

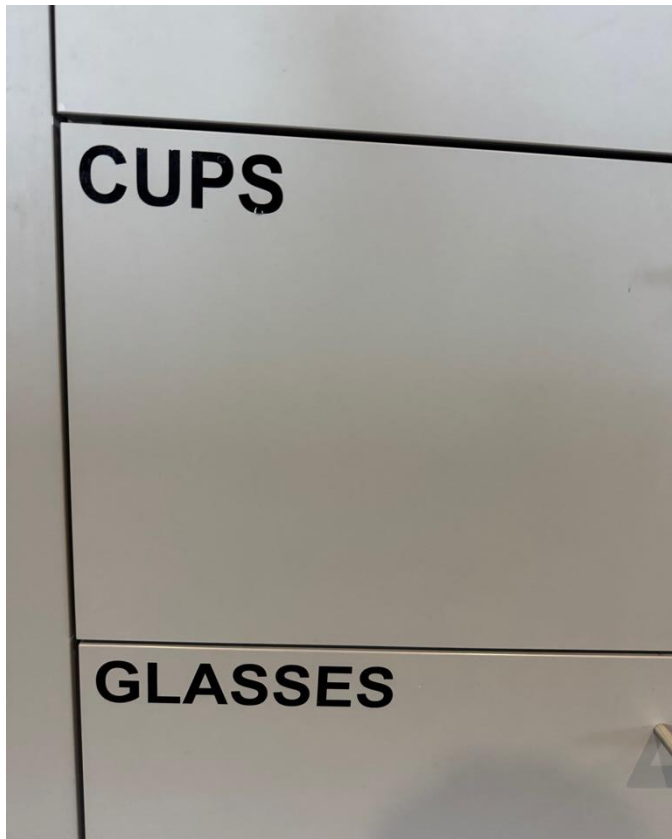
FENTA SL1300 CUTTING PLOTTER

- Cuts objects and textiles vinyls.
- Maximum cutting WIDTH: 132cm.
- Maximum cutting LENGTH: unlimited.



What can you do with the plotter?

Create stickers, signs and textile graphics from cut vinyl.



Choose the right vinyl

The material determines the workflow: normal cut + transfer foil (adhesive vinyl), or mirrored cut + heat press (heat-transfer vinyl).

OBJECTS

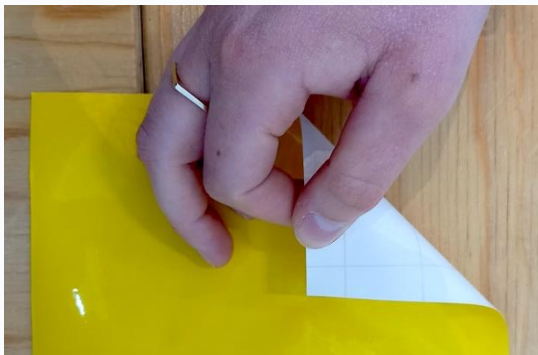
ADHESIVE VINYL

For glass, plastic, metal, walls, signs and other smooth surfaces.

How to recognise it

- Paper backing.
- Shiny front.

Before use



Final application



TEXTILES

HEAT-TRANSFER VINYL

For T-shirts, bags, fabric and other heat-safe textiles.

How to recognise it

- Very shiny backing.
- Rubbery front.

Before use



Final application



TIP: You can buy both vinyl types in the Makerspace shop.

Prepare the machine (knife)

Depending on your material, set the appropriate knife.



1 Pick the correct knife.

- You can find the knives in the dedicated holder next to the plotter.
- The knives are labelled: object vinyl and textile vinyl.
- Match the knife with your material of choice.

TIP: always store the knives in their dedicated spot in the knife holder.

2 Change/load the knife.

- Loosen the screw next to the knife holder.
- Insert the knife you want to use into the holder, then tighten the screw again.



Prepare the machine (cutting settings)

Depending on your material, set the appropriate cutting settings, using the small screen on the plotter.

