MAKERX Designs

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Desk Organizer Print & Use Guide

A pen cup, a paper-clip tray and a sticky-note bay, printed as one piece.

Any Filament · One Piece · No Supports · Optional Color Band

Built by MakerX Designs · Virginia Beach, VA · makerxdesigns.com · © 2026

Pens, paper clips and a pad of sticky notes, each with its own spot, in one piece that takes up 178 × 89 mm of desk.



Loaded and on the desk.

What it holds

- **A tall pen cup.** 96.5 mm high, deep enough that scissors, markers and highlighters stand upright instead of tipping out.
- **A paper-clip tray.** A shallow tray at the foot of the cup with a rounded floor, so a single clip slides up and out under a fingertip instead of hiding in a corner.
- **A sticky-note bay.** A walled bay beside the cup holds a pad flat and ready to peel.

In the download

File	What it is
`desk-organizer.3mf`	**Start here.** Two plates of the same model, profile already set up: **With Color Band** and **No Color Band**. Print one of them.
`desk-organizer.STL`	The bare model, for your own slicer profile.

One piece, 177.8 × 88.9 × 96.5 mm. No hardware, no assembly.

1 · Print it

The 3MF carries two plates. They are the **same organizer** — pick one, never both.

Plate	Time	Filament	Length	Swaps
1 · With Color Band	3 h 38 m	129.43 g	43.40 m	2
2 · No Color Band	3 h 26 m	125.53 g	42.09 m	None

Times and weights are the slicer's estimate for PLA with the profile below.

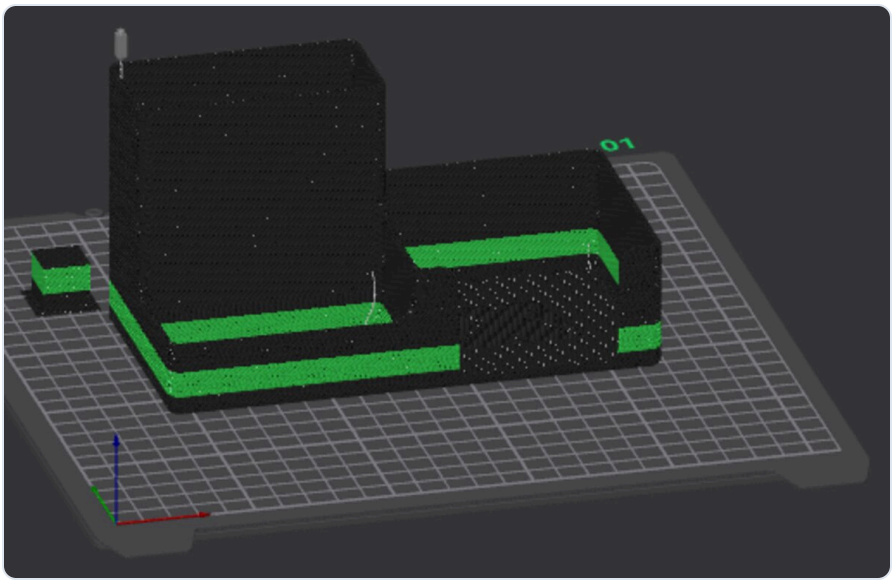


Plate 1 in the slicer. It prints upright with no supports; the small block beside it is the prime tower that cleans the nozzle at each color change.

1. Open `desk-organizer.3mf` in any slicer that imports 3MF project files. When it asks whether to load the project's print settings, **say yes**.
2. **Pick a plate.** Plate 1 for the two-color look, plate 2 for one color.
3. For plate 1, load your **main color in slot 1** and your **band color in slot 2**. The slicer switches to slot 2 at **6.8 mm** and back to slot 1 at **16 mm**.
4. Slice and print. Nothing to remove afterward — no brim, no supports.

> **No multi-color printer?**
> Print plate 1 anyway and add two manual filament changes (a pause or M600) at 6.8 mm and 16 mm, or print plate 2 and skip the band.

2 · The profile baked into the 3MF

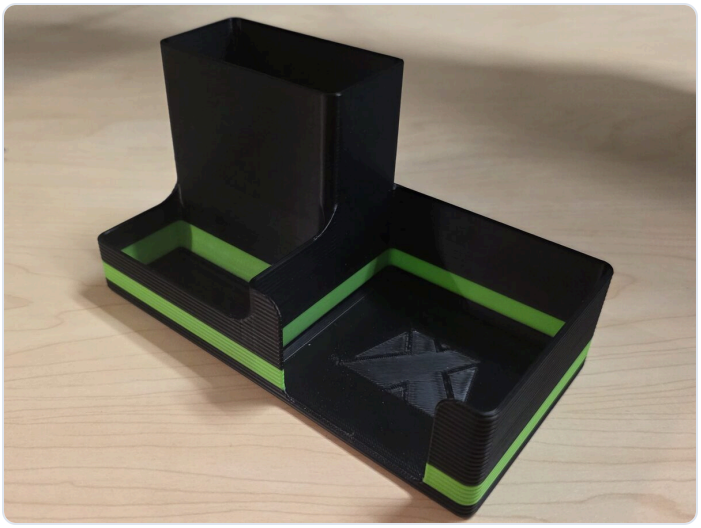
Using your own profile instead? Match these. Sliced for a 0.4 mm nozzle; both plates use the same settings.

