HP Latex White Ink Workflow Guide

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1. INTRODUCTION

This document is intended to provide the basics of how to print white ink using in-RIP features of Onyx, Caldera and FLEXI SAI, how to add white ink data to Adobe Photoshop or Adobe Illustrator files and the steps necessary to print these files. Other graphic design software may have similar capabilities and procedures. Refer to the software documentation for details.

1.1. Printing with white ink

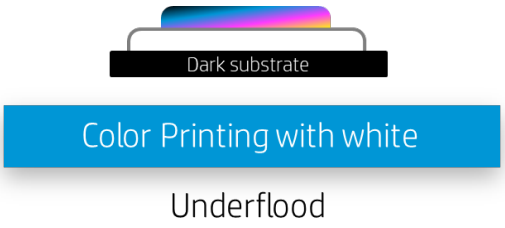
HP 886 White Latex Ink is a new feature of HP Latex R-series Printers. White ink extends HP Latex Printing into new applications including more options for backlit and 2-sided prints as well as printing on dark and colored substrates.

Different options can be chosen with the addition of white ink:

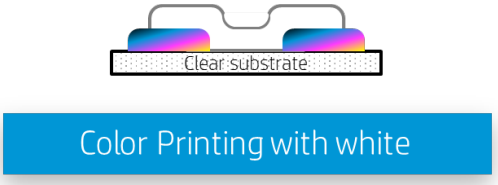
- **Overflood (OF):** the white ink is over the color ink and is normally used when the printed image will be viewed from the reverse side through clear media
- **Underflood (UF):** the white is placed under the color ink, typically used for printing on non-white opaque media such as black media
- Sandwich printing
- **Spot:** the white and color inks are printed on the same plane. This mode is used for some backlit applications and for printing *white ink only* on colored opaque media.

HP Latex R series and HP Latex 700W/800W printers have 4 available densities:

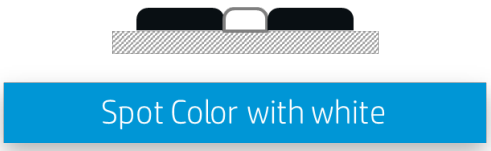
1. **W60 – Productivity-low opacity**
2. **W100 – High speed / medium opacity**
3. **W160 – Medium speed / high opacity**
4. **W260 – Low speed / best opacity**



Underflood



Overflood



Spot

Sandwich

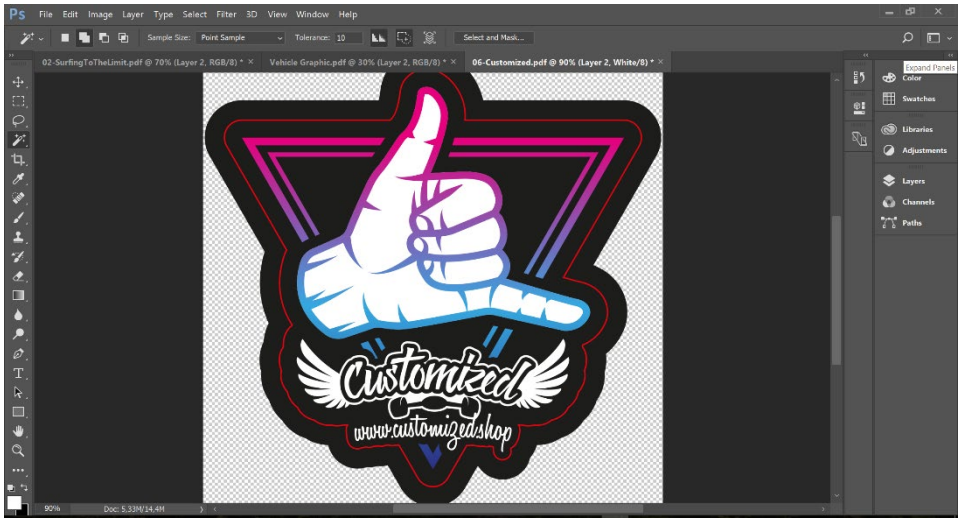
These print modes depend on the media category. They can be found in the IPS/front panel. If needed, more print modes can be added following the “Add new print mode” process.

Selecting which mode is used and the order the printer lays down the ink is determined by the Media Profile selected in the RIP or in the IPS. This will be covered in more detail in chapters 4 and 5.