SCREEN OVERVIEW

POWER MODE



SCREEN OVERVIEW

SET MODE



Prepare the machine (cutting settings)

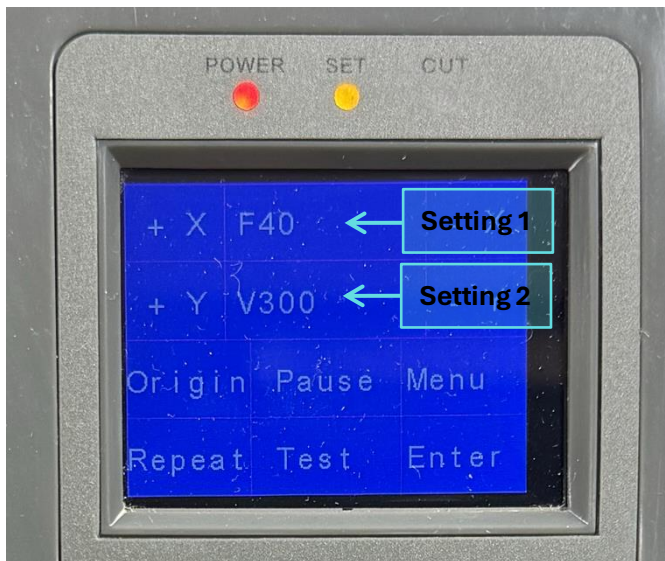
Depending on your material, set the appropriate cutting settings, using the small screen on the plotter.

3 Insert the correct values for setting 1 and setting 2.

- Press the MENU button.
- Copy the provided settings 1 and 2 below, using the arrows up/down, left/right. Press the MENU button to go back to power mode.

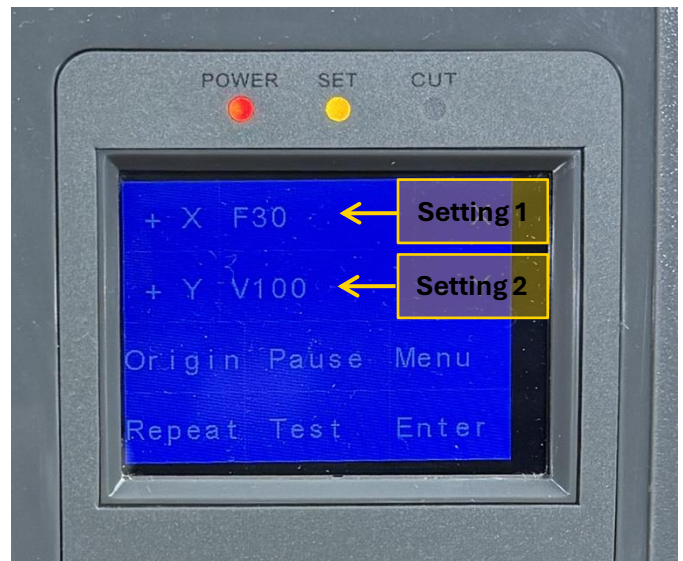
When using knife for objects (objects knife)

Use these settings.



When using knife for textile (textile knife)