Quality	
Layer height	**0.20 mm**
First layer	0.20 mm
Walls	**4 loops**
Top / bottom	5 / 3 layers
Infill	10 % gyroid
Z anti-aliasing	On

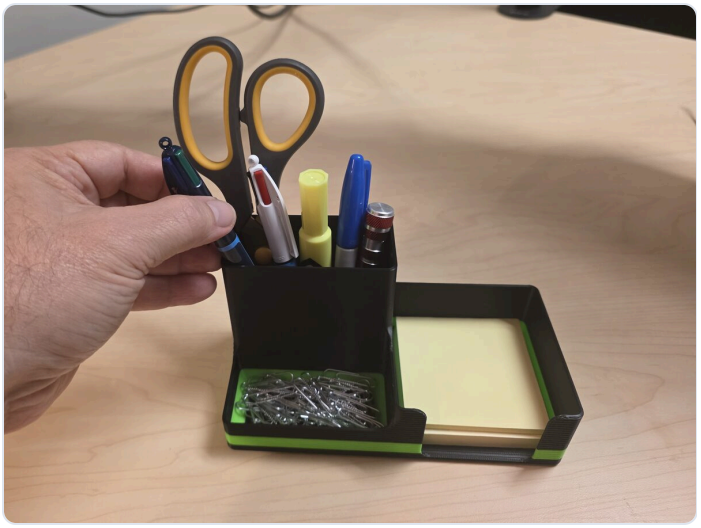
Material & plate	
Filament	**PLA** (set up)
Nozzle temp	220 °C
Bed temp	60 °C
Supports	**None**
Brim	None

> **Any filament works**
> Print it in PLA, PETG or any other filament you like — nothing here depends on the material. The 3MF is set up for PLA. The one in the photos is black and lime **PETG**, printed at 250 °C nozzle and 70 °C bed with every other setting the same. Switch to your own filament profile and keep the layer, wall and infill numbers above. If your slicer has no Z anti-aliasing setting, just print it without.

3 · Put it to work



Three compartments: the cup, the clip tray at its foot, and the note bay.



Everything stands upright, so a pen comes out in one reach.

Set it where your hand already goes for a pen, fill the cup with the tall things, drop clips in the front tray and a pad of sticky notes in the bay.

Where precision meets the printer

Thanks for printing this one. If it clears a few things off your desk and puts the pen where your hand expects it, that is exactly what it was designed to do.

For years my design world existed entirely behind a screen. As a mechanical engineer I spent countless hours building complex CAD models, but there was always a missing link — the ability to hold an idea in my hands. That changed in January 2026, when I went headfirst into 3D printing. The moment that first layer stuck to the bed, the gap between concept and reality vanished.

Coming from a background where precision is everything, tolerances aren't suggestions to me — they are a religion. I didn't want to print trinkets; I wanted to apply industrial engineering discipline to desktop manufacturing. Every wall count, every layer height and every infill percentage in this guide is a deliberate decision backed by testing. If a part can't handle the environment it was built for, it goes back to the drawing board.

Three principles behind every print

01

Functional Engineering

High-utility, real-world solutions rather than purely decorative models. If it doesn't solve a practical problem, it doesn't leave the workstation.

02

Rigorous Tolerances

Designed in professional CAD with mechanical intent — press-fits that click and assemblies that work straight off the build plate. No sanding, no filing, no guesswork.

03

Bridging the Gap

Industrial structural integrity at maker speed. Proving a desktop printer can produce parts worthy of real engineering applications is what drives every release.

The workshop

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A note on sharing

I'm thrilled when people use and share these designs. I just ask that you respect the license shown on the model listing and give the required credit, so I can keep contributing to the collective workshop.

IF THIS ONE EARNED ITS SPOT

A **Like** or a **Favorite** on the model page takes a second and genuinely helps. A **Boost** helps more than either — it is what puts a design in front of makers who would never otherwise come across it. And if you **Follow** me, new models and updates land in your feed as they are released. However you choose to support it, thank you — it is what keeps everything here free to download.

Printed one in your own colors? Post a make with a photo — I would love to see the band you picked.

Happy printing. — MakerX Designs · makerxdesigns.com · © 2026