Most RGB and CMYK files are designed to print using a standard set of CMYK colors on white media. Printing with white ink often requires additional steps in the RIP to add white ink data to the print job or within the file itself, or both.

2. DESIGNING IN ADOBE® PHOTOSHOP®

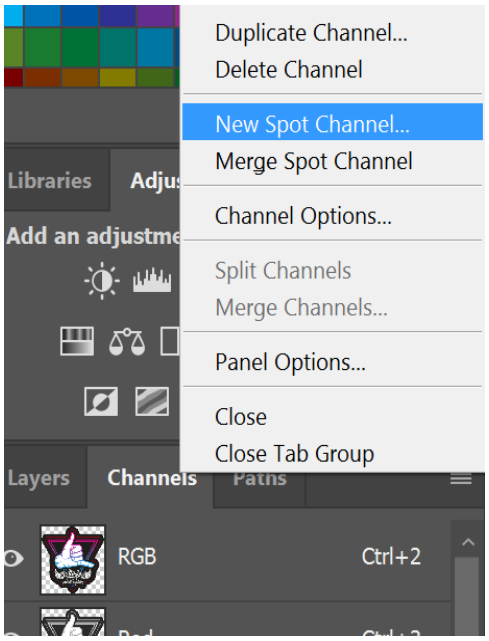
2.1. Creating a white Spot channel

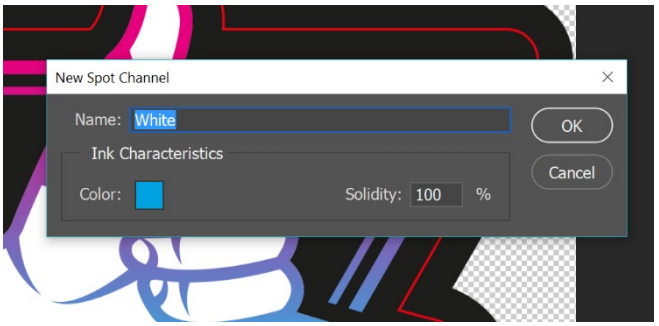


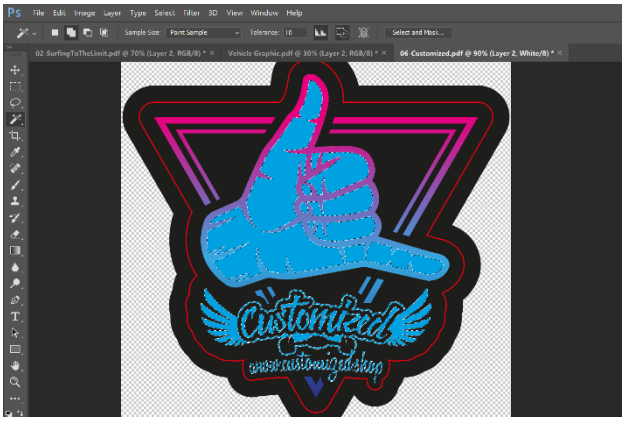
White ink data is defined in Photoshop using a “spot channel.” In Photoshop, create or load an existing file. Ensure that the Channels window is visible. If you do not see it, click on **Window** and select **Channels**.

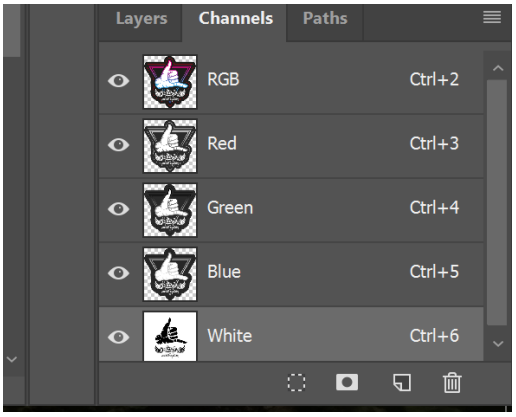
Select the part of the file that will be printed with white later. In the case below, the parts appearing in white will have white ink.

Create a new channel using the **Create new channel** icon ( ) on the right corner.



