

TABLE 1 Chemical Composition Requirements, %^A

UNS Desig. ^B	Type ^C	C ^D	Mn	P	S	Si	Cr	Ni	Mo	N	Cu	Other Elements ^{E,F}
Austenitic (Chromium-Nickel) (Chromium-Manganese-Nickel)												
N08020	...	0.07	2.00	0.045	0.035	1.00	19.0–21.0	32.0–38.0	2.00–3.00	...	3.00–4.00	Nb 8xC min, 1.00 max
N08367	...	0.030	2.00	0.040	0.030	1.00	20.0–22.0	23.5–25.5	6.0–7.0	0.18–0.25	0.75	...
N08700	...	0.04	2.00	0.040	0.030	1.00	19.0–23.0	24.0–26.0	4.3–5.0	...	0.50	Nb 8xC min 0.40 max
N08800	800 ^G	0.10	1.50	0.045	0.015	1.00	19.0–23.0	30.0–35.0	...	...	0.75	Fe ^H 39.5 min Al 0.15–0.60 Ti 0.15–0.60
N08810	800H ^G	0.05–0.10	1.50	0.045	0.015	1.00	19.0–23.0	30.0–35.0	...	...	0.75	Fe ^H 39.5 min Al 0.15–0.60 Ti 0.15–0.60
N08811	...	0.06–0.10	1.50	0.040	0.015	1.00	19.0–23.0	30.0–35.0	...	...	0.75	Fe ^H 39.5 min Ti ^I 0.25–0.60 Al ^I 0.25–0.60
N08904	904L ^G	0.020	2.00	0.045	0.035	1.00	19.0–23.0	23.0–28.0	4.00–5.00	0.10	1.00–2.00	...
N08925	...	0.020	1.00	0.045	0.030	0.50	19.0–21.0	24.0–26.0	6.00–7.00	0.10–0.20	0.80–1.50	...
N08926	...	0.020	2.00	0.030	0.010	0.50	19.0–21.0	24.0–26.0	6.00–7.00	0.15–0.25	0.50–1.50	...
S20100	201	0.15	5.50–7.50	0.060	0.030	1.00	16.0–18.0	3.5–5.5	...	0.25	...	...
S20103	...	0.03	5.50–7.50	0.045	0.030	0.75	16.0–18.0	3.5–5.5	...	0.25	...	...
S20153	201LN ^G	0.03	6.40–7.50	0.045	0.015	0.75	16.0–17.5	4.0–5.0	...	0.10–0.25	1.00	...
S20161	...	0.15	4.00–6.00	0.040	0.040	3.00–4.00	15.0–18.0	4.0–6.0	...	0.08–0.20	...	...
S20200	202	0.15	7.50–10.00	0.060	0.030	1.00	17.0–19.0	4.0–6.0	...	0.25	...	...
S20400	...	0.030	7.00–9.00	0.040	0.030	1.00	15.0–17.0	1.50–3.00	...	0.15–0.30	...	...
S20431	...	0.12	5.00–7.00	0.045	0.030	1.00	17.0–18.0	2.0–4.0	...	0.10–0.25	1.50–3.50	...
S20432	...	0.08	3.00–5.00	0.045	0.030	1.00	17.0–18.0	4.0–6.0	...	0.05–0.20	2.00–3.00	...
S20433	...	0.08	5.50–7.50	0.045	0.030	1.00	17.0–18.0	3.5–5.5	...	0.10–0.25	1.50–3.50	...
S20910	XM-19 ^J	0.06	4.00–6.00	0.040	0.030	0.75	20.5–23.5	11.5–13.5	1.50–3.00	0.20–0.40	...	Nb 0.10–0.30 V 0.10–0.30
S21400	XM-31 ^J	0.12	14.00–16.00	0.045	0.030	0.30–1.00	17.0–18.5	1.00	...	0.35 min	...	...
S21600	XM-17 ^J	0.08	7.50–9.00	0.045	0.030	0.75	17.5–22.0	5.0–7.0	2.00–3.00	0.25–0.50	...	...
S21603	XM-18 ^J	0.03	7.50–9.00	0.045	0.030	0.75	17.5–22.0	5.0–7.0	2.00–3.00	0.25–0.50	...	...
S21640	...	0.08	3.50–6.50	0.060	0.030	1.00	17.5–19.5	4.0–6.5	0.50–2.00	0.08–0.30	...	Nb 0.10–1.00
S21800	...	0.10	7.00–9.00	0.060	0.030	3.5–4.5	16.0–18.0	8.0–9.0	...	0.08–0.18	...	...
S21904	XM-11 ^J	0.04	8.00–10.00	0.060	0.030	0.75	19.0–21.5	5.5–7.5	...	0.15–0.40	...	...
S24000	XM-29 ^J	0.08	11.50–14.50	0.060	0.030	0.75	17.0–19.0	2.3–3.7	...	0.20–0.40	...	...
S30100	301	0.15	2.00	0.045	0.030	1.00	16.0–18.0	6.0–8.0	...	0.10	...	...
S30103	301L ^G	0.03	2.00	0.045	0.030	1.00	16.0–18.0	6.0–8.0	...	0.20	...	...
S30153	301LN ^G	0.03	2.00	0.045	0.030	1.00	16.0–18.0	6.0–8.0	...	0.07–0.20	...	...
