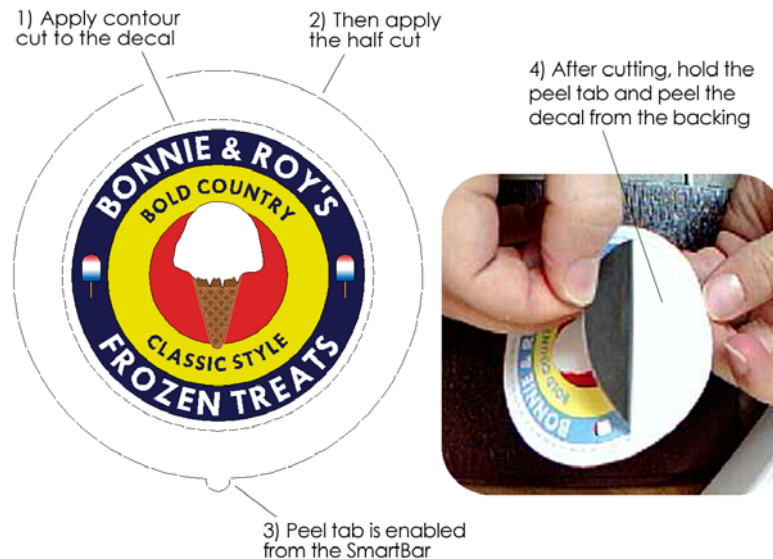
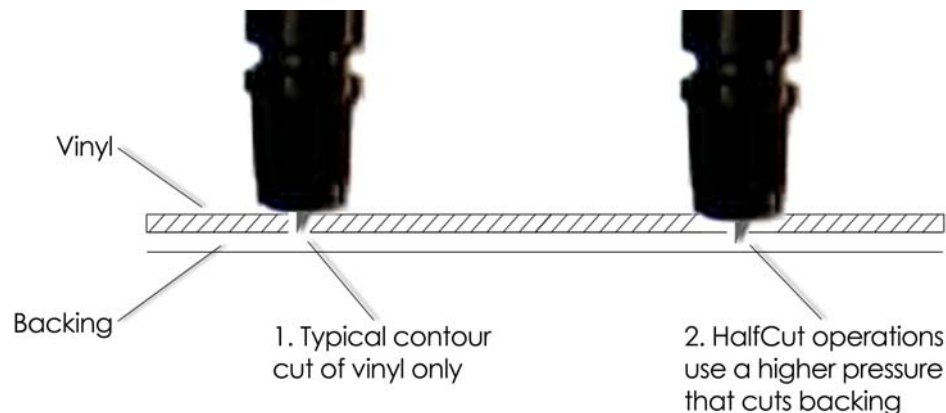


## Half Cut

Half Cut lines are like contour cut lines, except that a higher pressure is applied in order to cut the backing for easy decal removal. However, the backing is “half cut” in order to prevent material slippage during the cutting process. In typical usage, half cut lines are used in conjunction with contour cut lines to create decals that have an extra margin around the decal for handling.



- ☐ A half cut operation is similar to a contour cut operation, and both operations are available under the **Cut** menu (**Contour Cut** and **Half Cut**).
- ☐ In typical usage, the contour cut is applied to the decal, and then the half cut is applied.
- ☐ When creating a half cut operation, an optional peel tab can be added to improve the ease of peeling.
- ☐ On the workspace, the contour cut line will be displayed as a dashed line, and the half cut line will be displayed as a dashed line with longer dashes.
- ☐ When the cut job is sent to the machine, the contour cut will cut the material as a regular cut line, and the half cut will be cut according to the machine parameters set in the **Half Cut Options** dialog (typically a higher cutting pressure).



## Setting the Machine Parameters in Half Cut Options

### For cut jobs (Cut menu | Plot)

The machine parameters for half cut operations are set in the following manner:

- 1) From the **Cut** menu, choose **Plotting Defaults** to open the **Plot** dialog.
- 2) Verify that **Selected Driver** indicates the correct machine.
- 3) Click the **Setup** button to open the **Plotter Setup** dialog.
- 4) Click the **Half Cut Options** button.
- 5) The **Half Cut Options** dialog will open.

### For print and cut jobs (File menu | Print and Cut)

The machine parameters for half cut operations are set in the following manner:

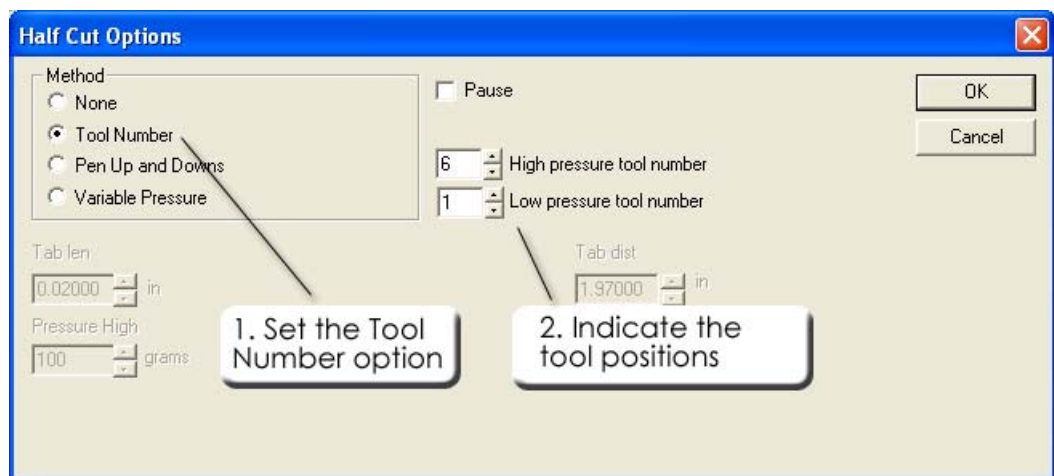
- 1) From the **File** menu, choose **Print and Cut Setup**.
- 2) On the **Printer** tab, verify the printer selection.
- 3) On the **Cutter** tab, verify the cutter selection.
- 4) Click the **Setup** button to open the **Plotter Setup** dialog.
- 5) Click the **Half Cut Options** button.
- 6) The **Half Cut Options** dialog will open.

The available machine parameters for half cut will depend on the cutter model. There are three common ways in which cutters support Half Cut:

### 1) Using the Tool Position Setting

With some cutters, the tool position setting is used to differentiate between using a hard platen for normal vinyl cutting, versus using a soft platen for “half cut” operations. Typically, position 1 indicates the hard platen (low pressure) used for contour cut, and position 6 indicates the soft platen (high pressure) used for half cut.

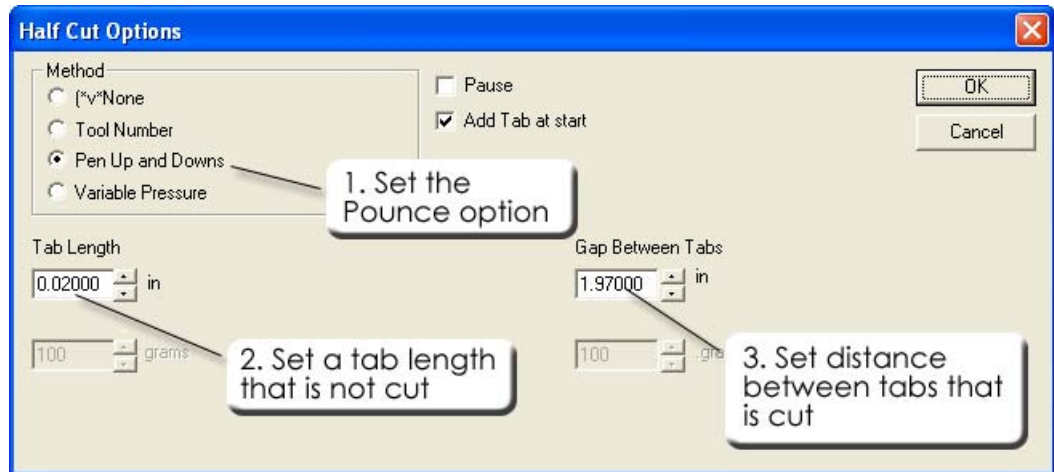
**Note:** At the time of writing, the Summa DC4 and some Mimaki cutters support this method of using the tool position.



## 2) The Pounce Method

This is the most prevalent method of half cut support, where short tabs are left uncut to serve as bridges between the decals and the material.

To create a half cut using the pounce method, the knife is used to cut like a dashed line. The knife will PENUP over the material to represent an uncut tab (**Tab Length**), and then the knife will PENDOWN into the material to create a gap between tabs (**Gap Between Tabs**). The knife will alternate these PENUP and PENDOWN operations to create a dashed cutting line (i.e., the half cut).