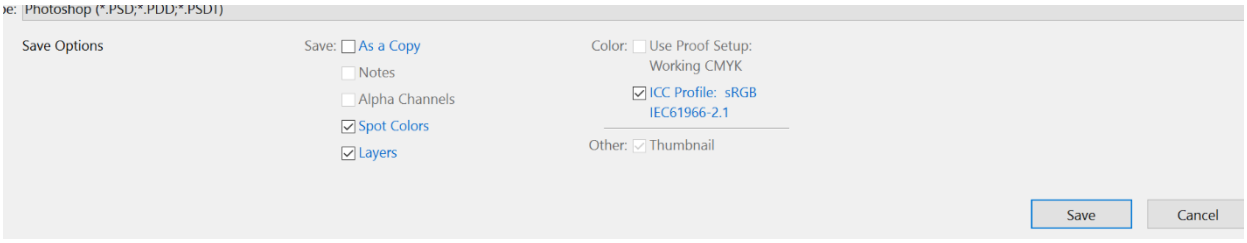






When you first create your new channel, it will be called "Spot" and you will see the channel fill the entire image at 100% coverage. You will have the ability to change its name, color and opacity. The color and opacity are only a visual representation of the channel within the application and do not affect the printed output. The name is important as it needs to be associated with the white ink channel in the RIP. Both Onyx and Caldera allow you to use any name and map that name to the white ink within the RIP, and each has a default name. For simplicity and clarity, only the default names will be used in this document. For Onyx, rename the Spot Channel to "Spot1." For Caldera, rename it to "White."

When you save your file, you will see *Spot Colors* checked under *Save Options*. This is available only when you have assigned your channel as a spot color. By default, this option is checked.



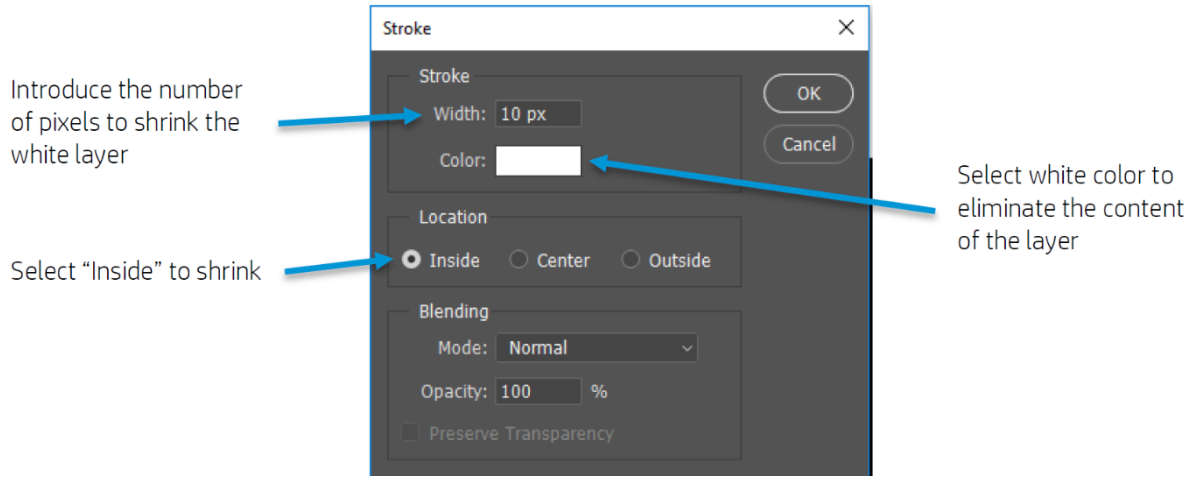
Saving the file as a TIFF or PDF, the file can be opened directly from the RIP and printed using its spot channel information. If this raster file is going to be imported into another Adobe application, such as Illustrator or InDesign, it must be saved as a Photoshop PSD, otherwise the spot channel data will be discarded when imported.

