

Tensile properties of A355 unreinforced				
Test temperature	Condition	U.T.S (MPa)	Y.S. (MPa)	%Elong.
Room temperature	As-cast	226	140	2,3
	Extruded	233	166	3,5
150 C	As-cast	251	150	1,9
	Extruded	250	141	2,8
300 C	As-cast	202	120	4,2
	Extruded	229	133	3,7
Tensile properties of A355 with 10% wt SiCp				
Test temperature	condition	U.T.S (MPa)	Y.S. (MPa)	%Elong.
Room temperature	As-cast	234	136	1,6
	Extruded	242	128	2,5
150 C	As-cast	222	105	2
	Extruded	234	131	1,5
300 C	As-cast	179	100	5,1
	Extruded	218	121	4,7
Tensile properties of A355 reinforced with 15% wt SiCp				
Test temperature	Condition	U.T.S(MPa)	Y.S. (MPa)	% Elong.
Room temperature	As-cast	223	134	1,4
	Extruded	238	124	1,9
150 C	As-cast	215	95	2
	Extruded	230	111	3,2
300 C	As-cast	152	72	5,2
	Extruded	164	97	4,9
Tensile properties of A355 reinforced with 20% wt SiCp				
Test temperature	Condition	U.T.S (MPa)	Y.S. (MPa)	% Elong.
Room temperature	As-cast	214	127	1,2
	Extruded	227	115	1,8
150 C	As-cast	207	90	1,9
	Extruded	215	105	2,4
300 C	As-cast	141	59	5,3
	Extruded	153	81	4,6

Table 2: The predicted tensile properties of A355 alloy matrix composites