

SPECIFICATIONS

CHEMICAL COMPOSITION									MECHANICAL PROPERTIES						
	JSL Designation/ Grade	%C (Max)	%Mn (Max)	%P (Max)	%S (Max)	%Si (Max)	%Cr	%Ni	%Mo	N PPM (Max)	%OTHERS	Tensile Strength MPa (min)	Yield strength MPa (min)	%Elongation (min)	Hardness Rockwell B (max)
Austenitic Cr-Mn*	J-201#	0.15	5.5-7.5	0.060	0.030	1.00	16.00-18.00	3.50-5.50	-	2500	-	655	310	40	100
	J-201L	0.030	5.5-7.5	0.045	0.030	0.75	16.00-18.00	3.50-5.50	-	2500	-	655	260	40	95
	J-201LN	0.030	6.4-7.5	0.045	0.015	0.75	16.00-17.50	4.00-5.00	-	1000-2500	Cu = 1.0 Max	655	310	45	100
	J-202	0.15	7.5-10.0	0.060	0.030	1.00	17.00-19.00	4.00-6.00	-	2500	-	620	260	40	100
	J-204 Cu††	0.10	6.5-9.0	0.060	0.010	0.75	16.00-17.50	1.50-3.50	-	1000-2000	Cu = 2.0-4.0	620	310	40	100
	JSLAUS (J1)	0.08	6.0-8.0	0.070	0.010	0.75	16.00-18.00	4.00-6.00	-	1000	Cu = 1.5-2.0	550	205	40	95
	J-4	0.10	8.50-10.0	0.080	0.010	0.75	15.00-16.00	1.00-2.00	-	2000	Cu = 1.5-2.0	650	325	40	100
Austenitic Cr-Ni	J-301	0.15	2.00	0.045	0.030	1.00	16.00-18.00	6.00-8.00	-	1000	-	515	205	40	95
	J-301L	0.030	2.00	0.045	0.030	1.00	16.00-18.00	6.00-8.00	-	2000	-	550	220	45	100
	J-301LN	0.030	2.00	0.045	0.030	1.00	16.00-18.00	6.00-8.00	-	700-2000	-	550	240	45	100
	J-304	0.07	2.00	0.045	0.030	0.75	17.50-19.50	8.00-10.50	-	1000	-	515	205	40	92
	J-304M	0.04-0.10	2.00	0.045	0.030	0.75	18.00-20.00	8.00-10.50	-	-	-	515	205	40	92
	J-304L	0.030	2.00	0.045	0.030	0.75	17.50-19.50	8.00-12.00	-	1000	-	485	170	40	92
	J-304LN	0.030	2.00	0.045	0.030	0.75	18.00-20.00	8.00-12.00	-	1000-1600	-	515	205	40	95
	J-309	0.20	2.00	0.045	0.030	0.75	22.00-24.00	12.00-15.00	-	-	-	515	205	40	95
	J-309S	0.08	2.00	0.045	0.030	0.75	22.00-24.00	12.00-15.00	-	-	-	515	205	40	95
	J-310	0.25	2.00	0.045	0.030	1.50	24.00-26.00	19.00-22.00	-	-	-	515	205	40	95
	J-310S	0.08	2.00	0.045	0.030	1.50	24.00-26.00	19.00-22.00	-	-	-	515	205	40	95
	J-316	0.08	2.00	0.045	0.030	0.75	16.00-18.00	10.00-14.00	2.00-3.00	1000	-	515	205	40	95
	J-316L	0.030	2.00	0.045	0.030	0.75	16.00-18.00	10.00-14.00	2.00-3.00	1000	-	485	170	40	95
	J-316LN	0.030	2.00	0.045	0.030	0.75	16.00-18.00	10.00-14.00	2.00-3.00	1000-1600	-	515	205	40	95
	J-316Ti	0.08	2.00	0.045	0.030	0.75	16.00-18.00	10.00-14.00	2.00-3.00	1000	Ti = 5X(C+N) Min., 0.70 Max	515	205	40	95
	J-317	0.08	2.00	0.045	0.030	0.75	18.00-20.00	11.00-15.00	3.00-4.00	1000	-	515	205	35	95
	J-317L	0.030	2.00	0.045	0.030	0.75	18.00-20.00	11.00-15.00	3.00-4.00	1000	-	515	205	40	95
J-317LN	0.030	2.00	0.045	0.030	0.75	18.00-20.00	11.00-15.00	3.00-4.00	1000-2200	-	550	240	40	95	