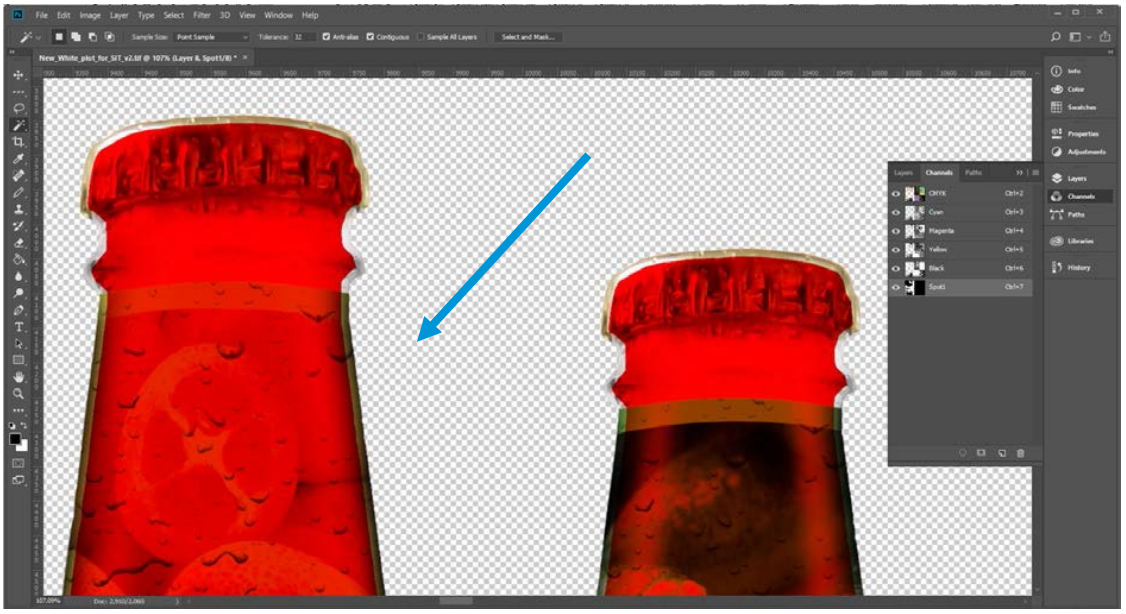
2.2. Create a choke

Sometimes, white ink can show misalignment, and white ink will go out of the image area. To avoid this, the file can be "choked" in Adobe Photoshop.

Select, in the white channel, the area to shrink. Go to **Edit**, then **Stroke**. Apply the Stroke desired to the white layer.

By increasing it, the white layer goes inside the colored layer.



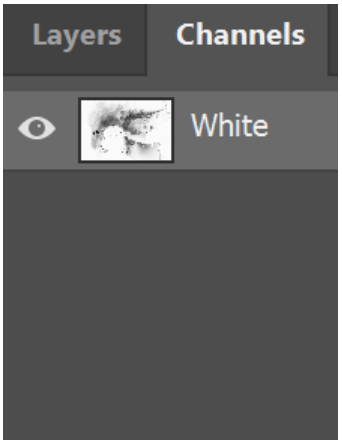


2.3. Creating a “whitescale” image

Printing grayscale images using only white ink is a fairly simple process and produces impressive results when printed on black media.

Open a file in Photoshop. Convert it to grayscale by selecting **Image** >**Mode**, and then **Grayscale**. Go to the Channels window and click the **New Spot Channel** icon ( ). A new spot channel is created. Select the name depending on the RIP you will be using.

Select the original channel and invert it by selecting **Image** > **Adjustments**, and then **Invert**. Select and copy the entire image to the new channel. Go back to the original channel and delete all of its contents (select all > delete). Save the file as a TIFF with Spot Colors selected.



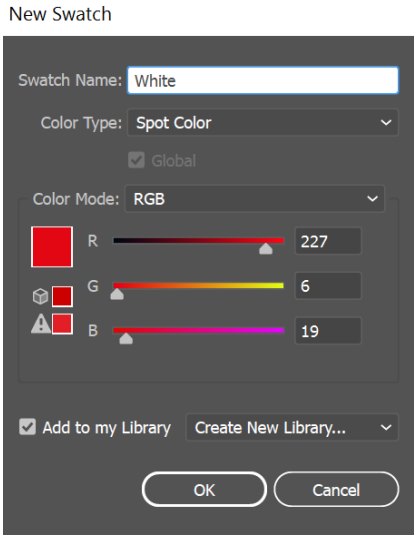
3. DESIGNING IN ADOBE® ILLUSTRATOR®

White ink data is defined in Adobe Illustrator and InDesign® as spot colors. This chapter will cover the steps used within Illustrator only, although similar steps are used in InDesign. For more information about using spot colors within InDesign, refer to the InDesign Help function.

3.1. Creating and using a spot color

To begin, ensure that the Swatches window is visible. If you do not see it, click on **Window** and choose **Swatches**. Create a new swatch using the **New Swatch** icon ( ) at the bottom.

Change the Swatch Name to "Spot1" (Onyx) or "White" (Caldera). Change the *Color Type* to *Spot Color*. These two steps are important for the RIP software to automatically be able to assign your spot color to the white ink channel.



You can change the color that visually represents the white ink spot when viewing the file in the application. This is helpful to differentiate the white ink spot color from areas that are blank or have no color data. It is recommended to select a color that is not present in the original file.

