

# Simple HEPA Solder fume extractor



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VIEW IN BROWSER

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## Summary

A simple, yet effective, solder fume extractor.

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Tags: [hepa](#) [solderingtool](#) [solderfumeextractor](#)

Ok, Ok, I know solder is not the best for your health. So for the new year I decided to build a fume extractor with a real HEPA filter -not some carbon filter- because this is for my health.

## Printing

All the parts can be printed on any printer with a build volume larger than 150x170x50. This means even the Prusa Mini will do!

I recommend using PETg to print all the parts, but PLA will work.

## Building

I designed this extractor with the following components in mind:

- A 5 inch HEPA filter, like this one from Amazon: [https://www.amazon.com/Hunter-F1715HE5-Filter-Purifier-HT1715/dp/B07C9QZNFK/ref=sr\\_1\\_5?keywords=5+inch+hepa+filter&sr=8-5](https://www.amazon.com/Hunter-F1715HE5-Filter-Purifier-HT1715/dp/B07C9QZNFK/ref=sr_1_5?keywords=5+inch+hepa+filter&sr=8-5)

- A 120mm fan. I used a 120 volt EC fan for efficiency, like this one:  
[https://www.amazon.com/Wathai-Industrial-Bearing-Brushless-Cooling/dp/B07SH42DCD/ref=sr\\_1\\_3?keywords=120%2Bvolt%2Bfan%2B120mm&sr=8-3&th=1](https://www.amazon.com/Wathai-Industrial-Bearing-Brushless-Cooling/dp/B07SH42DCD/ref=sr_1_3?keywords=120%2Bvolt%2Bfan%2B120mm&sr=8-3&th=1)

Required Hardware:

- 5x M3 lock nuts
- 4x M3x40 bolts
- 1x M3x20 bolt

## Editing

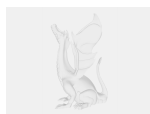
This file was designed in Onshape, so if you would like to make changes to the model, here is the original Onshape page: <https://cad.onshape.com/documents/0e0cba06d7d33acd871e47b3/w/a6ad114fc9812a7adc5beca4/e/f1791ccc2e663853ef84bff4>

Also, I've included the .step file for other CAD workflows.

## DISCLAMER:

**I have made every effort to make this system as affective as I can. Though I simply can NOT guarantee this extractor with remove all the dangerous particles from the air! Use this system with your own discernment!!**

## Model files



hepa-solder-fume-extractor.step



base.stl



filter-frame.stl



**filter-lock.stl**



**fan-duct.stl**

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