

ASTM	STAINLESS STEEL		CHEMICAL COMPOSITION																	MECHANICAL PROPERTIES					USA Wrought AISI STD		
	ASTM Code	Grade	Carbon C% Max.	Silicon Si% Max.	Manganese Mn% Max.	Nickel Ni%	Chromium Cr%	Molybdenum Mo%	P% Max.	Sulphur S% Max.	Copper Cu%	Selenium Se%	Nitrogen N%	Vanadium V%	Niobium Nb%	Tungsten W%	Niobium + Tantalum Nb+Ta%	Notes	Iron Fe%	Alloy % Total Without Iron	Charpy "V" Notch ft. lb.	Tensile Strength K.S.I.	Yield Strength K.S.I.	Elong%		Brinell Hardness #	Reduction of Area %
Heat Resisting Stainless Steel	A297	HC	0.50	2.00	1.00	4.00	26.00 to 30.00	0.50	0.04	0.04									63.92	36.08		55		8	180-250	446	
	A297	HD	0.50	2.00	1.50	4.00	26.00 to 30.00	0.50	0.04	0.04									61.92	38.08		75	35	8	170-210	327	
	A297	HE	0.20 to 0.50	2.00	2.00	8.00	26.00 to 30.00	0.50	0.04	0.04									57.72	42.28		85	40	9	180-220	312	
	A297	HF	0.20 to 0.40	2.00	2.00	8.00	12.00 to 23.00	0.50	0.04	0.04									64.62	35.38		70	35	25	150-190	320B	
	A297	HH	0.20 to 0.50	2.00	2.00	11.00	24.00 to 28.00	0.50	0.04	0.04									56.57	43.43		75	35	10	170-210	309	
	A297	HI	0.20 to 0.50	2.00	2.00	14.00	18.00 to 30.00	0.50	0.04	0.04									51.07	48.93		70	35	10	170-210		
	A297	HK	0.20 to 0.60	2.00	2.00	18.00	22.00 to 28.00	0.50	0.04	0.04									49.02	50.98		65	35	10	170-220	310	
	A297	HL	0.20 to 0.60	2.00	2.00	18.00	22.00 to 32.00	0.50	0.04	0.04									45.02	54.98		65	35	10	180-220		
	A297	HN	0.20 to 0.50	2.00	2.00	23.00	27.00 to 23.00	0.50	0.04	0.04									49.07	50.93		63		8	150-190		
	A297	HT	0.35 to 0.75	2.50	2.00	33.00	37.00 to 19.00	0.50	0.04	0.04									42.37	57.63		65		4	170-200	330	
	A297	HP	0.35 to 0.75	2.50	2.00	33.00	37.00 to 24.00	0.50	0.04	0.04									33.37	66.63		62.5	34	4	180-220		
	A297	HU	0.35 to 0.75	2.50	2.00	37.00	41.00 to 21.00	0.50	0.04	0.04									36.37	63.63		65		4	180-220		
	A297	HW	0.35 to 0.75	2.50	2.00	58.00	62.00 to 14.00	0.50	0.04	0.04									22.37	77.63		65			180-220		
	A297	HX	0.35 to 0.75	2.50	2.00	64.00	68.00 to 15.00	0.50	0.04	0.04									11.37	88.63		60			180-220		
A447	Type II	0.20 to 0.50	2.00	2.00	11.00	14.00 to 24.00	0.50											56.65	43.35		75	35	10	170-210	309		
Martensitic & Precipitating Hardening Stainless Steel	A351/A743	CA-15	0.15	1.50	1.00	1.00	11.50 to 14.00	0.50	0.04	0.04								83.02	16.98		90	65	18		30	410	
	A351/A743	CA-15F	0.15	1.50	1.25	0.50	11.50 to 14.00	0.50	0.15	0.35								83.1	16.9		90	65	8		15	415	
	A351/A743	CA-40	0.20 to 0.40	1.50	1.00	1.00	11.50 to 14.00	0.50	0.04	0.04								82.97	17.03		100	70	15		25	420	
	A351/A743	CB-30	0.30	1.50	1.00	2.00	18.00 to 21.00		0.04	0.04									75.62	24.38		65	30			431	
	A351/A743	CA-6NM	0.60	1.00	1.00	3.50	4.50 to 11.50	0.40 to 1.00	0.04	0.03									79.88	20.12		110	80	15		35	F6NM
	A351/A743	CG-12	0.12	2.00	1.50	10.00	13.00 to 20.00	23.00		0.04	0.04								63.3	36.7		70	28	35			
	A351/A743	CF-20	0.20	2.00	1.50	8.00	11.00 to 18.00	21.00		0.04	0.04								67.22	32.78		70	30	30			302
	A351/A743	CF-16F	0.16	2.00	1.50	9.00	12.00 to 18.00	21.00	1.50	0.17	0.04			0.20 to 0.35					64.36	35.65		70	30	25			303
	A351/A743	CF-16Fa	0.16	2.00	1.50	9.00	12.00 to 18.00	21.00	0.40 to 0.80	0.04	0.20 to 0.40								65.40	34.60		70	30	25			303
