.66	0.44	---	0.009	0.001	0.10	0.14	69.6
303Se-C	AISI 303Se	S30323	0.003	---	0.0003	---	0.05	17.5	0.19	0.27	---	1.47	0.59	8.96
			0.023	0.034	0.17	0.20	0.54	0.012	---	0.007	0.002	0.14	0.11	69.7
304-A	AISI 304	S30400	---	0.006	0.001	---	0.050	18.3	0.15	0.43	---	1.83	0.41	8.3
			0.010	0.07	0.038	---	0.31	0.025	<0.01	0.011	0.0014	0.033	0.07	70.0
304-B	AISI 304	S30400	0.003	---	0.0003	---	0.052	18.3	0.18	0.44	---	1.83	0.36	8.3
			0.037	0.078	0.031	---	0.31	0.027	---	0.011	0.001	0.051	0.070	70.0
304-C	AISI 304	S30400	0.003	---	---	0.002	0.051	18.4	0.16	0.51	---	1.83	0.37	8.3
			0.011	0.077	0.036	---	0.31	0.026	---	0.012	0.002	0.035	0.070	69.9
304-D	AISI 304	S30400	0.004	---	0.0002	---	0.060	18.2	0.13	0.30	---	0.83	0.32	8.5
			0.010	0.057	0.028	---	0.60	0.023	---	0.006	0.001	0.037	0.062	70.8
304-E	AISI 304	S30400	0.003	0.003	0.0001	0.003	0.049	18.1	0.17	0.41	---	1.84	0.34	8.3
			0.013	0.076	0.025	---	0.32	0.022	<0.01	0.006	0.002	0.058	0.063	70.2
304L-A	AISI 304L	S30403	---	0.007	0.001	---	0.019	18.1	0.14	0.36	---	1.9	0.41	8.3
			0.015	0.10	0.033	---	0.53	0.028	0.01	0.010	0.017	0.17	0.073	69.8
304L-B	AISI 304L	S30403	0.004	---	0.002	---	0.020	16.8	0.11	0.50	---	1.51	2.03	10.3
			0.020	0.062	0.029	---	0.53	0.025	---	0.014	0.018	0.034	0.070	68.7

Stainless & High Temperature Steels, Page 3 of 6

RM#	Grade	UNS	Al	As	B	Ca	C	Cr	Co	Cu	Pb	Mn	Mo	Ni
			Nb	N	P	Se	Si	S	Ta	Sn	Ti	W	V	Fe Bal.
304L-C	AISI 304L	S30403	0.004	---	---	---	0.023	18.7	0.43	0.46	---	1.33	0.54	9.6
			0.030	0.027	0.024	---	0.43	0.015	---	0.006	0.002	0.044	0.07	68.2
309-A	AISI 309	S30900	0.003	---	0.0007	0.005	0.063	22.8	0.09	0.32	---	1.76	0.22	13.9
			0.031	0.08	0.027	---	0.38	0.003	0.01	0.009	0.003	0.038	0.08	60.2
309-B	AISI 309	S30900	0.005	---	0.0002	---	0.067	22.3	0.24	0.43	---	1.60	0.36	12.4
			0.015	0.056	0.028	---	0.30	0.004	---	0.009	0.003	0.053	0.080	62.1
309-D	AISI 309	S30900	0.008	---	0.0006	0.001	0.063	22.6	0.18	0.12	---	1.95	0.17	13.4
			0.09	0.08	0.022	---	0.37	0.005	---	0.005	0.004	0.039	0.008	60.9
310-A	AISI 310	S31000	0.007	---	0.0005	---	0.046	24.5	0.10	0.27	---	1.40	0.50	19.5
			0.017	0.056	0.027	---	0.68	0.001	---	0.007	0.004	0.10	0.085	52.7
310-B	AISI 310	S31000	0.009	---	0.003	---	0.056	25.0	0.29	0.28	---	1.58	0.38	20.3
			0.057	0.072	0.025	---	0.47	0.006	---	0.004	0.002	0.090	0.073	51.3
310-D	AISI 310	S31000	0.001	0.02	0.004	---	0.056	24.6	0.14	0.13	---	1.66	0.25	20.1
			0.022	0.06	0.023	---	0.45	0.007	0.020	0.002	0.019	0.035	0.07	52.3
254SMO-A	Alloy 254SMO	S31254	0.005	---	0.002	0.0006	0.019	20.1	0.080	0.63	---	0.94	6.18	18.5
			---	0.22	0.027	---	0.32	0.001	---	0.008	0.003	0.045	0.060	52.9
316-A	AISI 316	S31600	0.005	0.001	---	0.001	0.046	16.8	0.31	0.32	---	1.44	2.03	10.0
			0.010	0.051	0.025	---	0.43	0.026	---	0.007	0.002	0.079	0.067	68.3
316-B	AISI 316	S31600	0.005	---	0.001	---	0.047	16.7	0.38	0.38	---	1.45	2.07	10.0
			---	---	0.029	---	0.49	0.028	---	0.008	0.003	0.080	0.053	68.3
316-D	AISI 316	S31600	0.004	---	0.001	---	0.040	17.0	0.42	0.49	---	1.67	2.02	12.1
			0.052	0.041	0.028	---	0.60	0.020	---	0.009	0.003	0.061	0.077	65.4
316L-A	AISI 316L	S31603	0.005	0.007	0.0006	0.002	0.017	16.8	0.30	0.47	---	1.72	2.04	10.2
			0.024	0.07	0.03	---	0.45	0.026	---	0.012	0.003	0.07	0.06	67.7
316L-C	AISI 316L	S31603	0.004	---	0.001	---	0.012	16.6	0.16	0.45	---	1.32	2.24	12.6
			0.015	0.040	0.029	---	0.65	0.014	---	0.013	0.004	0.036	0.064	65.7
316L-D	AISI 316L	S31603	0.005	---	0.001	---	0.016	16.6	0.13	0.37	---	1.45	2.04	10.2
			0.025	0.056	0.032	---	0.59	0.025	---	0.020	0.009	0.023	0.065	68.4
316L-E	AISI 316L	S31603	0.004	---	0.002	---	0.020	16.8	0.11	0.50	---	1.51	2.03	10.3
			0.020	0.062	0.029	---	0.53	0.025	---	0.014	0.018	0.034	0.070	67.9

