



Simple single sided mold generator



joo

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Summary

This is a modification to jason webbs two part mold generator for single sided molds to cast tin/other low melting...

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[cast](#) [tin](#) [bismuth](#)

This is a modification to jason webbs two part mold generator for single sided molds to cast tin/other low melting metals.

It splits the mold in 2 pieces, which helps greatly when removing the casted part.

Still very WIP, but maybe some find it already useful

Instructions

****The metals :**

In the second image you can see three casts: 1: Pure Sn97Cu3 (from local hardware store), 2 and 3: Sn97Cu3 with an added small Bismuth pellet, the third was made with leftovers from the second cast. Using Sn97Cu3

gives you a shiny finish, adding bismuth adds detail and a more matte surface. (mold 1: 0.20mm, 2/3: 0,125mm layer height)**

Caution: If you try to pour cavities deeper 5mm, you may loose the form due to melting! (Atleast with the tested tin)

Generating the mold (same as James Webbs generator):

1. Download the mold_v2.scad file and open it in OpenSCAD.
2. Update the parameters in the script to point to your model, as well as transform it to be suitable for printing.
3. Compile and Render (F6) the script with your updated parameters.
4. Grab an STL using the "Design > Export as STL" tool.

optional: Seperating the mold in 2 pieces 5. Load the STL in Netfabb basic, rightclick extras->repair part 6. Use "select shells" to select and then delete one of the 2 parts 7. repeat for the other part.

(default STL used in the script is sappo.stl, provided in the downloads)

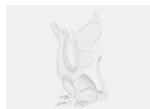
Casting the metal parts:

Use ABS plastic for the molds, slightly sand the 2 facing surfaces for better alignment. Clamp the 2 parts (<http://www.thingiverse.com/thing:12616> works great). Heat the metal to be just above the melting temperature, best is to move it a bit around before pouring. Pour into the mold. After it has settled a bit you can drop it in a glass of water for faster cool down.

Twisting the 2 molds against each other works pretty well to remove the mold.

Category: 3D Printing Tests

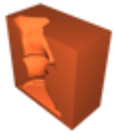
Model files



mold_v2.scad



mold2.stl



mold1.stl



sappo.stl

[Find source .stl files on Thingiverse.com](#)

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