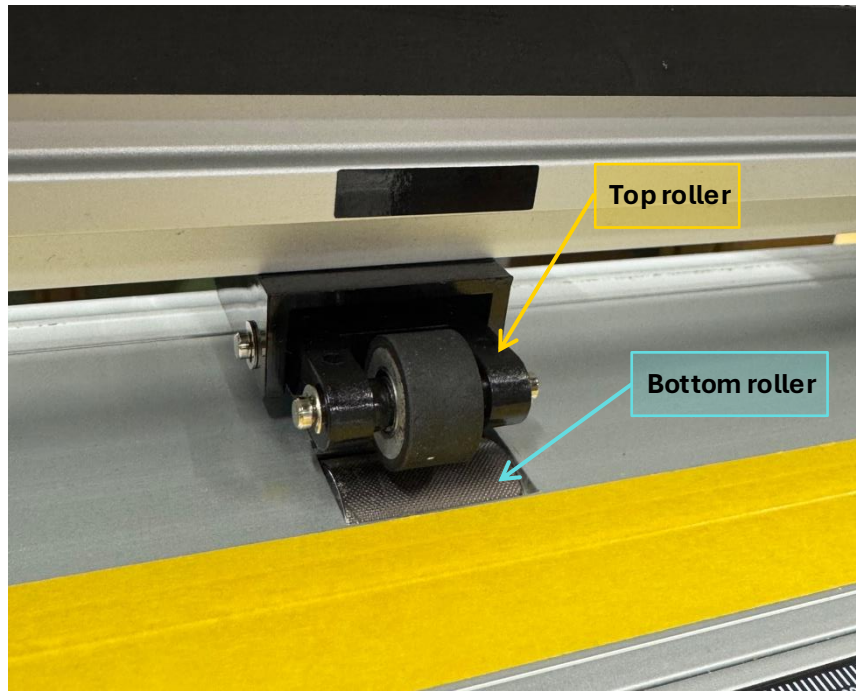
Use these settings.



CHECK: Make sure the settings are exactly the same as the ones presented above, otherwise your cut will not be successful.

Prepare the machine (rollers)

To ensure the material feeds correctly through the machine, position it properly between the rollers.



4 Slide the rollers in position.

Keep in mind that:

- Your material WIDTH needs to be fully covered by the rollers (or at least as much as possible).
- The rollers must be EVENLY distributed throughout your piece.
- Each top roller is placed on top of one bottom roller.

5 Load the material.

- Slide it into the rollers from the front.
- Use the ruler to align it properly.

When using vinyl for objects

Paper side is ON THE BOTTOM.



When using vinyl for textile

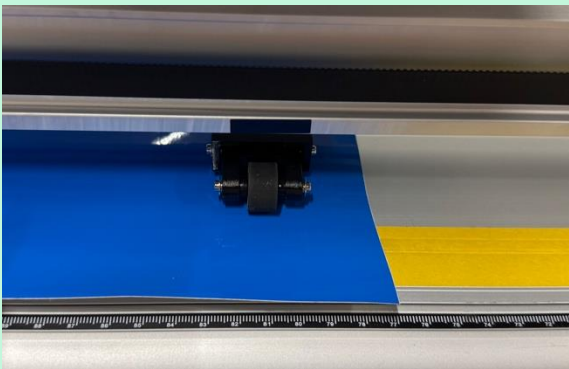
Shiny side is ON THE BOTTOM.



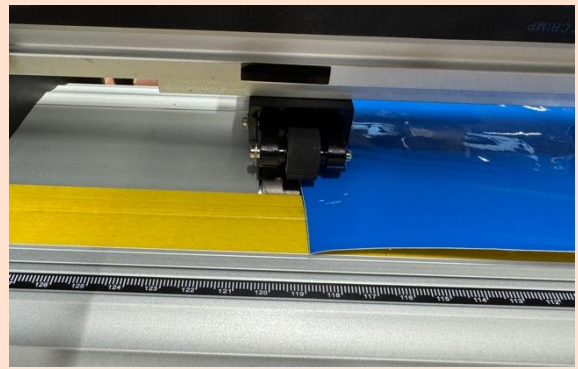
Prepare the machine (rollers)

To ensure the material feeds correctly through the machine, position it properly between the rollers.

✓ **CORRECT**



✗ **WRONG**



6 Lock the rollers, by bringing the lever down.

Unlocked rollers



Locked rollers



Prepare the machine (knife position)

Get the knife to the correct starting position. Make sure you are in the "power" mode.



7 Position the knife.

Using the arrows position your knife, keeping in mind that the plotter will start cutting from the **BOTTOM RIGHT CORNER OF YOUR DESIGN**.



