

**TABLE IX - AUSTENITIC STAINLESS STEELS** Typical Chemical Range Percentages

Trade Name (AISI Equivalent)	C	Mn	Si	P	S	Ni	Cr	Mo	Cu	Other
CF-20 (302)	.20	1.50	2.00	.04	.04	8.0 11.0	18.0 21.0	---	---	
CF-16F (303)	.16	1.50	2.00	.04	---	9.0 12.0	18.0 21.0	---	---	Either: .20-.35Se, 1.50 Mo or .40-.80Mo, .20-.40S
CF-8 (304)	.08	1.50	2.00	.04	.04	8.0 11.0	18.0 21.0	---	---	
CF-3 (304L)	.03	1.50	2.00	.04	.04	8.0 12.0	17.0 21.0	---	---	
CH-20 (309)	.20	1.50	2.00	.04	.04	12.0 15.0	22.0 26.0	---	---	
CK-20 (310)	.20	2.00	2.00	.04	.04	19.0 22.0	23.0 27.0	---	---	
CF-8M (316)	.08	1.50	2.00	.04	.04	9.0 12.0	18.0 21.0	2.0 3.0		
CF-3M (316L)	.03	1.50	1.50	.04	.04	9.0 13.0	17.0 21.0	2.0 3.0	---	
IC 316F (316F)	.08	1.50	2.0	.04	.04	9.0 12.0	18.0 21.0	2.0 3.0		.20-.35Se or .20-.40S
IC 321 (321)*	.08	2.00	1.00	.04	.03	9.0 12.0	17.0 19.0	---		Ti = (5xC) (min)
CF-8C (347)	.08	1.50	2.00	.04	.04	9.0 12.0	18.0 21.0	---	---	Cb = (8xC) (min) - 1.0Cb (max)
CN-7M	.07	1.50	1.50	.04	.04	27.5 30.5	19.0 22.0	2.0 3.0	3.0 4.0	
HK	.20 .60	2.00	2.00	.04	.04	18.0 22.0	24.0 28.0	.50	---	

\* CF-8C is recommended in lieu of IC-321 for castability

**TABLE X - PROPERTIES OF SEPARATELY CAST TEST BARS  
OF AUSTENITIC STAINLESS STEELS**

Alloy	Condition	Tensile Strength		0.2% Yield Strength		% Elongation Range (in 2.5 cm)	Hardness $R_b$ Max.
		English psi	Metric MPa	English psi	Metric MPa		
CF-20	Annealed	65-75,000	448-517	30-35,000	207-241	35-60	90
CF-3, CF-8	Annealed	70-85,000	483-586	40-50,000	276-345	35-50	90
CH-20	Annealed	70-80,000	483-552	30-40,000	207-276	30-45	90
CK-20	Annealed	60-75,000	414-517	30-40,000	207-276	35-45	90
CF-3M, -8M, IC 316F	Annealed	70-85,000	483-586	40-50,000	276-345	35-50	90
CF-16F	Annealed	65-75,000	418-517	30-35,000	207-241	35-45	90
CF-8C	Annealed	70-85,000	483-586	32-36,000	221-248	30-40	90
CN-7M	Annealed	65-75,000	418-517	25-35,000	172-241	35-45	90
IC 321	Annealed	65-75,000	418-517	30-40,000	207-276	35-45	90
HK	Annealed	65-75,000	418-517	35-45,000	241-310	10-20	100

NOTE: The above mechanical property values are for information only. They do not necessarily apply to casting. Any requirements for mechanical properties are beyond this standard and must be negotiated with the foundry.