

Rapido hotend Capability Test

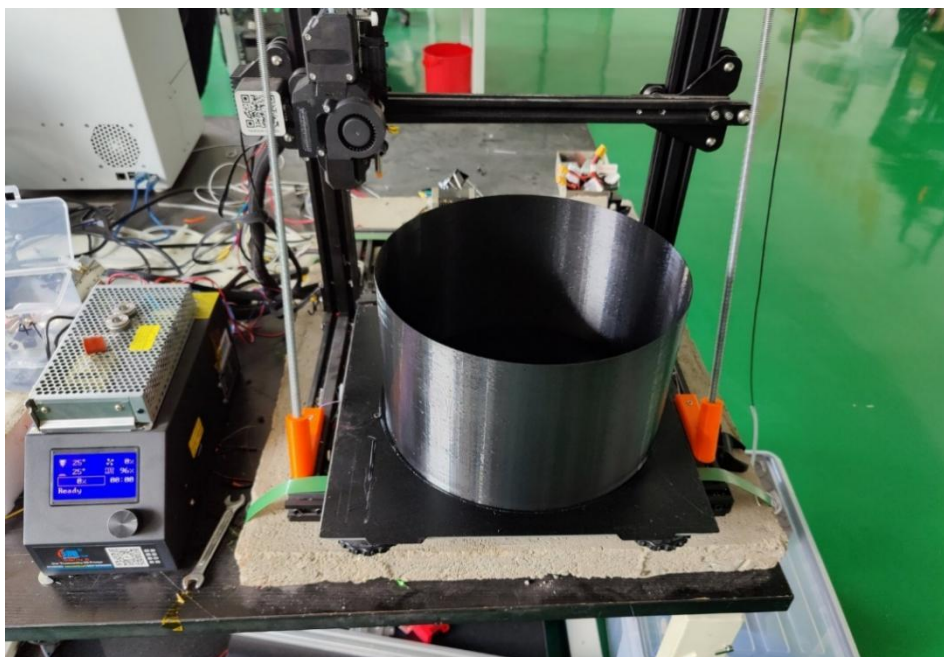
Test conditions

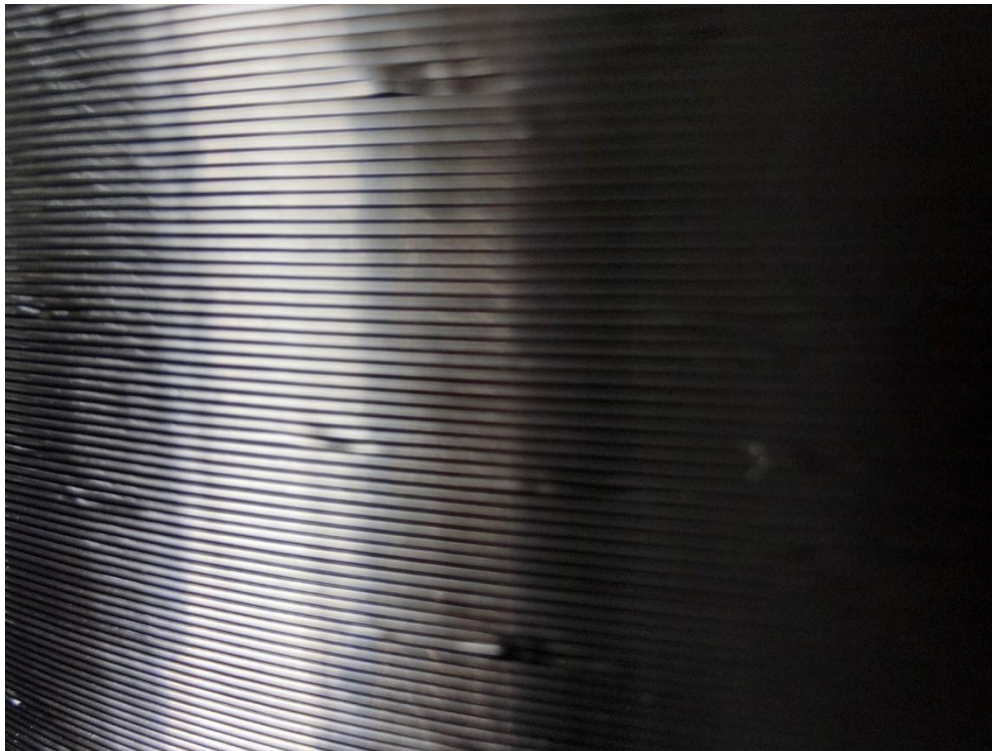
Printer	Creality CR-10S modified with 24V PSU and Klipper firmware https://creality3d.shop/products/creality-cr-10s-diy-desktop-3d-printer-300x300x400mm
Hotend	Rapido hotend
Extruder	Trianglelab DDE Direct Drive Extruder Upgrade Kit for CR-10S https://www.aliexpress.com/i/4000006762144.html
Slicer	PrusaSlicer 2.3.0
Filament	Generic PETG 1.75 density 1.27

