This a Polylite PLA 3D printed adapter, sliced in Cura 4.6 and printed on an Ultimaker 3. Once printed the adapter is annealed at 60°C for 1 hour and then allowed to cool to room temperature. 16 N52 Neodymium magnets, McMaster Carr #5862K122, are embedded at layer 51. We use a Cura post-processing G-Code modification found under the extension heading (Extensions>Post Processing>Modify G-Code>Add a Script>Pause at height) to pause the print and add magnets, and then resume printing. The magnetized end of the adapter, area (2), easily connects and disconnects the blowpipe to and from the air supply system. A conventional blow hose extension brass swivel connects the adapter to the air supply system, area (1). As a final note, the 32° pitch of the internal geometry was choosen because it fits the majority of the pipes here at The Studio, ie. Spiral Arts 5/8 and 3/4 pipes.

- Polylite PLA
- Nozzle temp. 215°C
- Bed Temp. 60°C
- 20% Infill
- No Supports
- No Brims, Skirt or Raft
- 1mm shell wall thickness
- 5 shell wall count

**PROJECT**

**Studio Alternate Inflation Device**

**TITLE**

**Magnetic Blowpipe Adapter**

**The Studio at CMoG**

**PLA+H.79_C16**

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