Master List Of Stan Meyer STLs

- Resonant Cavities

    - Version 1 - Single Hexagonal Design - Doesn't Require Machine Tubing

    - Version 2 - Two Cell Holder - Requires Machined Tube Sets

    - Version 3 - Single Cavity Holder - Requires Machined Tube Sets

    - DIY Inner Electrode Machining Template

- VIC5 Transformer Bobbins & Ends

    - VIC5 - Estate Replica - Flat Ferrite Cores

    - VIC5 - Large Ferrite Core

- VIC4 Coil Bobbins

    - Amazon U Cores - UY1658 /60

Resonant Cavities

Version 1 - Single Hexagonal Design - Doesn't Require Machine Tubing

Author does not accept and liabilities/responsibilities for those individuals who chose to build the below cell. This information on this site is for educational purposes only.

Chris Bake using this design: 10 Cell Tubular Resonant Cavity

My YouTube video: My Video

Cavity shown on Chris Bake's YouTube channel: ingle cavity with entry/flow holes at bottom. Accepts 3/4" (19.05mm) and 1/2" (12.7mm) stainless steel tubes. Nuts recessed are sized for 10-32" stainless steel nuts, and 10-32" stainless steel (18-8) set screws. Top accepts 1/2" long 10-32 set screws, bottom accepts 5/8" long 10-32 set screws. Holes are sized for 10-32 tap to thread if desired. 3D filament is regular PETG. Should only need 1 spool of filament, as all prints were done at 50% infill.

Supplier Sites: 10-32 SS Nuts , 1/2" 10-32 SS set screw , 5/8" 10-32 SS set screw , 1/2" OD, 0.065" Wall, 0.375" T-304 SS Tube , 3/4", 0.035" wall, 0.68" ID T-304 SS Tube , T-304 SS connecting wire , PETG Filament ,

hex resonant cavity with flow holes (2).stl

image-1667233965315.png

Base plate that accepts 10 of the single resonant cavities above. The cavities outer body will need to be filed a little to provide press fit into the below plate. Holes on the outer edge are for 6-32" tap if so desired to prevent resonant cavity from coming out if loose fitting happens.

WFC base plate v1 v0 (2).stl

image-1667233980842.png
image not found or type unknown

Depending on the vessel diameter used, the base plate may need to be reduced in OD. I accomplished this with a bench grinder and sandpaper. Needle nose pliers are helpful in tightening connections. A 10-32 tap was run through holes that set screws go into. Connect two in series at a time for easier construction/wiring. The OD diameter of the base was intended for the 5.75" ID acrylic tube I used. However, any clear vessel or bucket can be used for testing. Nothing specific for the base being 5.75" OD.

The 3/4" SS tubing needs cut to a length of 3.00"

10 qty total needed (total length of 30.00" minus blade width for 10 cuts, approximately 5/8", need 31" total)

> As of 12/01/2022 above supplier has 36" length for $21.71

The 1/2" SS tubing needs cut to a length of 3.50"

10 qty total needed (total length of 35.00" minus blade width for 10 cuts, approximately 5/8", to 36" total)

As of 12/01/2022 above supplier has 36" length for $37.34

Many methods for cutting can be used, whichever is available to the builder.

As of 12/01/2022, PETG filament is $20.00

20 qty, 10-32 SS nuts ($0.08/ea)= $1.60

10 qty, 10-32 x 1/2" SS set screws ($0.17/ea) = $1.70

10 qty, 10-32 x 5/8" SS set screws ($0.20/ea) = $2.00

As of 12/01/2022 above supplier has SS wire for $7.99

> With the itemized list above, the cost to print/assemble this cell is approximately: $92.34