	A351/A743	CH-20	0.20	2.00	1.50	12.00	15.00 to 22.00	26.00	0.50	0.04	0.04								58.22	41.78		70	30	30			309
	A351/A743	CH-10	0.10	2.00	1.50	12.00	15.00 to 22.00	26.00		0.04	0.04								58.82	41.18		70	30	30			
	A351/A743	CK-20	0.20	2.00	2.00	19.00	22.00 to 23.00	27.00		0.04	0.04								50.22	49.78		65	28	30			310
	A351/A743	CE-30	0.30	2.00	1.50	8.00	11.00 to 26.00	30.00		0.04	0.04								58.62	41.38		80	40	10			
	A351/A743	CC-50	0.50	1.50	1.00	4.00	26.00 to 30.00			0.04	0.04								64.92	35.08		55					446
	A351/A743	CA-40F	0.20 to 0.40	1.50	1.00	1.00	11.50 to 14.00	0.50	0.04	0.02									82.89	17.11		100	70	12			
	A351/A743	CF-10SMnN	0.10	3.50 to 4.50	7.00 to 9.00	8.00	9.00 to 16.00	18.00		0.06	0.03			0.08 to 0.18					62.18	37.82		85	42	30			Nitronic 60
	A351/A743	CF-3MN	0.03	1.50	1.50	9.00	13.00 to 17.00	22.00	2.00 to 3.00	0.04	0.04			0.10 to 0.20					63.74	36.26		75	37	35			
	A351/A743	CG-6MMN	0.06	1.00	4.00 to 6.00	11.50	13.50 to 20.50	23.50	1.50 to 3.00	0.04	0.03			0.20 to 0.40	0.10 to 0.30	0.10 to 0.30			56.42	43.58		85	42	30			
A351/A743	CN-7MS	0.07	2.50 to 3.50	1.00	22.00	25.00 to 18.00	20.00	2.50 to 3.00	0.04	0.03			1.50 to 2.00					48.86	51.14		70	30	35				
A351/A743	CA-6N	0.06	1.00	0.50	6.00	8.00 to 10.50	12.50		0.02	0.02								79.90	20.10		140	135	15		50		
Austenitic Non Hardenable Stainless Steel	A351/A743	CF-3	0.03	2.00	1.50	8.00	12.00 to 17.00	21.00		0.04	0.04			8.00 to 12.00				57.39	42.61		70	30	35			304L	
	A351/A743	CF-8	0.08	2.00	1.50	8.00	11.00 to 18.00	21.00		0.04	0.04							67.34	32.66		70	30	35			304	
	A351/A743	CF-8C	0.08	2.00	1.50	9.00	12.00 to 18.00	21.00		0.04	0.04							65.70	34.30		70	30	30			347	
	A351/A743	CF-3M	0.03	1.50	1.50	9.00	13.00 to 17.00	21.00	2.00 to 3.00	0.04	0.04								64.39	35.61		70	30	30			316L
	A351/A743	CF-8M	0.08	2.00	1.50	9.00	12.00 to 18.00	21.00	2.00 to 3.00	0.04	0.04								63.84	36.16		70	30	30			316
	A351/A743	CG-3M	0.03	1.50	1.50	9.00	13.00 to 18.00	21.00	3.00 to 4.00	0.04	0.04								62.89	37.11		75	35	25			317L
	A351/A743	CG-8M	0.08	1.50	1.50	9.00	13.00 to 18.00	21.00	3.00 to 4.00	0.04	0.04								62.84	37.16		75	35	25			317
	A351/A743	CK-3MCuN	0.03	1.00	1.20	17.50	19.50 to 20.50	6.00 to 7.00	0.05	0.01			0.18 to 0.24						51.76	48.24		80	38	35			254SMO
High Alloy Stainless Steel	A351/A743	CN-7M	0.07	1.50	1.50	27.50	30.50 to 19.00	22.00	2.00 to 3.00	0.04	0.04							41.35	58.65		62	25	35				
	A351/A743	CN-3M	0.03	1.00	2.00	23.00	27.00 to 20.00	22.00	4.50 to 5.50	0.03	0.03							45.91	54.09		63	25	30				
	A351/A743	CN-3MN	0.03	1.00	2.00	23.50	25.50 to 20.00	22.00	6.00 to 7.00	0.04	0.01			0.75	Max.			43.95	56.05		80	38	35			AL6XN	
	A747	CB-7Cu-1	0.07	1.00	0.70	3.60	4.60 to 15.50	17.70							0.15 to 0.35				74.43	25.57		125-175	97-145	5-10		17-4	
	A747	CB-7Cu-2	0.07	1.00	0.70	4.50	5.50 to 14.00	15.50							0.15 to 0.35				75.38	24.62		125-175	97-145	5-10		15-5	
AMS 5352	440 C	0.95 to 1.20	1.00	1.00		16.00 to 18.00	0.75	Max.	0.04	0.03								79.11	20.90								
Ferritic Austenitic Duplex Stainless Steel	A890	1A CD4MCu	0.04	1.00	1.00	4.75	6.00 to 24.50	26.50	1.75 to 2.25	0.04	0.04				2.75 to 3.25			62.01	38.00		100	70	16			255	
	A890	1B CD4MCuN	0.04	1.00	1.00	4.70	6.00 to 24.50	26.50	1.70 to 2.30	0.04	0.04																