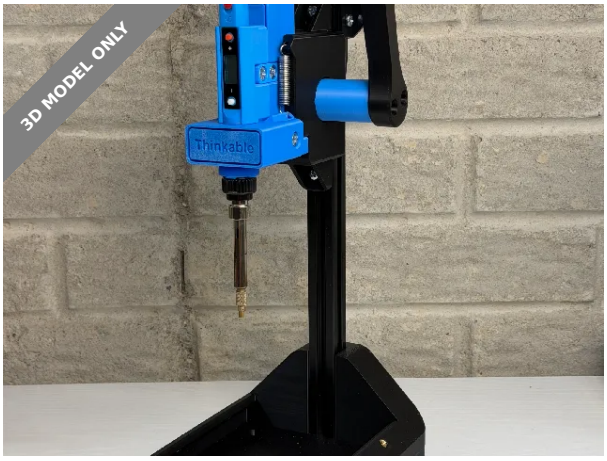


HeatSync - Ultimate Heat Insert Press

Thinkable

VIEW IN BROWSER

updated 12. 10. 2026 | published 12. 10. 2026

Summary

HeatSync makes it super easy to add threaded inserts to your parts!

3D Printers > Accessories

Tags: threaded threadedinsert insertpress heatsync thinkable

HeatSync - The Ultimate Heat Insert Press

> “This has been a long time coming and now it's finally here, the upgraded version of HeatSync! I make these models in my free time so if you would like to support me, follow Thinkable on **Patreon** and follow me on **YouTube**! Thank you all for the support! Let's build a better future together!

Back Story of the HeatSync Project:

Around 2022 when I started doing 3d printing I learned about different ways you could attach parts together using screws. Metal threaded heat inserts I found are amazing for this and so I bought a cheap soldering iron, press, and tips from amazon. The idea was that the iron in the press stayed in place and I could just press it down into the part to melt the insert into the part, simple and easy right? NO. That thing was a POS. It

was wobbly and the ergonomics were hurting my arms after doing hundreds of inserts at a time. I also started thinking about using different kinds of platforms (jigs) for parts with similar heights/shapes. I saw that a power drill press had the exact type of mechanism I wanted (later adapted for HeatSync) and so I simply made an adapter for the soldering iron to go in. As time went on, I kept wanting to use my own custom jigs for the parts that I make all the time. The main problem was attaching/aligning the jigs to the base and easily removing them. At that time, there were NO similar options to what I wanted available online to download and print. So, like Thanos I said “I’ll do it myself”.

HeatSync is the culmination of the last few years of work I’ve put in to make my dream soldering iron press. And now YOU can make it too! Not only that, but I am also including the STEP files for developers so that you can easily modify and change this system to your needs/wants. I believe that you have to create the world you want to live in to make it a better place and this is one of my contributions. I hope you all enjoy and appreciate HeatSync and use it to make things you couldn’t make before. Happy printing everyone!



First Prototypes vs HeatSync



Current Awesome Features of HeatSync:

- Custom Jig Compatible (NEW)
- Height Adjustable
- Easy Pull-Down Lever Action
- Cable guide
- Carrying handle
- Many different soldering irons supported
- New Simple Assembly (Instructions available)
- **STEP Files** included for developers to customize*

*Customizations of my models are always allowed, but must adhere to MakerWorld's License and can only be uploaded as a “Remix” of the original model. I believe that 3D Printing is a superpower and you can customize these models to your heart's content to best suit your needs. If you would like a feature to be added, comment down below and I or someone else can try to make it. Let's collaborate and build a better future together.

Future Features planned: (as of October 11, 2026)

- **Extendable Base Gridfinity Storage System** (coming soon)
- Comment other features you would like to see!

Update Log:

- October 11, 2026:
  - Added the PDF Assembly Guide
  - Stronger Spring hook mounts on Rack Gear and Main Housing
- April 2, 2026:
  - Added Jig base models
  - Added Flat base option (no jigs)
- Feb 27, 2026 - Original model release date

Any further updates to the model will be linked in this section, so be sure to follow and stay up to date!

Printing/prep Guide:

3d Printer requirements:

You can use any printer including the A1 Mini :)

Filament:

- **PETG** : (heat resistant PETG material **RECOMMENDED** for the soldering iron holder pieces. They can get kind of warm with extended use)
- **PLA** : Should be ok. Tested to work great :)

Hardware:

You will need to supply a Soldering Iron, and Flat iron tips of your choice. Everything else you need is below.

HeatSync Hardware kit available on my Shop:https://thinkablecreations.etsy.com/listing/4464290389

This model uses mostly 3d printed parts with the main exception being the “300mm 2020 Metal Extrusion” bar that is the strong backbone of the system. I chose this bar to add strength as well as the ability to easily adjust the height to your needs. Some of the hardware is currently available on Bambu's Store, but I will be making a **Hardware Kit** available on my shop HEREwhich will have everything* you need to assemble the HeatSync. I will also include individual affiliate links to the items needed below. You will need to use your own Soldering Iron + Tips to complete the setup.



Hardware Type	**Quantity Needed**	**Link** (Affiliate)

M4x10mm Machine Head Screws	17	Amazon
M4x6x6mm Heat Set Inserts	17	Amazon
6.4x38x0.9mm Extension Spring with hook ends (1⁄4"x1.5"x0.035")	1	Amazon
M4 Extrusion Nuts	7	Amazon
300mm 2020 Metal Extrusion Bar	1	Amazon
Soldering Iron	1	Amazon
Flat Tips for soldering iron	1	Amazon
M4x10 Thumb Screws (optional)	1-4	Amazon

Assembly Instructions:

Check out the “Documentation” section for the new PDF guide.

Thank you for Supporting my Projects, check out my other projects and Subscribe to Thinkable on YouTube!

https://www.youtube.com/@thinkable3D

Model files



a1_heatsync.3mf

All parts for HeatSync



heatsync_flat-base.step

Regular Flat Base



heatsync_jig-base.step

Base used with custom Jigs (optional)



heatsync-10-11-2026.step

STEP file of HeatSync mechanism

Other files



heatsync_assembly_guide.pdf

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