Test result

1. Vase speed test

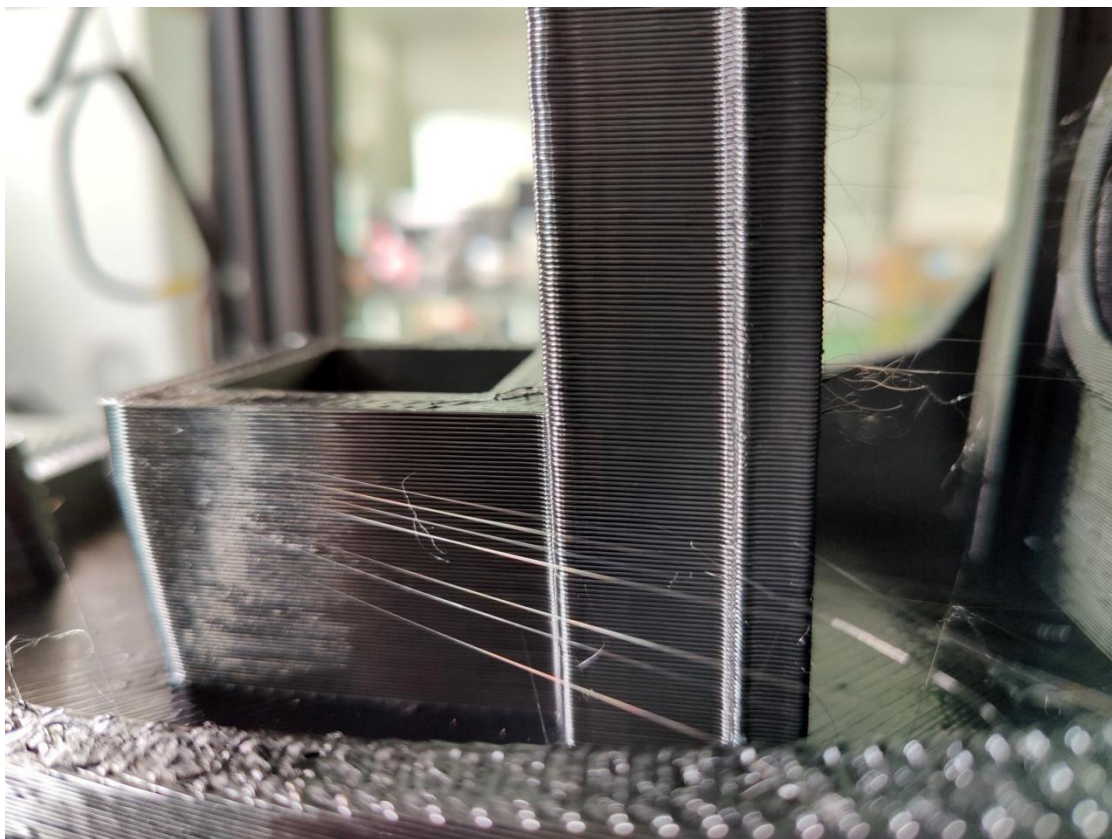
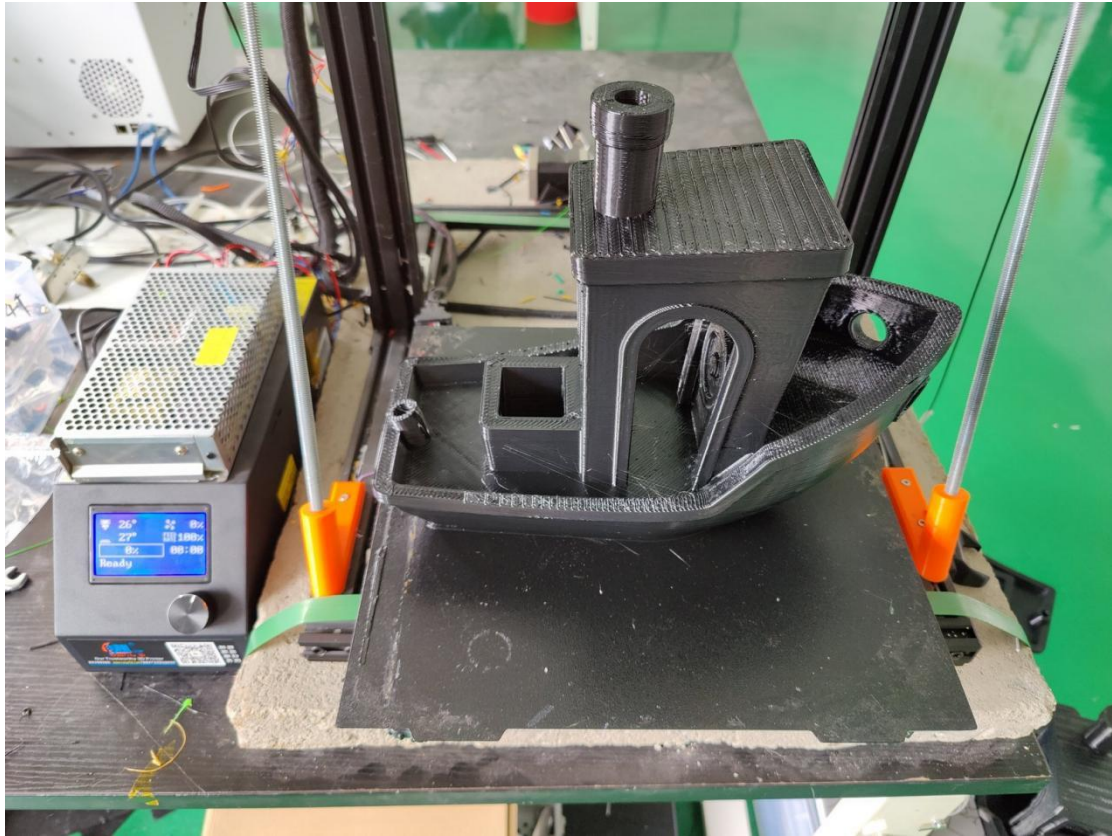
Model:	Cylindrical	Diameter=250mm	Height=150mm
Slicer setting:	Singel wall vase mode with 0 bottom layer		
Nozzle:	Volcano 1.0mm + Melt Zone Extender		
Filament	Generic PETG 1.75 @250C		
Printing speed	100-110MM/S		
Extrudtion width	1.13mm		
Layer height	0.5mm		
Part weight	138.5g	109055.12cm ³	
Print duration	39M40S		
Volumetric throughput	2749.05 mm ³ /min	45.82 mm ³ /s	





2. 3DBenchy test

Model www.thingiverse.com/thing:763622 in 500% size
 Slicer setting 15% infill 2bottom 3top layers
 Max-volumetric-speed-limit 55mm³/s
 Nozzle Volcano 1.0mm + Melt Zone Extender
 Filament Generic PETG 1.75 @250C
 Extrudtion width 1.13mm
 Layer height 0.5mm
 Printing speed 65-107MM/S
 Part weight 859g 676377.95mm³
 Print duration 5H49M
 Volumetric throughput 1938.05 mm³/min 32.3 mm³/s



3. TPU95A test

Model: 200*200*10mm cuboid

Slicer setting: 30% gird 0/90°infill 0bottom 0top layers

Max-volumetric-speed-limit 55mm³/s

Nozzle 0.8mm Volcano +Extender

Filament TPU95A 1.75 @240C

Extrudtion width 0.9mm

Layer height 0.3mm

Printing speed 130-150MM/S

Part weight 88g 72727.27mm³

Print duration 39M

Volumetric throughput 1864.80 mm³/min 31.08 mm³/s

