



Typical Mechanical Properties of Common Cast Aluminum Alloys and Tempers

Alloy	Casting Process & Temper	Ultimate Strength (ksi)	Yield Strength (set .02%-ksi)	% Elongation (min. 2 in.)	Shear Strength (ksi)	Brinell Hardness (500 kg load on 10 mm ball)
201.0 / A201.0	Sand & PM-T4/T43	60	37	17.0	-	-
	Sand & PM-T6	65	55	8.0	42	130
	Sand & PM-T7	68	60	6.0	40	146
A206.0	PM-T4	62	38	18.0	42	-
	PM-T7	63	50	7.0	-	-
319.0 / A319.0	Sand-F	27	18	2.0	22	70
	Sand-T5	30	26	1.5	24	80
	Sand-T6	36	24	2.0	29	80
	PM-F	34	19	2.5	24	85
	PM-T6	40	27	3.0	27	95
355.0	Sand-F	23	12	3.0	-	-
	Sand-T51	28	23	1.5	22	65
	San-T6	35	25	3.0	28	80
	Sand-T7	38	36	0.5	28	85
	PM-F	27	15	4.0	-	-
	PM-T51	30	24	2.0	24	75
	PM-T6	42	27	4.0	34	90
	PM-T62	45	40	1.5	36	105
	PM-T7	40	30	2.0	30	85
	PM-T71	36	31	3.0	27	85
356.0	Sand-F	24	18	6.0	-	-
	Sand-T51	25	20	2.0	20	60
	Sand-T6	33	24	3.5	26	70
	Sand-T71	28	21	3.5	20	60
	PM-F	26	18	5.0	-	-
	PM-T51	27	20	2.0	-	-
	PM-T6	38	27	5.0	30	80
	PM-T7	32	24	6.0	25	70
A356.0	Sand-F	24	12	6.0	-	-
	Sand-T51	26	18	3.0	-	-
	Sand-T-6	40	30	6.0	-	75
	Sand-T71	30	20	3.0	-	-
	PM-F	26	13	8.0	-	-
	PM-T51	29	20	5.0	-	-
	PM-T6	41	30	12.0	-	80
535.0	PM-T7	41	30	10.0	28	90
	Sand-F	40	20	13.0	27	70