

## 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>

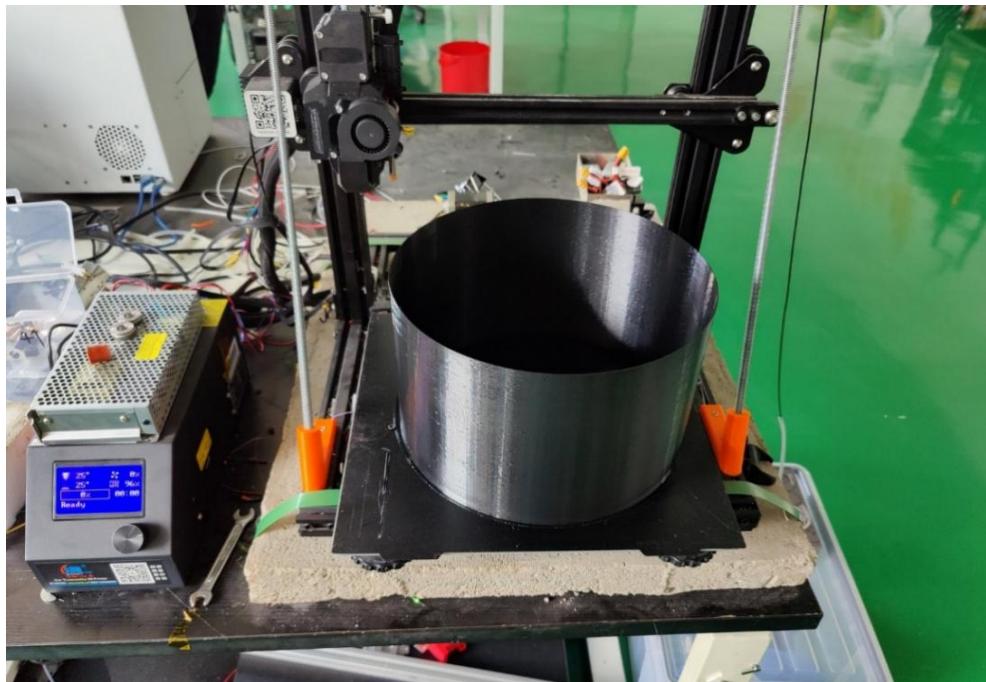
**Slicer:** PrusaSlicer 2.3.0

**Filament:** Generic PETG 1.75 density 1.27

### ➤ Test result

#### 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
Extrudtion width	1.13mm
Layer height	0.5mm
Printing speed	100-110MM/S
Part weight	138.5g 109055.12cm <sup>3</sup>
Print duration	39M40S
Volumetric throughput	2749.05 mm <sup>3</sup> /min 45.82 mm <sup>3</sup> /s



### 3DBenchy test

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



**TPU95A test**

Model	200*200*10mm cuboid	
Slicer setting	30% gird 0/90°infill 0bottom 0top layers	
Max-volumetric-speed-limit	55mm <sup>3</sup> /s	
Nozzle	0.8mm Volcano +Extender	
Filament	TPU95A 1.75 @240C	
Extrusion width	0.9mm	
Layer height	0.3mm	
Printing speed	130-150MM/S	
Part weight	88g	72727.27mm <sup>3</sup>
Print duration	39M	
Volumetric throughput	1864.80 mm <sup>3</sup> /min      31.08 mm <sup>3</sup> /s	