J-31727	0.030	1.00	0.030	0.030	1.00	17.50-19.00	14.50-16.50	3.80-4.50	1500-2100	Cu = 2.8-4.0	550	245	35	96	
J-321	0.08	2.00	0.045	0.030	0.75	17.00-19.00	9.00-12.00	-	1000	Ti = 5X(C+N) Min., 0.70 Max	515	205	40	95	
J-347	0.08	2.00	0.045	0.030	0.75	17.00-19.00	9.00-13.00	-	-	Nb = 10XC Min., 1.00 Max	515	205	40	92	
Martensitic	J-410	0.08-0.15	1.00	0.040	0.030	1.00	11.50-13.50	0.75 max	-	-	-	450	205	20	96
	J-415	0.05	0.50-1.00	0.030	0.030	0.60	11.50-14.00	3.50-5.50	0.50-1.00	-	-	795	620	15	32rc
	J-420	0.15 min	1.00	0.040	0.030	1.00	12.00-14.00	0.75 max	0.50 max	-	-	690	-	15	96
	J-431	0.20	1.00	0.040	0.030	1.00	15.00-17.00	1.25-2.50	-	-	-	-	-	-	29rc
	JBS	0.6-0.7	1.00	0.030	0.015	0.75	12.50-13.50	-	-	-	-	-	-	-	-
Ferritic	J-405	0.08	1.00	0.040	0.030	1.00	11.50-14.50	0.60	-	-	Al = 0.10-0.30	415	170	20	88
	J-409	0.030	1.00	0.040	0.020	1.00	10.50-11.70	0.50 max	-	-	Ti = 6X(C+N) Min., 0.5 Max	380	170	20	88
	J-409L	0.030	1.00	0.040	0.030	1.00	10.50-11.70	0.50 max	-	300	Ti = 6X(C+N) Min., 0.75 Max	380	170	20	88
	J-410S	0.08	1.00	0.040	0.030	1.00	11.50-13.50	0.60 max	-	-	-	415	205	22	89
	J-430	0.12	1.00	0.040	0.030	1.00	16.00-18.00	0.75 max	-	-	-	450	205	22	89
	J-430Ti	0.030	1.00	0.040	0.030	1.00	16.00-19.00	-	-	-	Ti = 0.10-1.00	360	175	22	90
	J-436	0.120	1.00	0.040	0.030	1.00	16.00-18.00	-	0.75-1.25	-	Nb = 5XC Min., 0.70 Max	450	240	22	89
	J-436L	0.025	1.00	0.040	0.030	1.00	16.00-19.00	-	0.75-1.25	250	%Nb or & Ti or % combination = 8X(C+N) Min., 0.80 Max	410	245	20	96
	J-439	0.030	1.00	0.040	0.030	1.00	17.00-19.00	0.50 max	-	300	Ti = 0.20+ 4X(C+N) Min., 1.10 Max Al = 0.15 Max	415	205	22	89
	J-441	0.030	1.00	0.040	0.015	1.00	17.50-18.50	-	-	-	Nb = 3X% C + 0.3 Min. 1% Max, T1 = 0.1-0.6%	430	250	18	88
	Ferritic + Martensitic														
	J-409M	0.030	0.8-1.5	0.030	0.030	1.00	10.80-12.50	1.50 max	-	300	Ti = 0.75 Max	450	275	20	90
Duplex (Austenitic+ Ferritic)															
	J-2205	0.030	2.00	0.030	0.020	1.00	22.00-23.00	4.50-6.50	3.0-3.50	1400-2000	-	655	450	25	31rc
	J-2304	0.030	2.50	0.040	0.030	1.00	21.50-24.50	3.00-5.50	0.05-0.60	500-2000	Cu 0.05 Min.-0.60 Max.	600	400	25	32rc
	J-31803	0.030	2.00	0.030	0.020	1.00	21.00-23.00	4.50-6.50	2.50-3.50	800-2000	-	620	450	25	31rc

*These grades can be supplied with 0.005%S max also.

This grade will be supplied with 0.08%C max for improved corrosion resistance.

† This grade can be supplied in two versions of 0.08%C max or 0.1%C max

Specific Chemical and Mechanical properties can be supplied by mutual agreement.