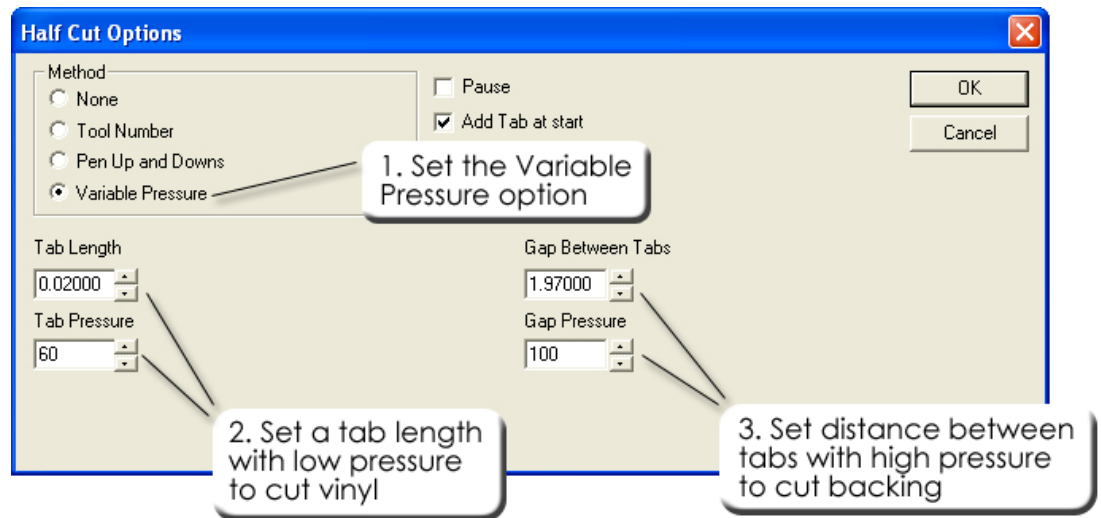


The **Add Tab At Start** checkbox determines whether cutting will begin with the **Tab Length**, or the **Gap Between Tabs**. For example, if this checkbox is ticked, then cutting will begin with an uncut tab (**Tab Length**), followed by a gap between tabs (**Gap Between Tabs**).

### 3) Support for Different Cutting Pressures

This method requires a cutter that is capable of accepting pressure change commands during the job. To create a half cut using different cutting pressures, the knife will alternate between high and low cutting pressures. Short tabs (**Tab Length**) are cut at low pressure to serve as bridges between the decals and the material, and high pressure is used to cut gaps in the vinyl backing (**Gap Between Tabs**).

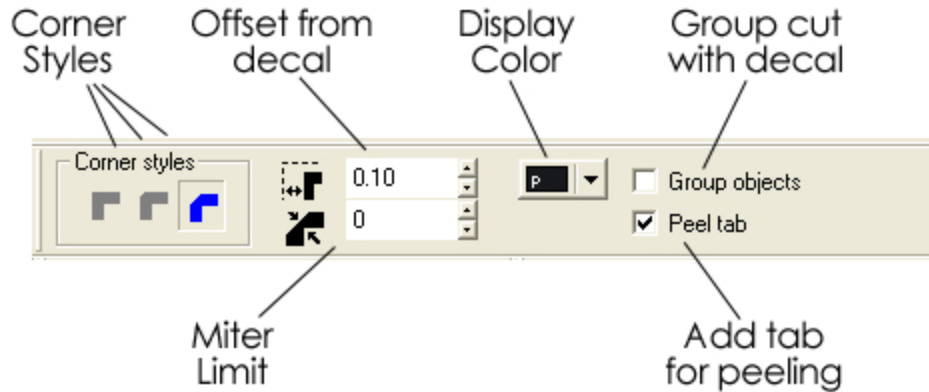
**Note:** Pressure change commands must be ENABLED at the cutter control panel. Otherwise, pressure change commands from the software will be ignored.



The **Add Tab At Start** checkbox determines whether cutting will begin with the **Tab Length**, or the **Gap Between Tabs**. For example, if this checkbox is ticked, then cutting will begin with a short tab (**Tab Length**), followed by a gap between tabs (**Gap Between Tabs**).

## Half-Cut SmartBar Controls

To specify a half cut line in your design, select the decal and then choose **Half Cut** from the **Cut** menu.



## Corner Style

There are three styles available for tracing the corners of a selected object:

| Style | Effect                                |
|-------|---------------------------------------|
| Point | Trace all corners to a sharp point.   |
| Round | Soften the corners to a rounded edge. |
| Miter | Crop or square the corners.           |



Pointed corners



Rounded corners



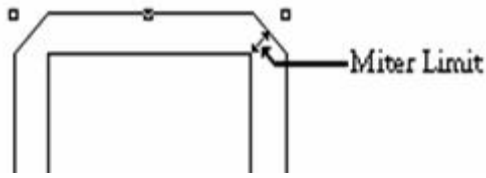
Mitered corners

## Offset

The **Offset** amount indicates the distance that is to be maintained between the object contour and the resulting half cut. The current units of measurement will be applied (see the **General Preferences** dialog, under the **Options** menu | **SignLab** setup).

## Miter Limit

This option is available when the **Miter** corner style has been selected. The **Miter Limit** is applied between the corners of the original object and the contour cut.



This limit is expressed as a percentage of the **Offset** amount.

## Layer Color

When selecting the color that will represent the contour, use a color that is not otherwise being used in the graphic. In so doing, the contours and original objects may be easily discerned when using the **Filter by Color** option (**Plot** dialog).

## Group Objects

Apply a **Group** operation to the half cut and the selected objects.

## Add Peel Tab

Ticking the **Peel Tab** checkbox will add a 1/8" peel tab to the half cut, which is used to improve the ease of peeling the decal. The peel tab will be positioned at the **Start Point** of the half cut object (See: Node Editing - Start Point).

## Converting Line Art into a Half Cut Path

- 1) Select the line art that you want to convert into a half cut path.
- 2) From the **Cut** menu, choose **Half Cut On/Off**. The line art shape is now displayed as a series of dashed lines to indicate that it is a contour cut path.



Dashed lines indicate contour cut paths

Note that the half cut path color will be the same as the original line art fill color. This color does not matter unless you wish to use the **Filter By Color** tool, in which case this allows you to choose which contour cut paths to cut according to their color.

To convert a contour cut path back to the original line art, select **Cut | Contour Cut On/Off**. However, note that any strokes that had been applied to the original line art will have been discarded.