Stainless & High Temperature Steels, Page 4 of 6

RM#	Grade	UNS	Al	As	B	Ca	C	Cr	Co	Cu	Pb	Mn	Mo	Ni
			Nb	N	P	Se	Si	S	Ta	Sn	Ti	W	V	Fe Bal.
317L-C	AISI 317L	S31703	0.008	---	0.001	---	0.015	18.4	0.32	0.35	---	1.60	3.14	12.9
			0.028	0.048	0.027	---	0.63	0.013	---	0.004	0.004	0.060	0.11	62.3
321-A	AISI 321	S32100	0.026	0.006	0.002	---	0.044	17.4	0.19	0.45	---	1.48	0.39	9.1
			0.009	0.011	0.033	---	0.45	0.001	0.010	0.014	0.39	0.052	0.081	69.9
321-B	AISI 321	S32100	0.025	0.004	0.001	---	0.043	17.2	0.17	0.39	---	1.43	0.36	9.1
			0.02	0.013	0.03	---	0.40	0.004	---	0.014	0.38	0.03	0.08	70.3
321-D	AISI 321	S32100	0.16	0.005	---	---	0.04	17.4	0.29	0.30	---	1.36	0.39	10.2
			0.02	0.02	0.03	---	0.5	0.001	---	0.01	0.30	---	0.11	68.8
321H-A	AISI 321H	S32109	0.023	---	0.002	0.0002	0.051	17.3	0.13	0.28	---	1.10	0.29	9.63
			0.019	0.012	0.026	---	0.41	0.001	---	0.009	0.47	0.027	0.071	70.1
2205-A	Alloy 2205	S32205	0.004	---	0.003	---	0.021	22.6	0.074	0.38	---	1.49	3.38	5.16
			---	0.15	0.030	---	0.49	0.002	---	0.005	0.002	0.039	0.053	66.1
2507-A	Alloy 2507	S32750	0.007	---	0.002	0.001	0.017	25.6	0.072	0.24	---	0.75	3.67	6.58
			---	0.25	0.023	---	0.48	0.001	---	0.004	0.003	0.056	0.066	62.2
347-A	AISI 347	S34700	---	0.03	0.0005	---	0.05	17.3	0.17	0.48	---	1.44	0.36	9.0
			0.57	0.03	0.036	---	0.35	0.01	0.01	0.01	0.003	0.04	0.06	70.0
347-B	AISI 347	S34700	---	0.049	0.0005	---	0.053	18.3	0.091	0.30	---	1.78	0.20	9.7
			0.73	0.017	0.026	---	0.26	0.005	0.010	0.007	0.003	0.019	0.062	68.4
347-C	AISI 347	S34700					0.045	17.15	0.12			1.85		9.17
			0.56		0.022		0.41	0.0008	0.005					71.7
347-D	AISI 347	S34700	---	---	0.0005	---	0.05	17.64	0.10	0.19	---	1.35	0.32	9.5
			0.61	0.021	0.024	---	0.54	0.003	0.012	0.006	0.002	0.015	0.07	69.5
347H-A	AISI 347H	S34709	0.003	---	0.0004	---	0.12	18.1	0.012	<0.005	---	1.78	0.020	11.1
			1.04	0.015	0.005	---	0.87	0.005	---	0.002	0.006	0.013	0.016	66.9
347H-B	AISI 347H	S34709	0.002	---	<0.0005	---	0.11	18.5	0.005	0.10	---	1.65	0.093	10.3
			0.95	0.030	0.005	---	0.83	0.006	<0.01	---	0.003	0.020	0.015	67.4
355-C	AM 355	S35500	0.023	---	0.001	---	0.12	15.1	0.064	0.13	---	0.69	2.84	4.26
			<0.005	0.085	0.020	---	0.45	0.006	---	0.005	0.001	0.052	0.041	76.1
355-D	AM 355	S35500	0.018	---	0.0005	---	0.12	15.4	0.055	0.19	---	0.75	2.90	4.29
			0.011	0.082	0.020	---	0.47	0.005	---	0.007	0.001	0.029	0.046	75.6