Once you have created the spot color swatch, it is ready to be used in the design of your file. The swatch is found in the Swatches window. It has a small dot in the lower right corner of the swatch to indicate that is a spot color ( ).

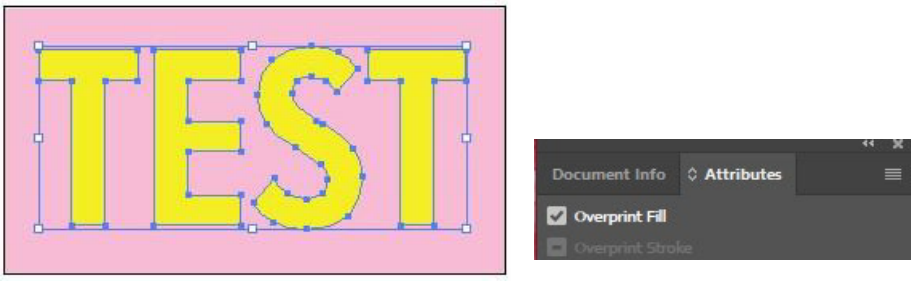
You can control the density of white ink using the slider or numerical control in the Color window. Note that using the *Transparency* control will also affect the density of the spot color and has a cumulative effect (70% density with 50% transparency results in an overall density of 3).

3.2. Overprint attribute

Normally, when you create and print overlapping elements, the top element knocks out the area of the element underneath. This is the default mode for Illustrator. In the example below, a box was created using the spot color swatch (white ink) and yellow text was placed on top. The yellow text knocks out the spot swatch data below. The two colors do not mix. If this was printed on black media, the yellow text would have no white ink underneath it and this would make it difficult to see the yellow.

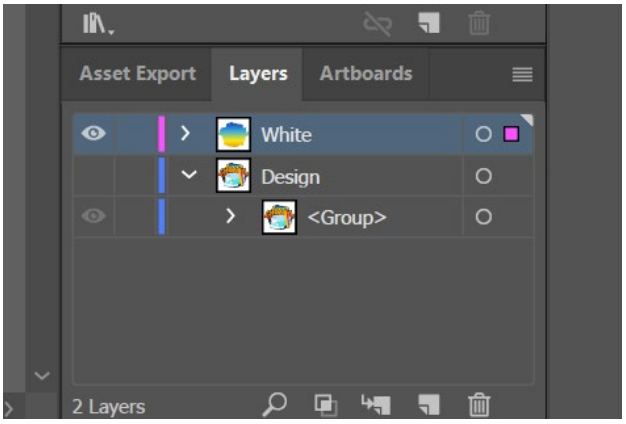
Overprinting prevents knockout and allows elements to print over or under other elements. This is important when using white ink as a spot color. You will need to enable the overprint attribute when the artwork needs to be printed over top of or under the white ink. This option is found in the **Window** menu under **Attributes**. When you select your shape, the options for *Fill* and *Stroke* will be available based on the object's characteristics.

If the example below was printed on black media, the yellow text would print on top of a uniform box of white ink.



3.3. Layer ordering

When printing using a spot color swatch, the order of the design elements, or *Layers,* is important. Generally, you want to place all of the elements that contain the spot color swatch (white ink) in the *top layer* and color elements and images in the layer below. Also, if the top (*white ink*) layer contains both knockout elements and *Overprint* elements, place the elements with the *Overprint* attributes at the bottom of the top layer.



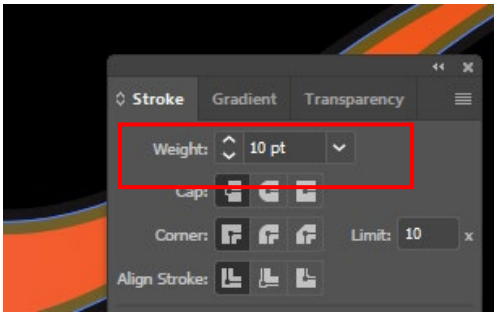
NOTE: The order of the layers does not affect the order of how the printer lays down the ink (white ink under color or color under white ink). This is controlled in the RIP.

3.4. Create a choke

Sometimes, white ink can show misalignment, and white ink will go out of the image area. In order to avoid this, the file can be *choked* in Adobe Illustrator.

Select in the white channel the area to shrink. Go to **Windows > Stroke**. Apply the Stroke desired to the white layer.