8 Select the origin.

Once the knife is located in your starting point of choice, click the red button to set the knife origin.

The machine is now set up.

Prepare the software (first use only)

When using the cutting plotter for the first time with your ETH- account the plotter plugin needs to be implemented to access the Cutting Plotter from the computer.

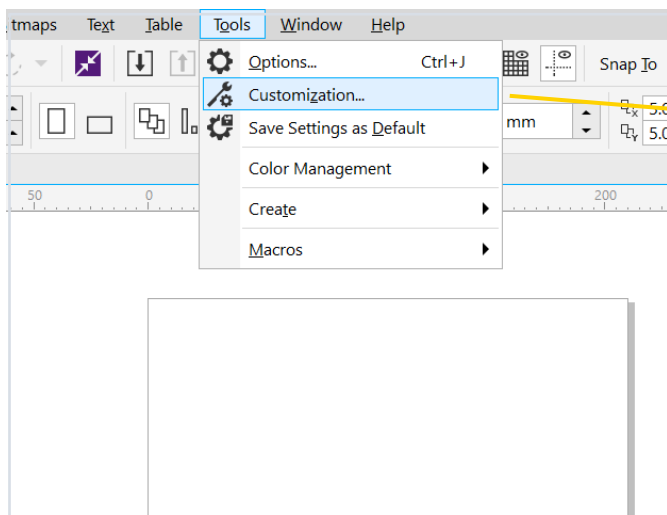
1 Open Corel Draw.

- This is the same software used for the laser cutters.
- It is powerful but also fairly complex.

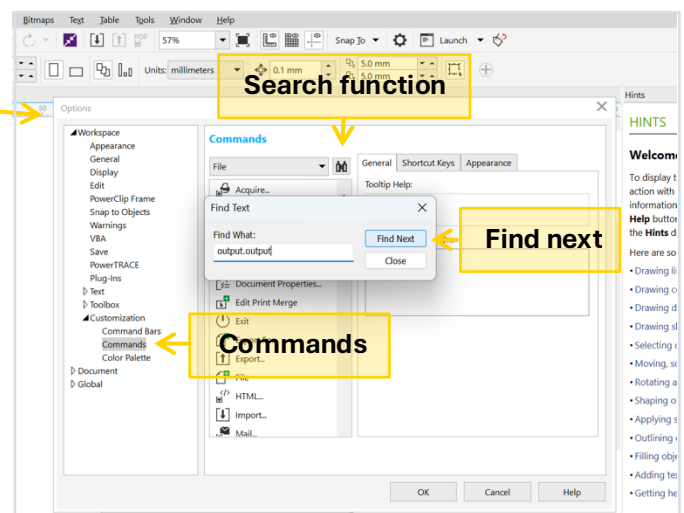
2 Enable the plug-in.

- From Tools → customization → commands → search function
- Search: output.output → "Find Next"
- Drag and drop it into the tool bar
- Press ok

