

Makerspace Craft: Custom Mugs

Equipment Used

- Cricut Maker/Maker 3
- Computer with Cricut Design Space software
- Vinyl/crafting/weeding tools
- Cricut Mug Press
- EasyPress Mat

Supplies

- Mug sublimation blank
- Infusible ink transfer sheets
- Heat resistant tape
- Lint roller and alcohol swabs

Overview – Important Things to Know

- When infusible or sublimation ink is heated to the correct temperature, it permanently sinks into the special sublimation coating or polyester fabric.
- The infusible/sublimation ink will only work on items with a sublimation/polymer coating or fabric with high polyester amounts (at least 65% and above). It doesn't work on 100% cotton materials, dark colored materials, or regular mugs, glasses, or other products without a sublimation coating. Don't buy dollar store products expecting them to work with infusible/sublimation ink!

Instructions

Overview: To make a custom mug, you'll use Cricut Design Space software to design, the Cricut to cut or draw your design, and the Cricut Mug Press to heat press the infusible ink onto the blank mug.


Create Your Design in Cricut Design Space Software

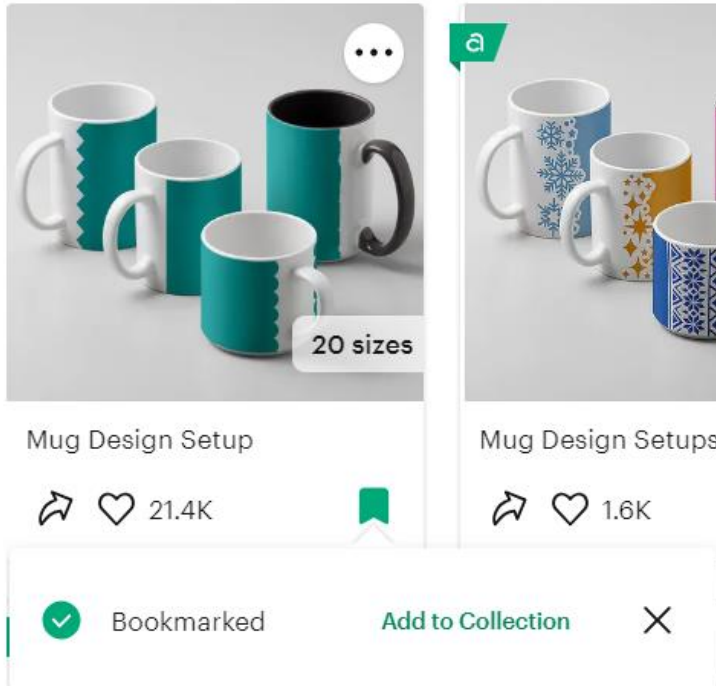
1. If you don't already have a Cricut Design Space account, your first step is to make a free account. Once you've made an account, you can also download the Design Space software onto a personal computer or compatible device, so you can design projects from home.
2. Once you're logged in, you'll see the landing page. Cricut offers some free images and fonts, but they also offer pay per file or a subscription model. You can also use your own fonts or images. The library has two Cricut Makers and one Cricut Maker 3, which works very similarly to the original Cricut Maker.

Using Projects

3. Start with opening the mug template project. In the top search bar, search for **Mug Design Setup**.
 - Under **Projects**, select **View All**.
 - Click the drop-down menu for **All Projects**, and change it to **Cricut Only**.

- Click the picture for **Mug Design Setup**.

