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Aluminum Standard Sand & Permanent Mold Casting Alloys

AA Number	Temper	Ultimate Tensile (ksi)	Yield Strength (ksi)	Elongation % (in 2 in.)	Compressive Yield (ksi)	Brinell Hardness (500 kg- 10mm ball)	Shearing Strength (ksi)	Endurance Limit (ksi)
Sand Casting								
319	F	23.0	13.0	1.5	19.0	55-85	22.0	10.0
319	T5	25		1.5	27	65-95	24	11
319	T6	31.0	20.0	1.5	25.0	65-95	29.0	11.0
355	T51	25	18	1.5	24	50-80	22	8
355	T6	32.0	20.0	2.0	26.0	70-105	28.0	9.0
355	T7	35	26	0.5	38	70-100	28	10
355	T71	30.0	22.0	1.5	30.0	60-95	26.0	10.0
C355	T6	36	25	2.5		75-105		
356	F	19.0		2.0		40-70		
356	T51	23	16	2	21	45-75	20	8
356	T6	30.0	20.0	3.0	25.0	55-90	26.0	8.5
356	T7	31	29	2	31	60-90	24	9
356	T71	25.0	18.0	3.0	22.0	45-75	20.0	8.5
A356	T6	34	24	3.5		70-105		
514	F	22.0	9.0	6.0	12.0	35-65	20.0	7.0
520	T4	42	22	12	27	60-90	34	8
535	F or T5	35.0	18.0	9.0		60-90		
713	F or T5	32.0	22.0	3.0		60-90		
Permanent Mold Casting								
319	F	28	14	1.5	19	70-100	24	
319	T6	34		2	27	75-105		
355	T51	27		2	24	60-90	24	
355	T6	37		1.5	27	75-105	34	10
355	T62	42		1.5	40	90-120	36	10
355	T7	36		2	30	70-100	30	10
355	T71	34	27	3	31	65-95	27	10
C355	T61	40	30	3	36	75-105	32	14
356	F	21		3		40-70		
356	T51	25		2		55-85		
356	T6	33	22	3	27	65-95	30	13
356	T7	25		3	24	60-90	25	11
356	T71	25		3		60-90	7	
A356	T61	37	26	5	32	70-100	28	13
357	T6	45		3	44	75-105	35	13
A357	T61	45	36	3		85-115		
535	F	35	18	8		60-90		
713	T5	32	22	4		60-90		