S30200	302	0.15	2.00	0.045	0.030	0.75	17.0–19.0	8.0–10.0	...	0.10	...	...
S30400	304	0.08	2.00	0.045	0.030	0.75	18.0–20.0	8.0–11.0	...	0.10	...	...
S30403	304L	0.030	2.00	0.045	0.030	0.75	18.0–20.0	8.0–12.0	...	0.10	...	...
S30409	304H	0.04–0.10	2.00	0.045	0.030	0.75	18.0–20.0	8.0–10.5	...	...	...	...
S30415	...	0.04–0.06	0.80	0.045	0.030	1.00–2.00	18.0–19.0	9.0–10.0	...	0.12–0.18	...	Ce 0.03–0.08
S30416	...	0.030	2.00	0.045	0.015	0.80–2.00	17.5–19.5	9.0–11.0	0.40–0.80	0.10	...	...
S30435	...	0.08	2.00	0.045	0.030	1.00	16.0–18.0	7.0–9.0	...	...	1.50–3.00	...
S30441	...	0.08	2.00	0.045	0.030	1.0–2.0	17.5–19.5	8.0–10.5	...	0.10	1.5–2.5	Nb 0.1–0.5 W 0.2–0.8
S30451	304N	0.08	2.00	0.045	0.030	0.75	18.0–20.0	8.0–10.5	...	0.10–0.16	...	...
S30452	XM-21 ^J	0.08	2.00	0.045	0.030	0.75	18.0–20.0	8.0–10.5	...	0.16–0.30	...	...
S30453	304LN	0.030	2.00	0.045	0.030	0.75	18.0–20.0	8.0–12.0	...	0.10–0.16	...	...
S30500	305	0.12	2.00	0.045	0.030	0.75	17.0–19.0	10.5–13.0	...	...	...	...
S30530	...	0.08	2.00	0.045	0.030	0.50–2.50	17.0–20.5	8.5–11.5	0.75–1.50	...	0.75–3.50	...
S30600	...	0.018	2.00	0.020	0.020	3.7–4.3	17.0–18.5	14.0–15.5	0.20	...	0.50	...
S30616	...	0.020	1.50	0.030	0.015	3.9–4.7	16.5–18.5	13.0–15.5	0.50	...	0.40	Nb 0.30–0.70
S30601	...	0.015	0.50–0.80	0.030	0.013	5.0–5.6	17.0–18.0	17.0–18.0	0.20	0.05	0.35	...
S30615	...	0.16–0.24	2.00	0.030	0.030	3.2–4.0	17.0–19.5	13.5–16.0	...	...	...	Al 0.80–1.50
S30815	...	0.05–0.10	0.80	0.040	0.030	1.40–2.00	20.0–22.0	10.0–12.0	...	0.14–0.20	...	Ce 0.03–0.08
S30908	309S	0.08	2.00	0.045	0.030	0.75	22.0–24.0	12.0–15.0	...	...	...	...
S30909	309H ^G	0.04–0.10	2.00	0.045	0.030	0.75	22.0–24.0	12.0–15.0	...	...	...	...
S30940	309Cb ^G	0.08	2.00	0.045	0.030	0.75	22.0–24.0	12.0–16.0	...	...	...	Nb 10xC min, 1.10 max
S30941	309HCb ^G	0.04–0.10	2.00	0.045	0.030	0.75	22.0–24.0	12.0–16.0	...	...	...	Nb 10xC min, 1.10 max
S31008	310S	0.08	2.00	0.045	0.030	1.50	24.0–26.0	19.0–22.0	...	...	...	...
S31009	310H ^G	0.04–0.10	2.00	0.045	0.030	0.75	24.0–26.0	19.0–22.0	...	...	...	...
S31040	310Cb ^G	0.08	2.00	0.045	0.030	1.50	24.0–26.0	19.0–22.0	...	...	...	Nb 10xC min, 1.10 max
S31041	310HCb ^G	0.04–0.10	2.00	0.045	0.030	0.75	24.0–26.0	19.0–22.0	...	...	...	Nb 10xC min, 1.10 max
S31050	310MoLN ^G	0.020	2.00	0.030	0.010	0.50	24.0–26.0	20.5–23.5	1.60–2.60	0.09–0.15	...	...
S31060	...	0.05–0.10	1.00	0.040	0.030	0.50	22.0–24.0	10.0–12.5	...	0.18–0.25	...	Ce + La 0.025–0.070 B 0.001–0.010
S31254	...	0.020	1.00	0.030	0.010	0.80	19.5–20.5	17.5–18.5	6.0–6.5	0.18–0.25	0.50–1.00	...
S31266	...	0.030	2.00–4.00	0.035	0.020	1.00	23.0–25.0	21.0–24.0	5.2–6.2	0.35–0.60	1.00–2.50	W 1.50–2.50
S31277	...	0.020	3.00	0.030	0.010	0.50	20.5–23.0	26.0–28.0	6.5–8.0	0.30–0.40	0.50–1.50	...
S31600	316	0.08	2.00	0.045	0.030	0.75	16.0–18.0	10.0–14.0	2.00–3.00	0.10	...	...
S31603	316L	0.030	2.00	0.045	0.030	0.75	16.0–18.0	10.0–14.0	2.00–3.00	0.10	...	...