By increasing it, the white layer goes *inside* of the colored layer.



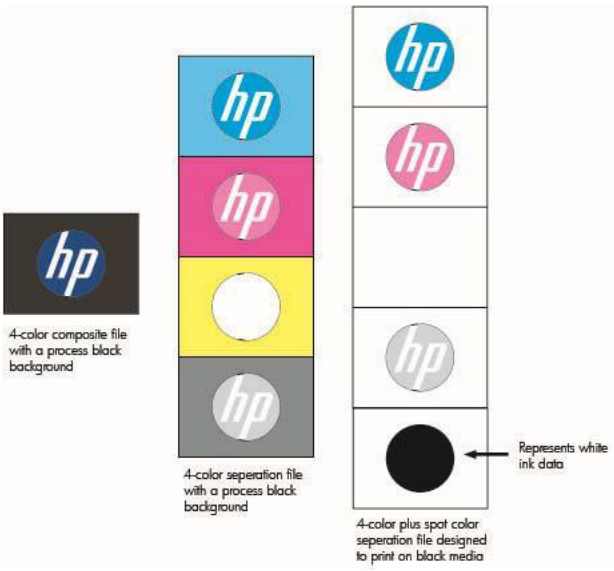
3.5. Saving the file

It is recommended to save your file in Adobe Acrobat (PDF) format. While it is possible to save Illustrator files with white ink data outside of the file area as a Postscript (PS) or Encapsulated Postscript (EPS) file, it is important to remember that of the three file types, only PDF files support transparency. This is important if your file has white ink data that crosses a transparency bounding box. When this happens, a PS or EPS file will flatten the transparency. As a result, the white ink data is lost. Do not use any of PDF/x standards, as most of these standards will flatten your transparent regions.

When printing with white ink, composite PDF files only work when the spot color swatch in the file has a single density. If the spot color swatch has more than one density, or uses a gradient, the file must be saved as a Separation File.

3.6. Creating a separation file

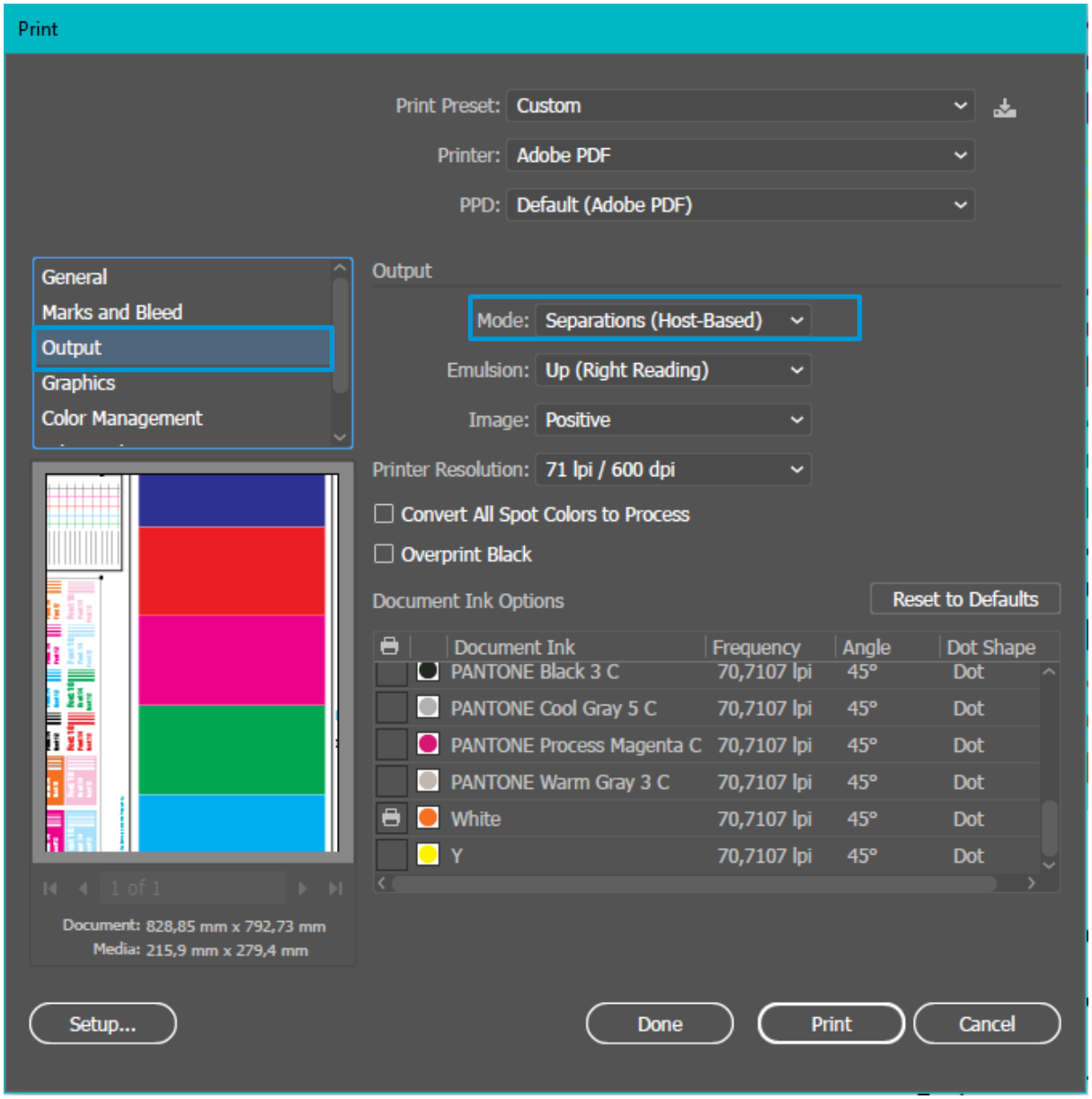
Creating a separation file involves using Illustrator's printing function. "Printing" a separation file takes the color data and creates multiple pages (also referred to as plates): one for each color channel. A standard CMYK file will contain four pages. Files containing a spot color will have a fifth page.



