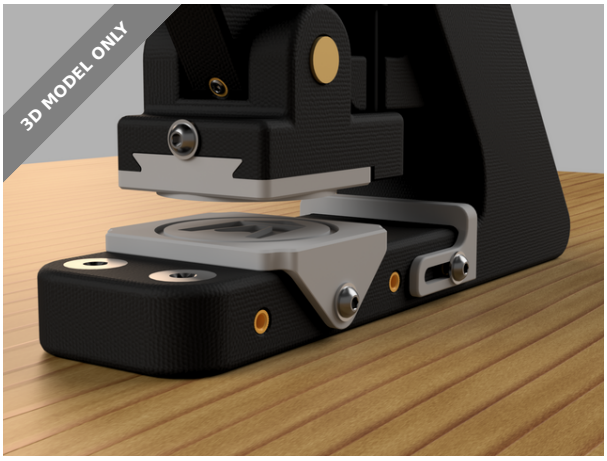


# Embossing press

Cederb

VIEW IN BROWSER

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## Summary

A mostly printed toggle joint embossing press i made to emboss diplomas.

Hobby & Makers > Tools

Tags: press card paper cardboard toggle emboss embossing scrapbooking deboss diploma debossing

The main parts are FDM printed, while I used SLA to print the dies and the backstop, mainly to get the surface finished I wanted.

I printed most parts on a Markforged printer with CFF Kevlar reinforcement, but they would probably work fine with regular PLA.

We use this at 3DVerkstan (www.3dverkstan.se) to press watermarks with our logo into our training diplomas.

You will need three ~35mm pieces of 8mm rod of your choosing to act as the hinge pin.
It also uses 12pcs of heat set M3 inserts for all the screws.
To lock the hinge pins in place you will need 3pcs of M3 threaded set screws, i used 6 mm length.
I also used five M3x8mm screws with standard washers.
Two M6 heat-set inserts are used in the press plate for the slider screw.
Three countersunk wooden screws are used to fasten it down to a base.

For the slider screws, the drawing was made with a partially threaded socket head screw M6x45mm cut down so it only had the smooth part sticking up on top of the insert. I turned this one myself out of a much longer piece of brass for extra stability and looks. A partially threaded ~M6x130 cut down to only expose ~10mm of thread would also provide this extra stability.

**Making the dies**

I have included STEP files that you can edit in your preferred CAD software to add the embossing of your choice. You would often do this by importing an SVG file of whatever you want to emboss and extrude it to these parts.

The upper die should have the embossed feature and the lower should have the debossed feature. It is very important that these features are well aligned with each other.

I used a depth of 1mm, but you can go deeper if you want a more pronounced embossing.

You will have to apply an outward offset to the debossed part to allow for the thickness of the paper you are using, if trying to use it with too small spacing you will get shearing of the paper rather than embossing, and if too large, your embossing will lack sharpness.

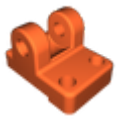
Originally published on YouMagine in 2019

# Model files

**main_body.stl**

**handle.stl**

**toggle.stl**



**press_plate.stl**

**backstop.stl**

**lower_die.stl**

**upper_die.stl**

**upperdie.step**

**lowerdie.step**

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