

TABLE I—ALUMINUM ALLOYS
Typical Chemical Range Percentages

Trade Name	Cu	Si	Mg	Ti	Fe	Mn	Zn	Cr	Other	Trace	
										Ea.	Tot.
Pure Aluminum	0.03	0.2	0.03	-	0.2	0.03	0.03	-	-	0.03	0.05
D-712(40E)	0.25	0.3	.50- .65	.15- .25	0.5	0.1	5.0 6.5	.40 .6	-	0.05	0.2
RR350	4.50 5.50	0.2	-	.15- .25	0.3	.20 .30	-	-	Ni - 1.3- 1.8 Co - .10- .40 Zr. - .10- .30	0.05	0.3
354	1.6 2.0	8.6- 9.4	.40- .6	0.2	0.2	0.1	0.1	-	-	0.05	0.15
355	1.0 1.5	4.5- 5.5	.40- .6	0.25	0.6	0.5	0.35	0.25	-	0.05	0.15
C-355	1.0 1.5	4.5- 5.5	.40- .6	0.2	0.2	0.1	0.1	-	-	0.05	0.15
356	0.25	6.5- 7.5	.20- .40	0.25	0.6	0.35	0.35	-	-	0.05	0.15
A-356	0.2	6.5- 7.5	.20- .40	0.2	0.2	0.1	0.1	-	-	0.05	0.15
357	0.5	6.5- 7.5	.45- .6	.10- .20	0.15	0.3	0.3	-	-	0.03	0.09
A-201 (KO-1)	4.0 5.0	0.05	.18- .35	.15- .35	0.05	.20 .30	-	-	Ag. .40-1.0	0.03	0.1
Precedent- 71A	0.1	0.15	.8- 1.0	.10- .20	0.15	0.1	6.5 7.5	.06 .20	-	0.05	0.15

¹ Where two numbers are not shown in a block, the value is a maximum. This applies to all tables of chemistry unless specifically noted.

TABLE II
PROPERTIES OF SEPARATELY CAST TEST BARS
OF ALUMINUM BASE ALLOYS

Alloy	Tensile Strength		0.2% Yield Strength		% Elongation Range (in 2.5cm)
	English psi	Metric MPa	English psi	Metric MPa	
356	32-40,000	221-276	22-30,000	152-207	3-7
A-356	38-48,000	262-331	28-36,000	193-248	3-10
A-357	33-50,000	228-345	27-40,000	186-276	3-9
355 C-355	35-50,000	241-345	28-39,000	193-269	1-8
D-712 (40E)	34-40,000	234-276	25-32,000	172-221	4-8
A-354	47-55,000	324-379	36-45,000	248-310	2-5
RR-350	32-45,000	221-310	24-38,000	165-262	1.5-5
Precedent 71	35-55,000	241-379	25-45,000	172-310	2-5
A-201 (KO-1)	56-60,000	386-414	48-55,000	331-379	3-5

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