

Working with ACM cutting file layouts

When creating layouts, you can also add features to be used by cutting tables that support the ACM cutting file format. When you output an ACM-enabled layout, the ACM cutting file is automatically created in addition to the layout TIFF file.

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Setting up the creation of ACM plate-cutting files

1. Go to **Edit > Preferences > Cut**.
2. For the **Create cutting file when outputting layout** setting, select **ACM**. Additional options become available.
3. Set the options as needed. For details, see [Cut Preferences](#).
 - Min split length
 - Camera mark
 - Camera mark location
 - Camera mark count
 - Label etching
 - Label position
 - Label font size
 - Cut direction
 - Auto apply embedded mask
 - Include marks
 - Include mask

Setting the camera mark type

Some camera marks work better than others, depending on the cutting table and the plate to be cut. For example, on very reflective plates, cutting tables can recognize the **Circle** camera mark more easily than other marks that may be seen as light noise. Some cutting tables may require specially designed custom camera marks.

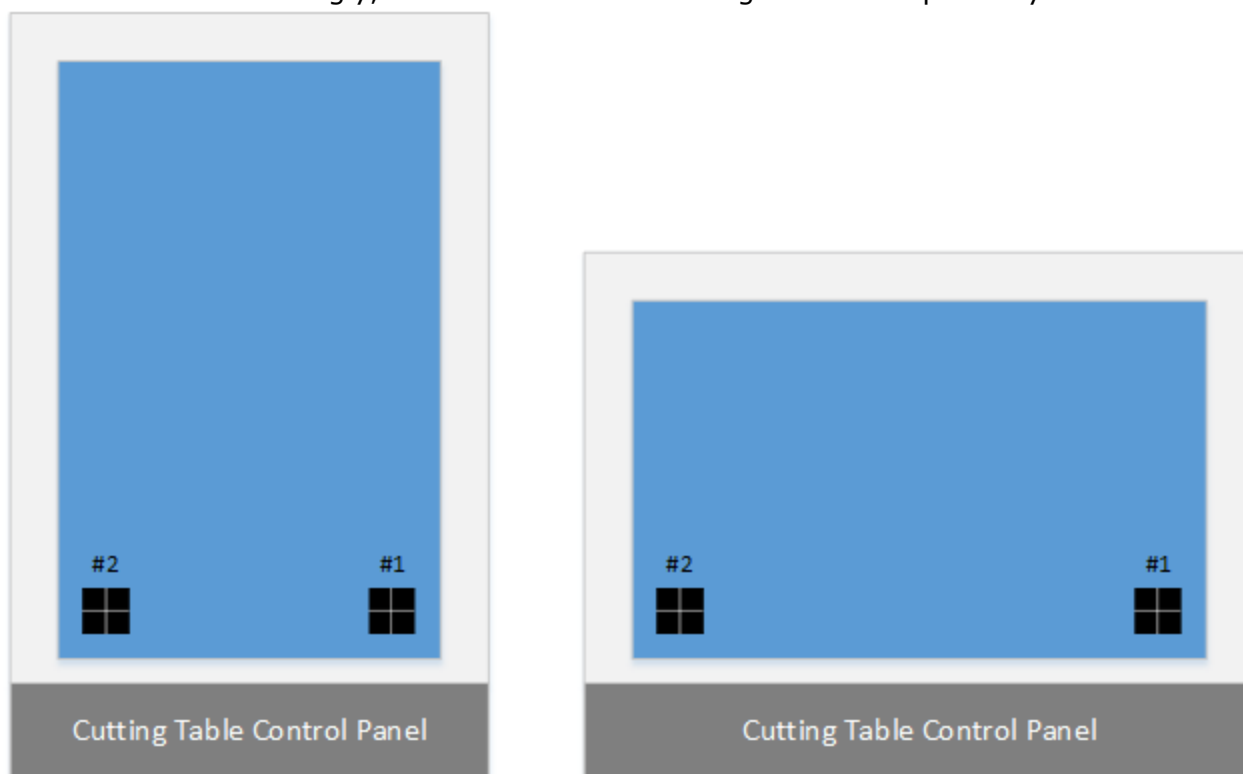
1. To use a camera mark that is installed with the software, perform these actions:
 - a. In **Cut** Preferences, change the **Camera mark type** selection to **Plus**, **Cross**, or **Circle**.
 - b. The selected camera mark type appears in the layout display window. The Inventory **Marks** tab shows the file name of the currently-placed camera mark: **CameraTargetDefault Plus.tif**, **CameraTargetDefault Cross.tif**, or **CameraTargetDefault Circle.tif**.
2. If a custom camera mark is required, perform these actions:
 - a. Follow the guidelines in the cutting table documentation to design a camera mark that the cutting table can detect easily.

- b. Save the custom artwork file using this required file name structure: **CameraTargetname.tif**.
- c. Place the custom **CameraTargetname.tif** file in the **Marksfolder** location that is specified in the **Marks** Preferences.
- d. In **Cut** Preferences, change the **Camera mark type** selection to **Custom**.
- e. From the **Marks folder** location, add the **CameraTargetname.tif** file to the layout. Because the file name starts with "CameraTarget", it is automatically applied to the layout as the camera mark.

The Inventory **Marks** tab shows the file name of the currently-placed camera mark.

About the camera marks location

The cutting table software typically expects the first two camera marks to be placed near the table's control panel. Depending on the cutting table and on the plate dimensions, the plate may need to be placed on the table in a specific orientation only. You will need to place the first two camera marks accordingly, at either the short or long side of the plate layout.