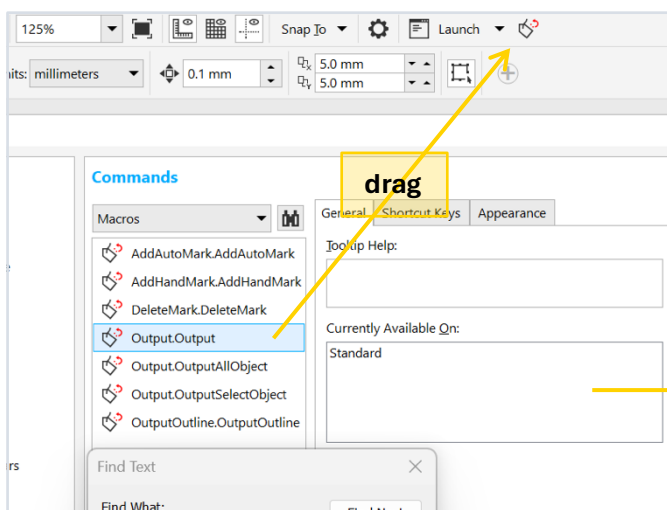
From Tools → customization



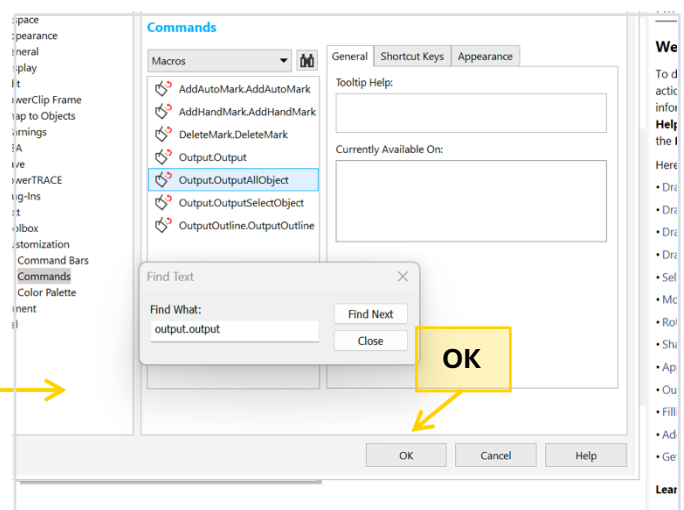
Commands → search → output.output



Drag and drop



Confirm

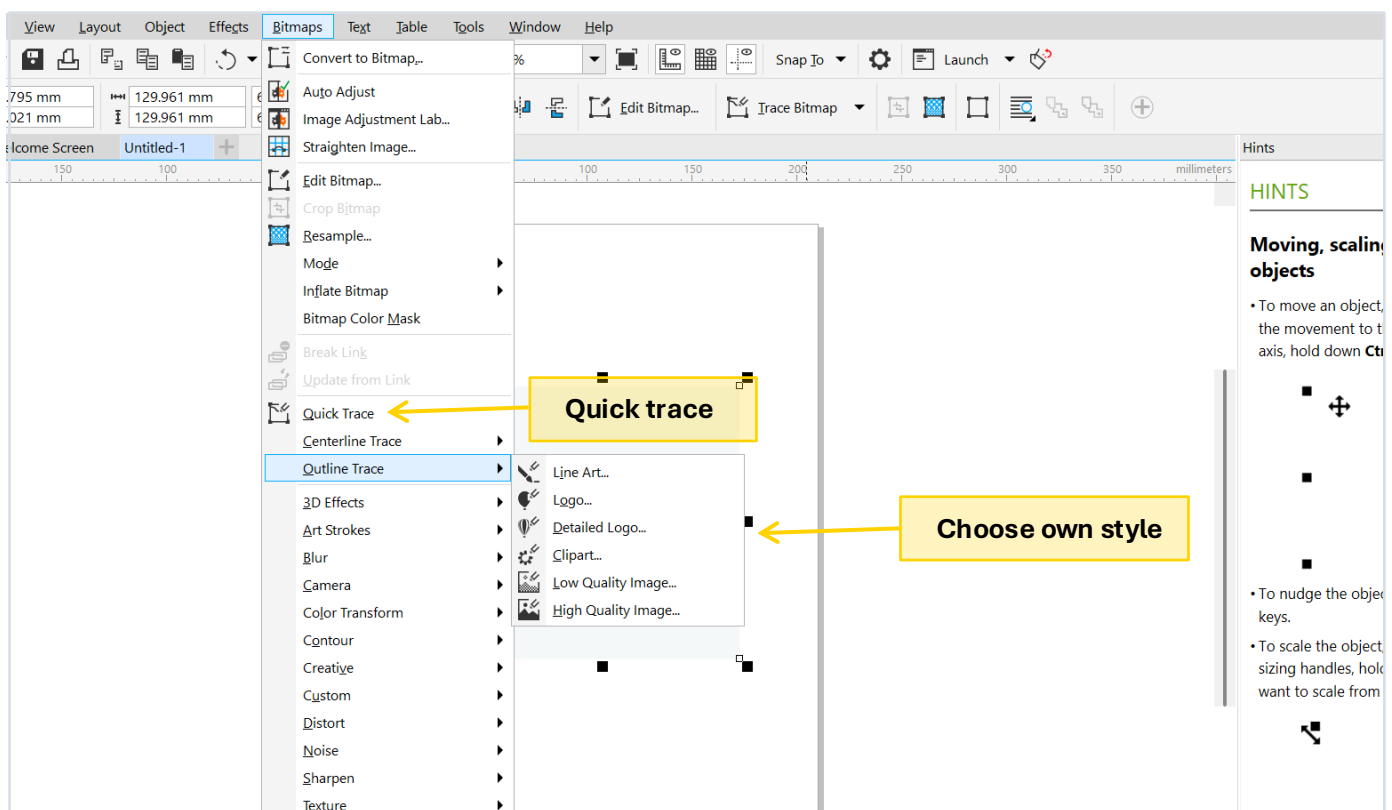


Prepare your design

You will need a VECTOR image, for it to be cut. If the image you upload is not a vector yet, you can transform it with CorelDraw itself.

7 Vectorize your image.