Version 2 - Two Cell Holder - Requires Machined Tube Sets

Version 3 - Single Cavity Holder - Requires Machined Tube Sets

DIY Inner Electrode Machining Template

VIC5 Transformer Bobbins & Ends

# VIC5 - Estate Replica - Flat Ferrite Cores

VIC5 - Large Ferrite Core

VIC4 Coil Bobbins

Amazon U Cores - UY1658 /60

The following bobbins were designed to fit with the following U cores from Amazon: UY1658 /60 Cores
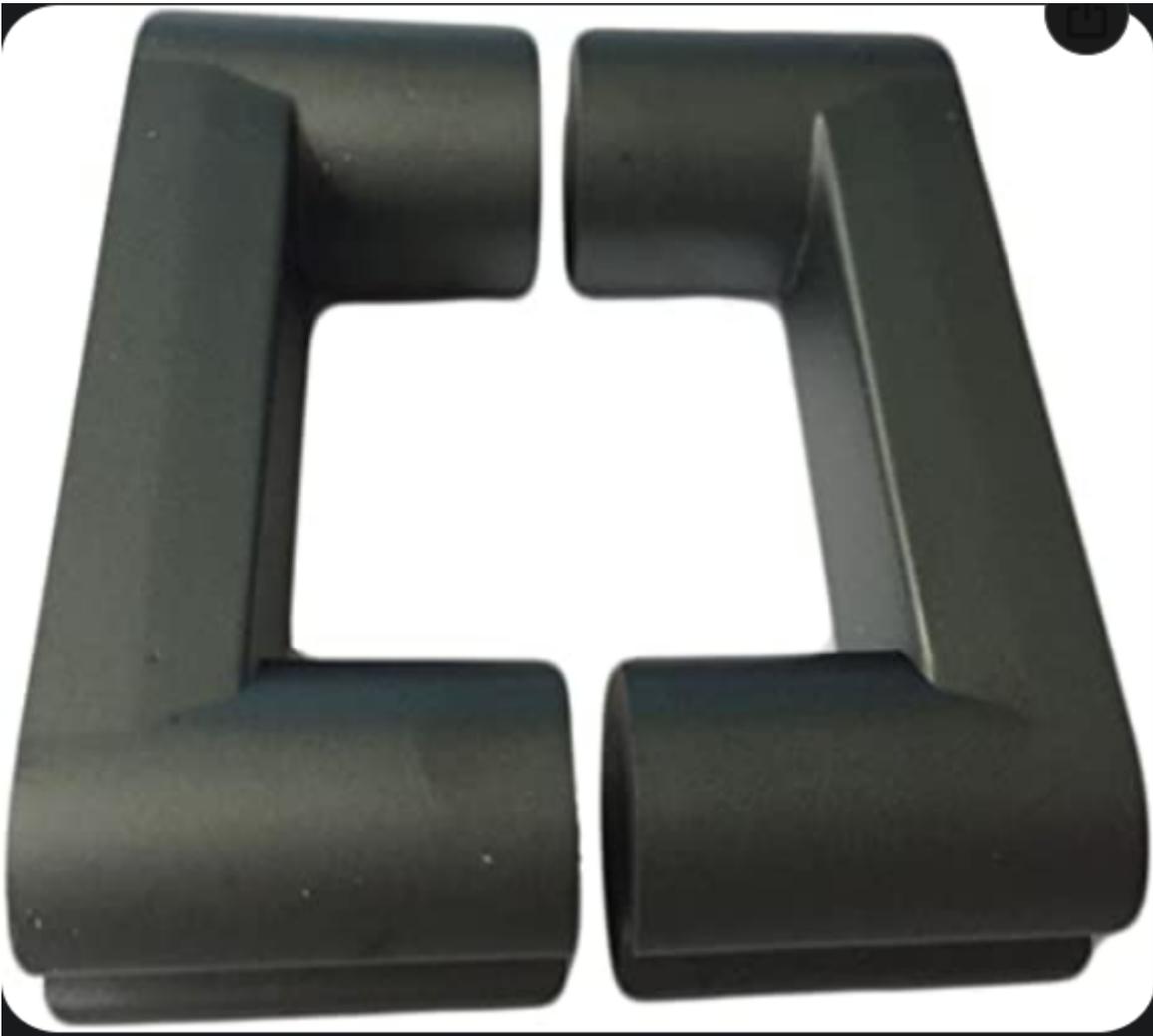
0.060" Piece STL: 060_Half Piece.stl
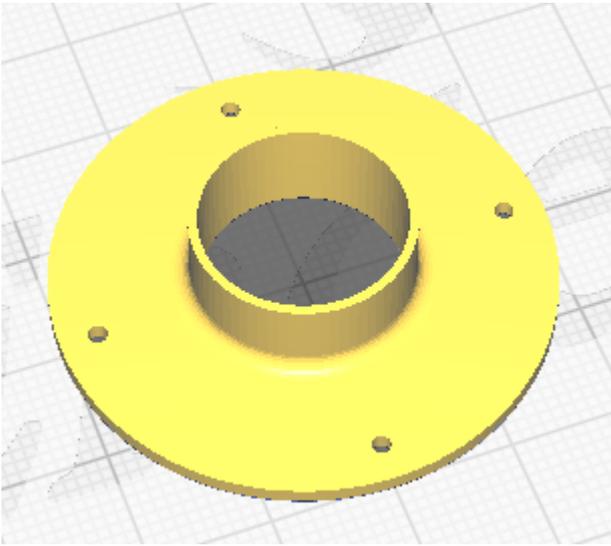
0.030" Piece STL: 030_half piece.stl