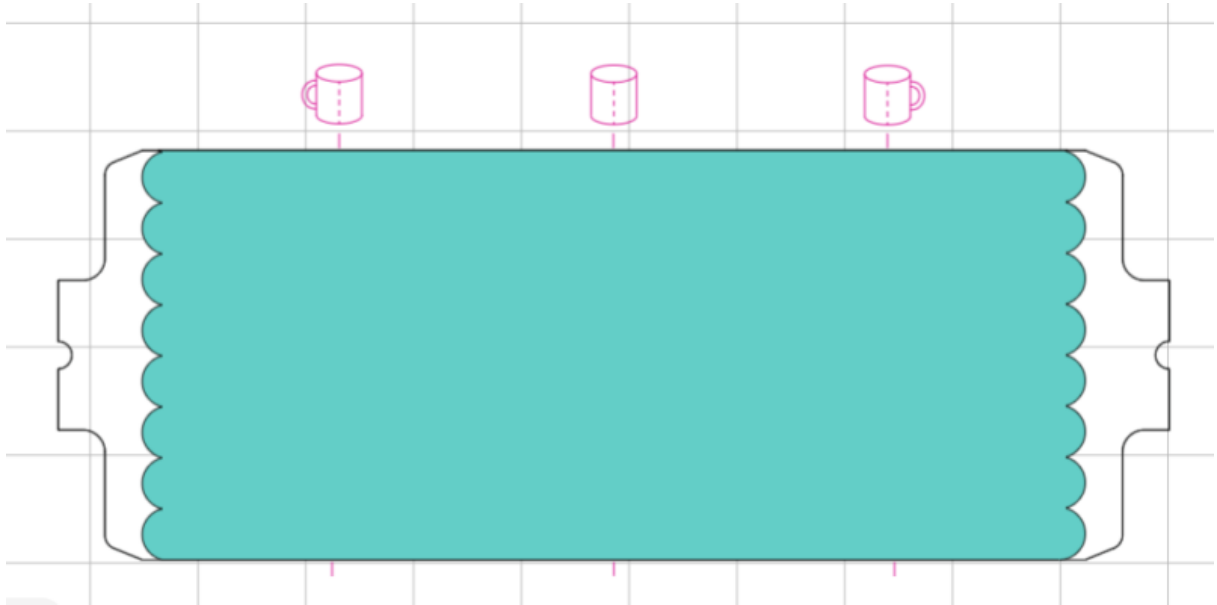
Pro Tip: Click the bookmark icon  to add this project template to your Collection. This will make it quicker to find.



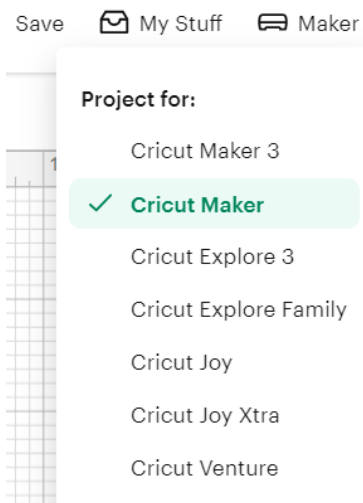
4. In the **Finished Size** drop-down menu, choose one of the **small 12 oz/340 ml Mug Blank** options. There are five options:
Straight Edge, Ripped Edge, Scallop Edge, Wavy Edge, and Zig Zag Edge



5. Click the **Customize** button. The template will open on your canvas. The red icons show how your design will line up when wrapped around the mug.



6. In the top right corner, click the machine drop-down menu, and change it to the **Cricut Maker**.



Design the Mug – Using Text, Phrases, and Images; Uploading Custom Images

7. Now you can start designing your mug using text, phrases, or images.

Design Tips

- Be aware that small, intricate designs or fonts may not come out cleanly or cut correctly.

- You will only use one infusible ink sheet for your design. Because of program time restrictions, you can't layer or use multiple ink sheets for your design.

- When you're making your design, consider if you want more of the infusible ink color or the white background to show. Here's an example of the same design, with one featuring more infusible ink (left) and the other using more of the white negative space (right).



Images from Happiness is Homemade by Heidi Kundin (<https://www.happinessishomemade.net/>)

Here are more design examples. The left mug uses more infusible ink. The right mug uses more of the white negative space.



Using Text

8. To add text to your design, click the **Text** button and type your wording.
9. Now choose your font. Make sure the text is selected. Click the **Font drop-down box**. Change the Fonts to **System**. System fonts are installed on the computers, and do not require a Cricut subscription or cost money. Scroll through until you find your preferred font, then select it.

Resize text: You can resize text. From the bottom right corner, click and drag the text box to resize. You can also put in exact dimensions under the top menu's **Size** option.

Align text: You can change the text alignment to be left, center, or right aligned. Select the text, then under **Alignment**, choose your preferred alignment.

Position text: Position the text, so it's within the teal colored portion of the mug template. If you'd like the text exactly centered, choose all items on the canvas (CTRL+A), then under the **Align** menu item, choose **Center**.

Using Phrases

10. To add phrases to your design, click the **Phrases** button. On the left menu, checkmark the **Free box**, and under **Operation Type**, checkmark the **Cut Only box**. Select your phrase, then click the **Add to Canvas** button.
11. Resize and position the phrase.

Using Images

12. To use images, you can either use Cricut's free images or upload custom images. To use Cricut's free images, click the **Images** button on the left and select the **Free** category. You can browse or search in the **keyword box**. Select the image, then click the **Add to Canvas** button.
13. Resize and position the image within the mug template.