- Import your picture into CorelDraw (png, jpeg, jpg).
- From toolbar → bitmap → outline trace (choose your own style OR quick trace)
- Customize your picture with the available settings, then press ok.
- Delete your original, non-vector picture.



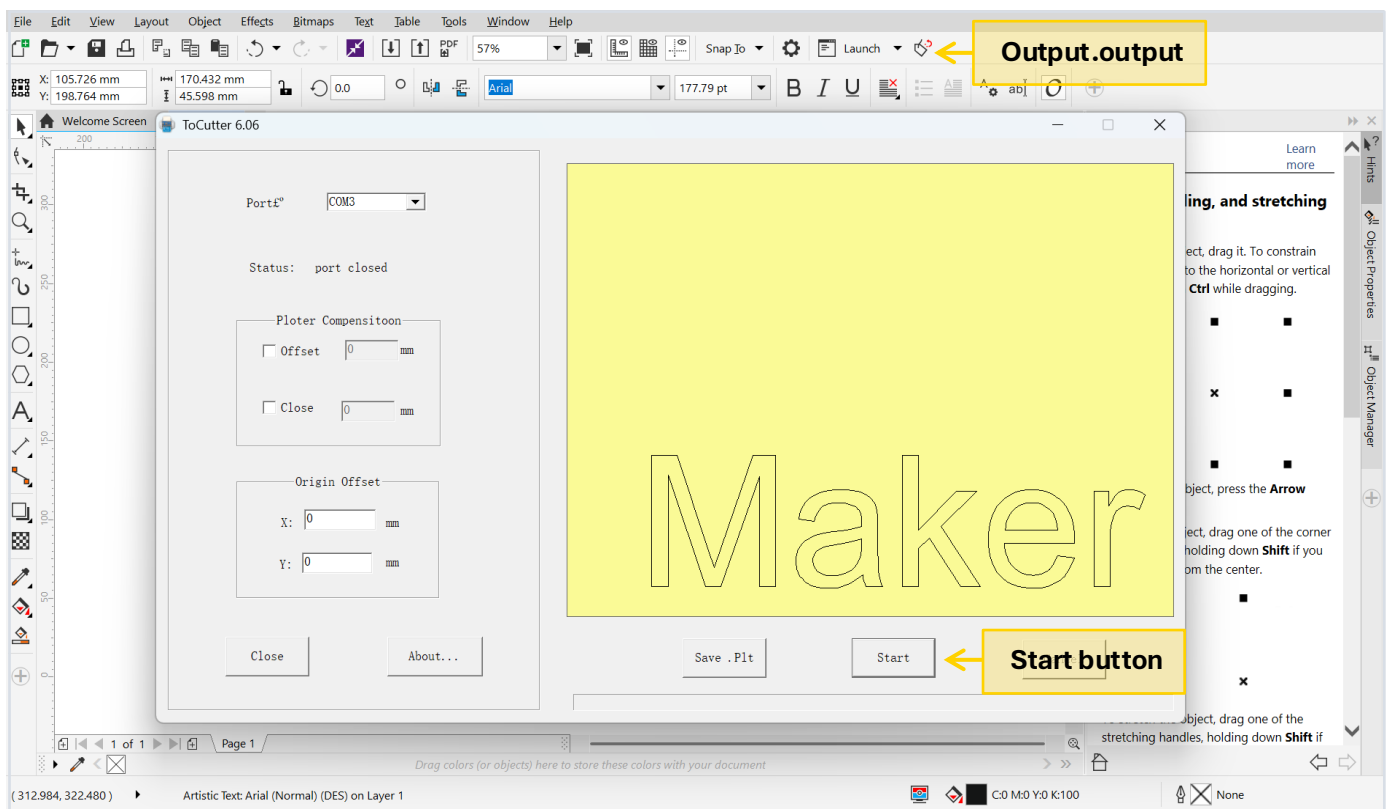
If you are cutting TEXTILE VINYL, mirror your picture. You can do this from the tool bar or with the shortcut ALT+F9.

