

CFS Filament Labels Print & Use Guide

Five slide-on tags so you can see what is loaded without opening the CFS.

No Supports

No Brim

Five Plates, One 3MF

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

Four slots loaded and nothing on the outside telling you which is which. These tags hook over the front edge of the CFS and put the answer where you look anyway — no adhesive, no clips, no modification to the unit.

In the download

File	What it is
<code>makerx-cfs-front-label-all.3mf</code>	Start here. All five labels, one per plate, with the tested profile and the two-color setup already in place.
<code>makerx-cfs-front-label-pla.stl</code> · petg · asa · tpu	The four lettered tags as individual meshes, for your own slicer.
<code>makerx-cfs-front-label-blank.stl</code>	The blank. Same body, no text — letter it yourself or leave it plain.

1 · What is on each plate

Plate	Time	Filament
1 · ASA	20 m 46 s	5.95 g
2 · Blank	13 m 48 s	3.70 g
3 · PET-G	20 m 58 s	5.95 g
4 · PLA	20 m 40 s	5.96 g
5 · TPU	20 m 40 s	5.96 g
All five	1 h 37 m	27.5 g

Each tag is 50 × 20 × 12.5 mm. The plate names are the TEXT on the label, not the filament the plate is printed in — every plate is sliced with the same PLA profile.

2 • Slice it

- 1 Open `makerx-cfs-front-label-all.3mf` in Creality Print, or any slicer that imports 3MF project files.
- 2 When it asks whether to load the project's print settings, **say yes**.
- 3 Pick the plate for the label you want and slice it. Print one, or work through all five — they are independent. Using an STL instead? **Paint the text** first (see below), or it will slice in a single color.

3 • Two colors, or one

The 3MF is set up for **two filaments** — three filament changes on each lettered plate. The colors in the photo are simply the pair we printed; load any two you like.

★ Multi-color: needs a CFS or an AMS • from an STL, paint the text

Two filaments, three tool changes — that needs a CFS, an AMS or another multi-material unit. The **3MF already carries the setup** — in whatever two colors you load, so start there. An **STL carries no color**: select the part, open **Paint** in your slicer and color the lettering, or it slices in one color — which is exactly why the text can look like it disappeared. Either way keep the **lettered face down on the plate**: fastest, and the least filament wasted on purge.



Four lettered tags and the blank, as they come off the plates.

Roughly a third of the material on a lettered plate is purge from those color changes. Printing single-color drops a tag closer to the blank's 3.70 g.

4 • The profile baked into the 3MF

Quality	
Layer height	0.20 mm
Nozzle	0.4 mm
Walls	2 loops
Top / bottom	5 / 3 layers
Infill	15 % grid

Material & plate	
Supports	Off
Brim	None
Filament	PLA · 220 °C
Bed	60 °C, epoxy resin

5 • Before you hit print

- ☐ Supports confirmed **off** — the tag lies flat and has no overhang.
- ☐ If you are printing in two colors, both filaments loaded and mapped to the right slots.
- ☐ Bed clean. It is a small part with a small footprint, and the first layer is all of it.

6 • How it hangs on

There is nothing to assemble and nothing to stick down. The back of each tag is an **L-shaped channel** that drops over the front lip of the CFS.

- 1 Let the tag cool, then check the channel is clear of any first-layer whiskers. A clean channel is the difference between a tag that sits square and one that leans.
- 2 Hold the tag with the text facing you and the hook pointing away.
- 3 Lower it over the front edge above the slot it belongs to, and let it settle. That is it.
- 4 To move it, lift straight up. Nothing is glued, so relabeling takes a second.



The back. That L-shaped channel is the whole mounting system — it hooks the front edge and gravity does the rest.

7 • Living with them

- **One tag per slot, left to right.** Match the order to the slots themselves and the whole unit reads at a glance.
- **Swap the tag when you swap the spool.** That habit is the entire value of the set — a label that is out of date is worse than no label.
- **Print in the filament's own color.** A PETG tag printed in the same PETG you have loaded adds a second layer of at-a-glance information.
- **Use the blank for anything else.** PLA+, silk, a brand name, or a slot you keep empty — the blank body is the same, so it hangs identically.



One tag per slot, read at a glance from across the room.

8 • Making it yours

- **Need a material that isn't in the set?** Leave a comment on the model and I will add it. It is a five-minute change at my end.
- **Custom text.** The blank STL is a clean canvas — emboss your own lettering on the face in any CAD tool and the mounting geometry is untouched.

Where precision meets the printer

Thanks for printing these. If they earned a permanent spot on the front of your CFS, that is exactly what they were 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

Mechanical engineering degree · SolidWorks precision modeling · two Creality Hi printers · Virginia Beach, Virginia · every design free to download.

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 THESE EARNED THEIR 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.

Running a material that isn't in the set, or a different unit that could use the same idea? Leave a comment on the model. That is where the next one starts.

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