The cutting software prompts you to guide the table's camera to the location of the first, or reference, camera mark, which it expects at the bottom-right corner of the plate, near the right side of the control panel. Based on this reference location and the ACM file's information, the table automatically locates the second camera mark, providing it is at the bottom-left corner of the plate.

If the plate position is crooked or if its camera marks are located away from the control panel, the cutting table software can adjust. However, you will need to guide the camera to both the first and second camera marks, because the table cannot locate the second camera mark automatically.

Specifying the camera marks location for the layout

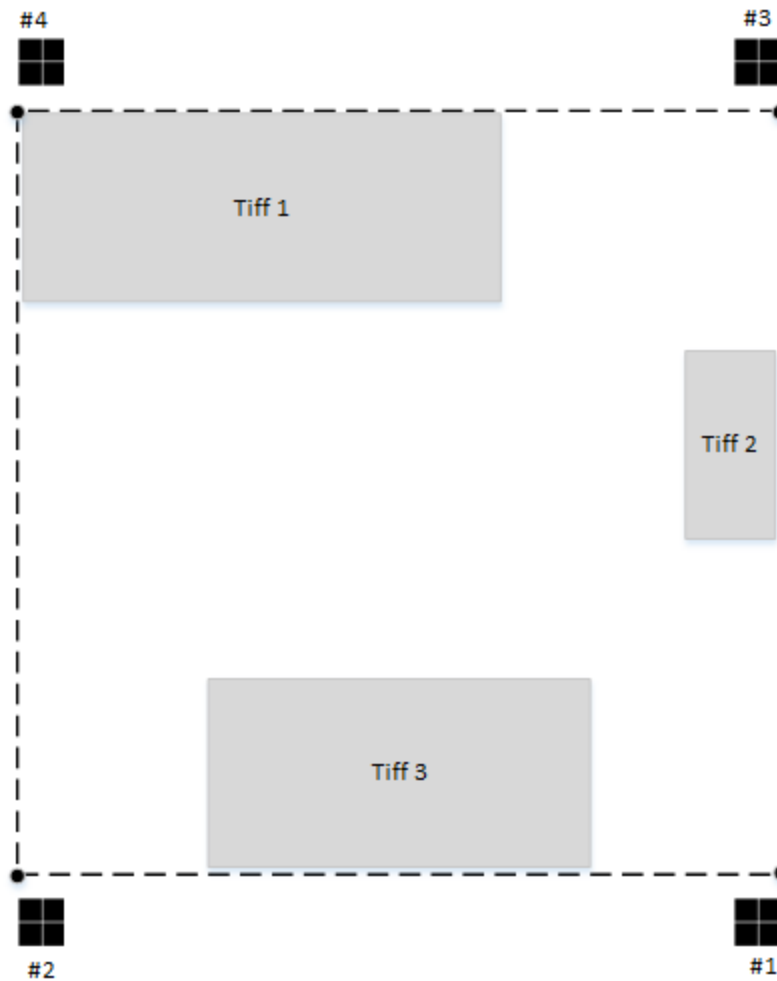
- In **Cut** Preferences, set the **Camera mark location** to ensure that the plate will be cut correctly.
 - If **Bottom/Top** is selected, the first two camera marks appear at the bottom or at the top, depending on the layout's **Flip** setting.
 - If **Left/Right** is selected, the first two camera marks appear at the left or at the right, depending on the layout's **Flip** setting.

The following table summarizes how the camera marks are placed.

Flip	Camera mark location	Layout position of the first two camera marks
None or Vertical	Bottom/Top	Bottom
None or Vertical	Left/Right	Left
Horizontal	Bottom/Top	Top
Horizontal	Left/Right	Right

Creating and outputting a layout as a TIFF file and as an ACM cutting file

1. After setting up the **Cut** Preferences for the ACM format, arrange TIFF files in a layout as usual.
Depending on the **Camera mark count** setting in the **Cut** Preferences, either two or four camera marks may appear at the corners of the bounding box around the layout files.



Note: The camera marks are automatically applied and are locked in the layout.

2. If you need to rearrange the files in the layout, first unlock the camera marks via the Inventory **Marks** tab.
3. Drag the camera marks out of the way.
4. Rearrange the layout.
The positions of the bounding box and camera marks are adjusted automatically, based on the rearranged layout.
5. Output the layout.
The camera marks are included in the output TIFF and ACM files.

Using the cutting table software

1. Use the software at the ACM-capable cutting table to open or load the ACM file.
The software displays a preview that is based on the file content, including the cut lines, the labels, and the camera mark locations.
2. Depending on the cutting software, you may be able to specify the tools to be used for the cut, label, or camera mark layers and the order in which to process the layers. (Some cutting software supports only minimal editing.)
3. To ensure that the plate is placed correctly on the cutting table, follow the instructions in the applicable cutting table documentation.

4. When you press Start or otherwise indicate that the plate is ready to be cut, the software prompts you to guide the table's camera to the first camera mark.
After the software identifies all the camera mark locations, cutting proceeds automatically.

Tips for improving the cutting accuracy

1. Calibrate the camera to align it with the cutting tool, according to the instructions in the cutting table documentation.
2. Use four camera marks in the layout instead of two—in **Cut** Preferences, set the **Camera mark count** to **4**.
3. In the layout setup, fine-tune the offset and margin settings:
 - Use **ACM Cut Offset** to shift all the cut lines in the X or Y direction.
 - Use **ACM Cut Margin** to increase or decrease the margin around the TIFFs in the X or Y direction.
 - See also [Editing a layout setup](#).