Prepare your design

You will need a VECTOR image, for it to be cut. If the image you upload is not a vector yet, you can transform it with CorelDraw itself.

8 Start the plotting job.

- Select your design.
- Click on the output.output icon on your toolbar (see page 10 for more info).
- Double check that all the graphics you want to cut are inside the yellow background.
- Press start.



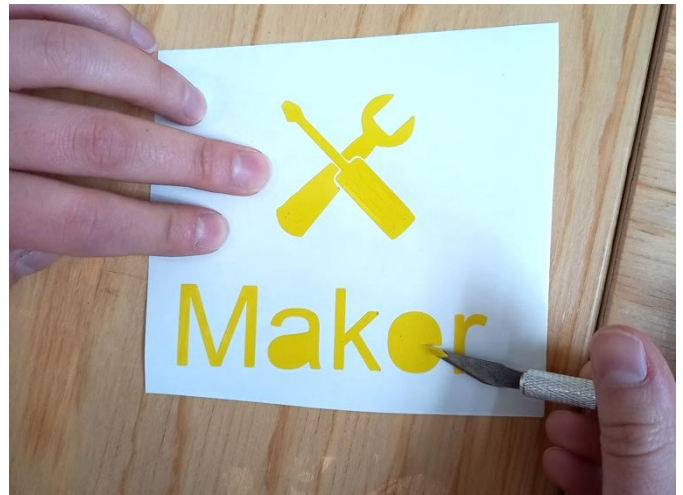
If you do not select your graphic, you will be asked to "Output All Objects". If that is your desired action, press "ok". Otherwise, if you want to cut only certain parts, go back and select those only.

Transfer (object vinyl)

To accurately transfer your designs to an object, you can use transfer foil.

1 Cut your material.

When the cutting is done, place you design on a flat surface and with the help of a plotter tools, remove the unwanted parts (commonly, the background).



2 Apply transfer foil

Place the sticky side of the transfer foil over you design, so that it fully covers the whole thing, You can always cut smaller parts to make the transfer easier, if your design allows it.



Transfer (object vinyl)

To accurately transfer your designs to an object, you can use transfer foil.

