

**TABLE I - ALUMINUM ALLOYS**  
Typical Chemical Range Percentages

Trade Name	Cu	Si	Mg	Ti	Fe	Mn	Zn	Cr	Other	Trace	
										Ea.	Tot.
Pure Aluminum	.03	.20	.03	---	.20	.03	.03	---	---	.03	.05
D-712 (40E)	.25	.30	.50 - .65	.15 - .25	.50	.10	5.0 - 6.5	.40 - .6	---	.05	.20
RR350	4.5 - 5.5	.20	---	.15 - .25	.30	.20 - .30	---	---	Ni - 1.3 - 1.8 Co - .10 - .40 Zr - .10 - .30	.05	.30
354	1.6 - 2.0	8.6 - 9.4	.40 - .6	.20	.20	.10	.10	---	---	.05	.15
355	1.0 - 1.5	4.5 - 5.5	.40 - .6	.25	.6	.50	.35	.25	---	.05	.15
C-355	1.0 - 1.5	4.5 - 5.5	.40 - .6	.20	.20	.10	.10	---	---	.05	.15
356	.25	6.5 - 7.5	.20 - .40	.25	.6	.35	.35	---	---	.05	.15
A-356	.20	6.5 - 7.5	.20 - .40	.20	.20	.10	.10	---	---	.05	.15
357	.50	6.5 - 7.5	.45 - .6	.10 - .20	.15	.30	.30	---	---	.03	.09
A-201	4.0 - 5.0	.05	.18 - .35	.15 - .35	.05	.20 - .30	---	---	Ag .40 - 1.0	.03	.10
Precedent-71A	.10	.15	.8 - 1.0	.10 - .20	.15	.10	6.5 - 7.5	.06 - .20	---	.05	.15

\* Ti + Zr = .50

\*\* .10 - .40Sb, Sb + Co = 0.6

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