Stainless & High Temperature Steels, Page 5 of 6

RM#	Grade	UNS	Al	As	B	Ca	C	Cr	Co	Cu	Pb	Mn	Mo	Ni
			Nb	N	P	Se	Si	S	Ta	Sn	Ti	W	V	Fe Bal.
410-A	AISI 410	S41000	---	0.003	0.0003	---	0.14	11.9	0.014	0.074	---	0.40	0.034	0.21
			<0.005	0.02	0.022	---	0.41	0.001	---	0.005	---	---	0.043	86.7
410-D	AISI 410	S41000	---	---	---	---	0.10	12.26	0.021	0.062	---	0.38	0.036	0.34
			0.005	0.023	0.017	---	0.36	0.006	---	---	0.001	---	0.072	86.3
416-D	AISI 416	S41600	---	---	---	---	0.088	12.9	0.020	0.048	---	0.38	0.023	0.16
			---	0.036	0.018	---	0.64	0.34	---	0.007	0.002	---	0.069	85.3
416Se-C	AISI 416Se	S41623	0.002	---	0.0004	0.0003	0.11	13.5	0.015	0.11	---	0.47	0.076	0.25
			<0.005	---	0.022	0.31	0.62	0.022	---	---	0.001	0.019	0.050	84.4
418-C	Greek Ascoloy	S41800	0.002	0.005	---	---	0.17	12.4	0.041	0.11	---	0.33	0.15	1.95
			0.006	0.040	0.018	---	0.34	0.005	---	0.003	---	2.62	0.06	81.7
418-D	Greek Ascoloy	S41800	0.002	0.005	---	---	0.17	12.3	0.029	0.14	---	0.28	0.14	1.90
			<0.005	0.040	0.022	---	0.39	0.004	---	0.003	---	2.48	0.054	82.1
420-C	AISI 420	S42000	0.002	---	---	---	0.32	13.50	0.020	0.047	---	0.34	0.049	0.20
			<0.005	0.020	0.024	---	0.61	0.001	---	0.006	0.003	---	0.072	84.8
420F-C	AISI 420F	S42020	0.002	---	0.001	---	0.25	13.21	0.024	0.077	---	0.42	0.047	0.22
			---	---	0.019	---	0.38	0.28	---	---	0.001	0.006	0.065	85.0
422-A	AISI 422	S42200	0.011	0.004	<0.0005	---	0.23	11.52	0.030	0.096	<0.005	0.62	0.92	0.69
			0.042	0.047	0.016	---	0.43	0.002	<0.01	0.004	0.002	0.91	0.26	84.2
BG42-C	AISI 427	S42700	0.056	---	0.001	0.0004	1.25	14.9	0.017	0.040	---	0.43	4.04	0.12
			---	---	0.011	---	0.35	0.006	---	---	0.003	---	1.27	77.6
430-D	AISI 430	S43000	0.001	0.004	---	---	0.072	16.16	0.026	0.062	---	0.36	0.40	0.22
			0.007	0.044	0.016	---	0.49	0.003	---	0.009	0.005	0.13	0.12	81.9
430F-C	AISI 430F	S43020	0.001	---	0.001	---	0.042	17.3	0.020	0.078	---	0.37	0.27	0.22
			<0.005	0.045	0.020	---	0.57	0.34	---	0.009	0.003	0.012	0.043	80.7
431-C	AISI 431	S43100	---	---	---	---	0.16	16.14	0.012	0.026	---	0.61	0.016	2.40
			0.005	---	0.017	---	0.47	0.004	---	0.007	0.003	---	0.036	80.1
440A-C	AISI 440A	S44002	0.005	---	0.001	---	0.66	17.4	0.021	0.055	---	0.42	0.48	0.17
			---	---	0.016	---	0.34	0.001	---	---	0.003	0.016	0.046	80.4
440C-D	AISI 440C	S44004	---	---	---	---	1.04	16.8	0.029	0.050	---	0.35	0.45	0.15
			<0.005	0.037	0.022	---	0.62	0.001	---	0.012	0.004	---	0.043	80.4

Stainless & High Temperature Steels, Page 6 of 6

RM#	Grade	UNS	Al	As	B	Ca	C	Cr	Co	Cu	Pb	Mn	Mo	Ni
			Nb	N	P	Se	Si	S	Ta	Sn	Ti	W	V	Fe Bal.
440FSe-C	AISI 440F Se	S44023	0.004	---	0.0008	0.0006	1.00	16.7	0.029	0.07	---	1.07	0.46	0.26
			0.019	---	0.021	0.26	0.49	0.017	---	---	0.002	0.081	0.14	79.4
443-C	AISI 443	S44300	0.004	---	0.0004	0.001	0.10	20.8	0.023	1.01	---	0.44	0.046	0.27
			0.005	---	0.025	---	0.31	0.008	---	---	0.002	0.009	0.072	76.9