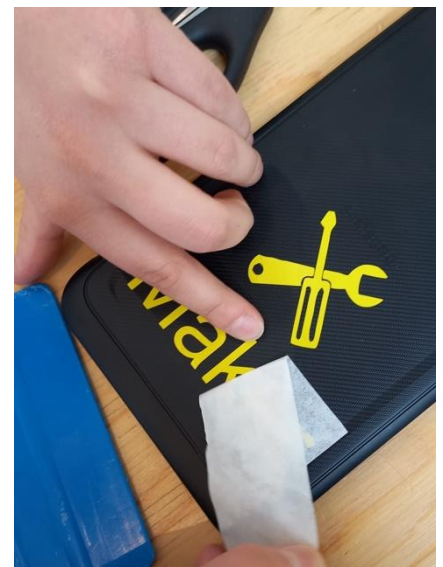
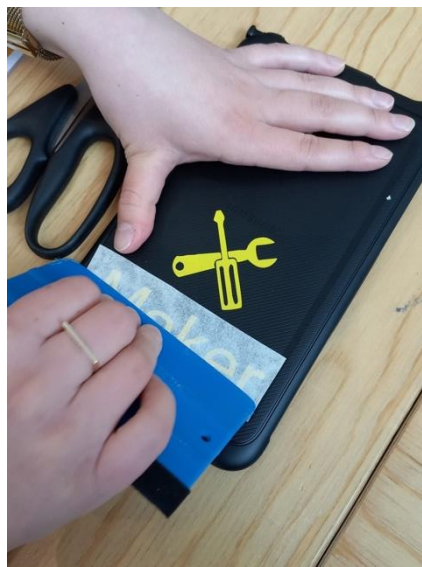
3 Make it stick properly.

- Use the spatula to force it stuck onto di transfer foil, by going over it a few times.
- Then carefully remove it from the paper, so that your design is fully on the transfer foil.



4 Place the design.

Position your design on your object of choice and use the spatula again to make sure it sticks down. Remove your transfer foil, making sure that all the parts remain attached to the object.

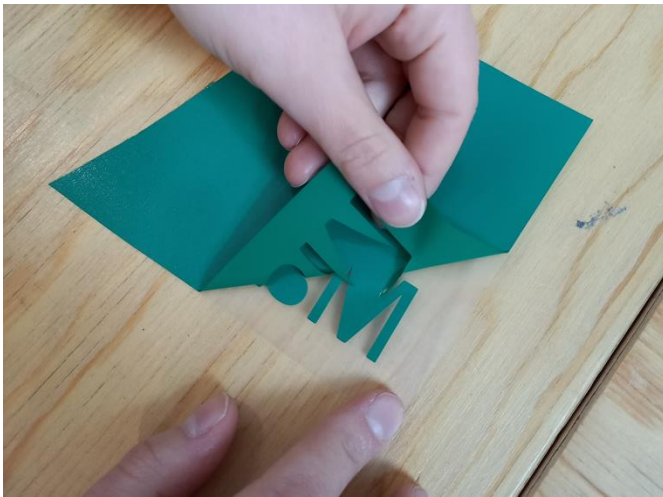


Transfer (textile vinyl)

To accurately transfer your designs to textile, you will need heat. The transfer foil is already included in your vinyl: it is the “shiny side”.

1 Cut your material.

When the cutting is done, place you design on a flat surface and with the help of a plotter tools, remove the unwanted parts (commonly, the background).



Be careful: the plastic on the bottom is sticky.



2 Place on textile.

Place your design on your textile/garment, where you want it to be.

Transfer (textile vinyl)

To accurately transfer your designs to textile, you will need heat. The transfer foil is already included in your vinyl: it is the "shiny side".



3 Transfer your design.

- Use the HEAT PRESS to transfer your design.
- Place your garment on the heat press (design on top).
- Cover ALL the plastic parts with an extra piece of fabric.
- Switch on the machine and let it heat.
- When it is ready press down.
- Wait about 15 to 20 seconds and then pull back up.

4 Remove transfer foil.

Be careful, as sometimes 15 seconds in the heat press are not enough, therefore your design will keep sticking to the transfer foil. Repeat step 3 more times if needed.