Unlike the representation above, when viewing a separation PDF file, the pages will be in black and white.

Each page will reflect where that particular channel contains data (some percentage of black) and where it does not (white).

To save your file as a separation file, select **File** and then **Print**. In the print dialog window, change the Printer to **Adobe PDF**.



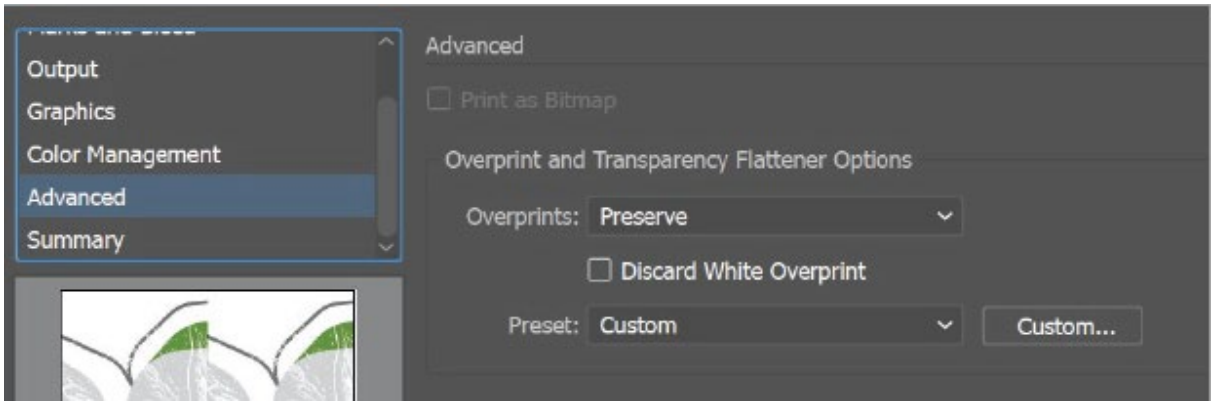
You will likely see that the image preview is not sized correctly. The Adobe PDF printer uses standard page sizes, such as letter or “Defined by Printer.” To adjust the image to your art board size, change Media Size to **Custom**.

Click on **Output**, located to the upper left of the Print window.

Click on the **Mode** drop-down menu and change from “Composite” to ***In-RIP Separations.*** This

option indicates that this computer will create the separations. Once selected, the Document Ink Options change. You will see that the four process colors and the spot color are listed. Next to each of the separation colors are and icons. These icons designate spot colors ( ) and process colors ( ).

Make sure you preserve the overprint:



Select **Print**, and when prompted, enter a file name and location to save the file.

