Printables by JOSEF PRUSA



Drill Dust Collector V3

AK3D

VIEW IN BROWSER

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Summary

3-in-1 system with integrated bottle, vacuum adapter, and cap. Bi-color design.

Hobby & Makers > Tools

Tags: wall multicolor diy modular drill collector accessory home hobby cleaning organization dust laboratory drilling instrument homelab

Drill Dust Collector V3 - Modular 3D Design

I'm thrilled to introduce the Drill Dust Collector V3.

This tool, entirely designed and 3D-printed, features a 3-in-1 modular design and an eye-catching two-tone aesthetic for superior versatility and effectiveness.

Compared to the V2 version, I've introduced the following improvements:

- 3-in-1 modular system: designed to adapt to various needs.
- Dust collection bottle: screws directly onto the collector for dust collection at the source, ideal for jobs requiring continuous movement and large amounts of dust. The bottle base has also been designed for stable support.

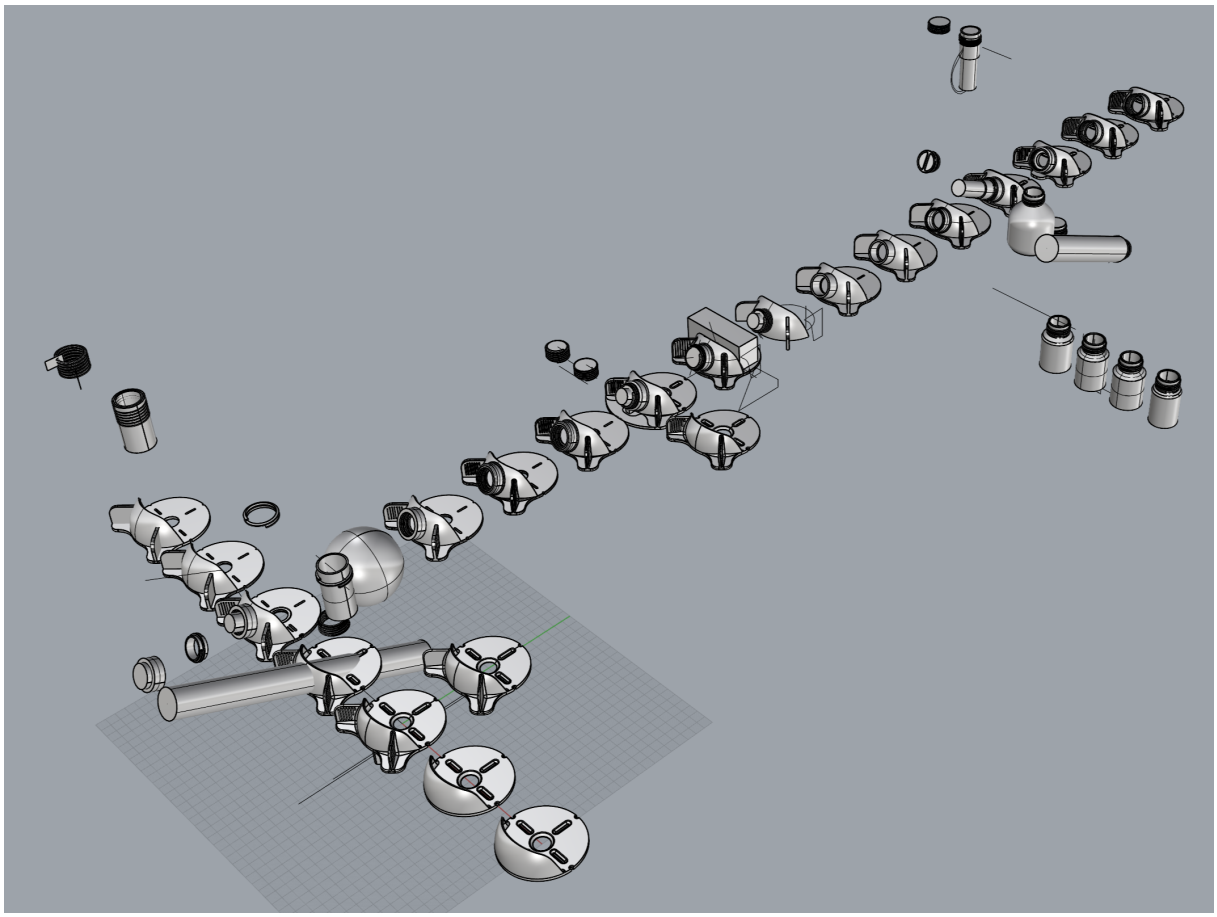
- Vacuum adapter: allows you to connect the collector to the vacuum cleaner hose (standard Ø31mm outer diameter) for deep and instant cleaning.
- Closing cap: seals the collector for those who drill few holes and don't need the other accessories.
- Two-tone design: for a unique and effective aesthetic, highlighting the centering slots and the central hole.
- Reinforced ribbed wings: the side wings, now thicker, ensure a firm and comfortable grip during use.
- I've had feedback from users that increasing the size by 15% makes it fit carbonated bottles.

Printing recommendations:

- Material: PETG
- Infill: 25%
- Layer thickness: 0.20 mm / 0.25 mm (for faster printing)
- Cooling: 80%-100% for bridges
- Support material: organic style, overhang threshold 20°-30° (depending on the printer's cooling capacity)
- Infill angle: 0° (for a vertical layer finish that promotes dust sliding)
- Color change: pause at layer number 9 for those using 0.25 mm layers, while those using 0.20 mm layers should pause at layer number 11.

At the end of the print, I recommend carefully cleaning the supports because the presence of small residues in the thread can cause the accessory to get stuck. Once this is done, screw and unscrew the bottle several times to adapt the thread and you're done.

The 3MF file includes the settings for my MK4S.
I hope you like the project and I look forward to seeing your prints with different color combinations.
Here are all the models I created to achieve the final result:



I'm excited to share with you my projects and my passion for 3D printing. As a designer, I dedicate considerable time and resources to creating unique and high-quality models.

If you appreciate my work and would like to support me in creating new projects, I invite you to join my club! Club members will have access to exclusive content, including preview models and some services that you will find in the subscription description.

Your contribution is essential to help me cover the design costs and continue to create increasingly innovative models. Thank you from the bottom of my heart for your support!

Happy printing!

Model files



drill-dust-collector-v3.3mf

3MF file with my settings using 0.25mm layers.



drill-dust-collector-v3.stl



drill-dust-collector-v3-bottle.stl



drill-dust-collector-v3-vacuum-cleaner-adapter.stl



drill-dust-collector-v3-cap.stl

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