Uploading Custom Images

14. To upload custom images, start by searching online in Google Images or a similar site. Cricut works with the following file types: PNG, JPG, GIF, SVG, DXF, HEIC, BMP
If you're using a different file type, you'll need to convert it to a compatible file type.

Recommended search keywords: silhouette, icon, or black and white. I often include the keyword "free" as well. Once you find an image, save it to the computer.

Example: Ivy silhouette
Example: Rose icon
Example: Cat black and white
Example: Dog svg free

You can also search sites featuring files that are ready to cut (DXF or SVG files).

Websites with DXF and SVG files

Sites may require free registration.

<https://www.freepik.com/>

<https://hellosvg.com/>

<https://lovesvg.com/>

<https://free-dxf.com/>

<https://www.dxfforcnc.com/collections/free-dxf-files>

Once you find an image, save it to the desktop or Downloads folder on the computer.

15. In Design Space, click the **Upload button** on the left. Click the **Upload Image button**. Drag and drop the file or browse for it. Select the image type based on the complexity of the image. Choose the type, then click the **Continue button**.
16. Depending on the image type, you may need to use the **Background Remover**. You need to remove the background by clicking the color you want to remove. Once clicked, you'll see a checkerboard pattern. You can manually select, erase, or restore the background. When you're finished, click the **Apply & Continue button**.
17. You will see previews of your image, one for Cut Image and one for Print Then Cut Image. For our project, select the **Cut Image**, then click the **Upload button**.
18. Choose your uploaded image so it's highlighted, then click the **Add to Canvas button**. Adjust and resize it to fit within the mug template.

Attach Your Design

19. Once your design is ready, select all items (press CTRL+A on the keyboard). Under the **Layers** menu to the right, click the **Attach button**. This groups your design together. If you don't attach the items, the Cricut software will rearrange your design into separate cuts.

Cut Your Project (Make It)

20. Now that your design is ready, choose your infusible ink sheet. Because of our class timeframe, you may only choose one color/design for your mug. Note that the ink sheets' colors will turn much darker when heat is applied.

You should also consider if the infusible ink has light colored areas that overlap into your

design. See our sample mug for an example.

21. Position the infusible ink sheet on a green Cricut StandardGrip cutting mat with the **shiny, clear liner side down**. Align the sheet along the top and left gridlines. Use a squeegee or brayer tool to press it flat.
22. In the Design Space software, click the **Make It button**. You will see a mat preview. Cricut's software automatically rearranges the design to minimize material used.
23. Click the **Mirror button**. Since we're using infusible ink sheets, we must mirror the design, or the design will be backwards when you heat press it onto the mug.
24. You can rearrange elements in the Mat Preview. Once you've positioned to your preference, click the **Continue button**.
25. Set the **Base Material type**. Choose **Browse All Materials**. You can either scroll down or search for **Infusible Ink Transfer Sheet**. Click Done.
26. Position the mat, so it goes under the guides. It should be flush against the rollers. Press the **Load/Unload button**.
27. Press the flashing **Go button**. Your project will begin cutting. When it's finished, press the **Load/Unload button**, and remove the transfer sheet from the mat.

Cricut Mug Press – Prep Your Transfer Sheet and Heat Press onto the Mug

33. Weed excess transfer sheet material. You can use the picks and other vinyl tools to weed. When you're weeding, be aware if your design is using more of the infusible ink or the white, negative space.
34. Turn on the Cricut Mug Press to preheat. The Mug Press will beep when it's fully preheated.
35. Use a lint roller or isopropyl alcohol to remove any debris on the mug.
36. Wrap your design around your mug, ensuring that it is straight and there are no gaps between the design and the mug. Leave at least ½ inch from the mug handle. The clear, shiny side should be facing outward. Secure edges with heat resistant tape.
37. Insert the mug into the preheated Mug Press.
38. Push lever down. Ensure that the design is completely covered by the heat plate.
39. When the transfer is complete, the Mug Press will beep. Put on the heat resistant gloves. Lift the lever.

40. Holding the handle, carefully remove the mug from the Press. It will be very hot. Place the mug on an EasyPress Mat to cool before handling.

41. When cool to the touch, remove the tape and paper.

Mug Care Instructions

- Hand wash with warm water or in a dishwasher.
 - Wash on the top rack only.
 - Avoid extra cycle options such as heated drying cycles, sanitize, and steam cycles.
 - Liquid, power, and pod detergents are safe to use.
- For best results, avoid scrubbing pads, heavily dyed detergents, and steel wool, since these can damage the outer coating of the mug and the transferred image.