MK7 Test Specification (Revision C)

For use with MK7 Design Specification (Revision A)

Test Conditions

Hardware
__ Machine: Thing-O-Matic _____
__ Electronics: Gen4
__ Extruder motor Ref voltage: 1.68 +0/-0.05
__ Fan connected to 1A/1B
__ Thermal cutoff switch connected
__ Washers: 2 rubber, 3 metal
__ Motor: 5 mm shaft MP1872
__ MK5 drive gear with sleeve adapter
__ Thermal barrier: 2 mm bore through, 3/32" x 10 mm from nozzle end
__ Nozzle: 3/32" bore, 0.4 mm orifice
__ Insulated thermal core
Software
__ Motherboard firmware: v2.81
__ Extruder firmware: v2.9
__ PLA temperature: 205 C
__ PLA reversal: 35 RPM, 20 ms reverse, 23 forward
__ ABS temperature: 225 C
__ ABS reversal: 25 RPM, 10 ms reverse, 12 ms forward

Specification

All objects must visually appear of equal or greater quality than MK6 prints to pass.

1. __ Print three 20 mm cubes in PLA
2. Print three discontinuous objects using reversal with no stripping events or major defects in PLA:
   a. __ one ultimateCalibrationTest (thing: _____)
   b. __ one Vica Illusion Sculpture (thing: 5700)
   c. __ one 3-D Knot (thing:5504)
3. __ Print three 20 mm cubes in ABS
4. Print three discontinuous objects using reversal with no stripping events or major defects in ABS:
   a. __ one ultimateCalibrationTest (thing: _____)
   b. __ one Vica Illusion Sculpture (thing: 5700)
   c. __ one 3-D Knot (thing:5504)
5. __ Print one Spiral Pencil/Candle/Toothbrush Cup (thing: 6917)

Change Log

Revision	Notes	Checked by	Approved by
A	Initial specification	C. Pax	N. Starno
B	Changed specifics for printing/ eliminated non-standard nozzles	N. Starno	C. Pax
C	Added test conditions, changed print order	N. Starno	C. Pax