

Printers							
Benchmarking Parameters	Asterid 1000S	Cube	David (Sculptify)	MakerBot Mini	MakerBot Replicator (5th gen)	MakerGear M2	Solidoodle
Filament Size (mm)	1.75	cartridge	pellets	1.75	1.75	1.75	1.75
Nozzle Diameter (mm)	0.4	-	0.3, 0.4, 0.5	0.4	0.4	0.35	0.4
Power Requirements	120W -- 12VDC @ 10amps	-	-	100-240 VAC; 0.75-.41A; 50-60 Hz; 100W	100-240 VAC; 0.75-.43A; 50-60 Hz; 100W	-	180 W
Weight	-	-	-	.7lb	.7lb	-	-
Size	-	-	-	6.5" x 3.625" x 2.5"	6.5" x 3.625" x 2.5"	-	-
Material Capabilities	PLA	ABS, PLA	ABS, EVA, HIPS, HDPE, Nylon, PC, PLA, TPU, Wood Composites	PLA	PLA	PLA	ABS, PLA
Operating Temperature	-	280C	330C	215C	230C	-	-
Screw Extruder Machinery							
Benchmarking Parameters	JYH-45/33	Sterling Extruder	Brabender KE 19				
Motor Power (kW)	45	11.2	1.5				
Diameter of screw (mm)	45	38.1	19-30				
Screw L/D Ratio	33	42					
Torque (N*m)	1790	-					
Max Output (kg/h)	150	-	0.5-15				