4. PRINTING WHITE FROM CALDERA

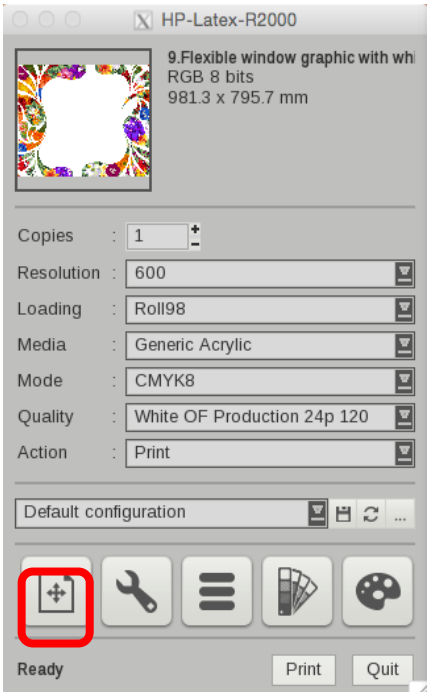
Depending on the file and how you set up your white ink data, there are specific methods to get your white ink data recognized by the Caldera RIP. There are tools within the software that can be used to apply white ink to an RGB or CMYK file. The RIP can also process files that have white ink data in the file itself. The first step, however, is to select the media profile.

4.1. Selecting the media profile

Open the Printer setup window by clicking on the **HP Rx00** printer button. Select the down arrow to the right of the Media selection to display a list of available media profiles. Selecting the media profile determines both the order the printer lays down the white and color ink and controls the ink saturation depending on media type and viewing intent (e.g. backlit).

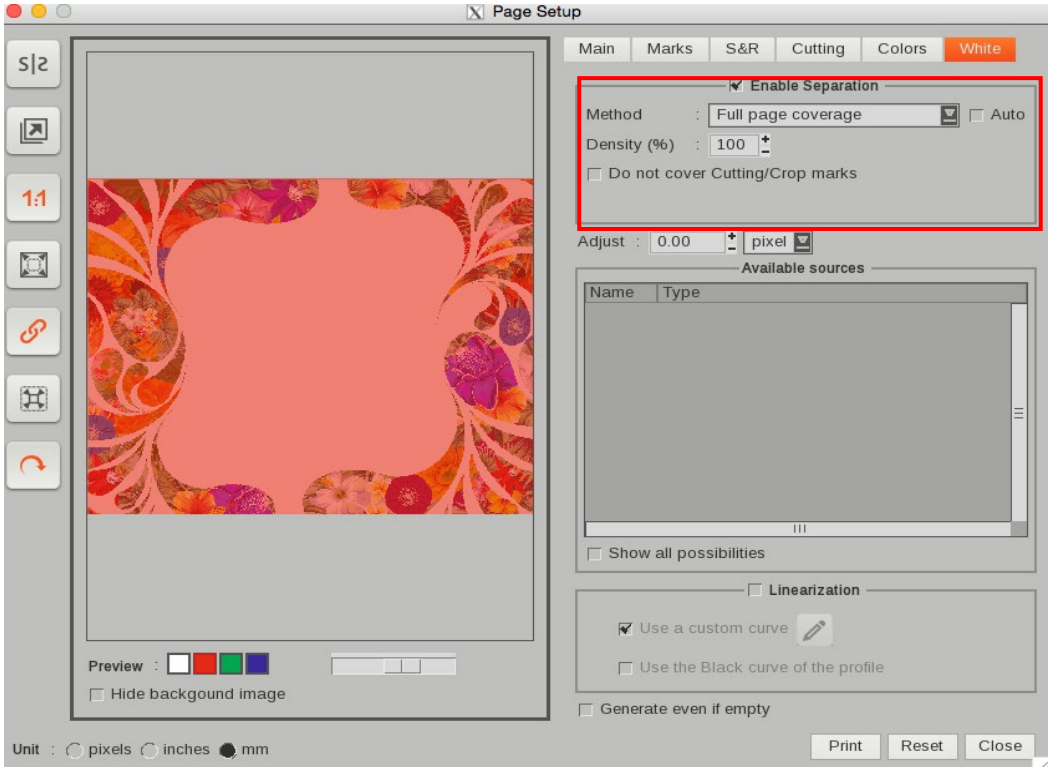
5. **White UF (Underflood)** – Prints and cures the white ink followed by printing CMYK ink over the white.
6. **White OF (Overflood)** – Prints and cures the CMYK ink followed by printing white ink on top.
7. **White SP** – Uses the full width of all printheads to deliver CMYK and white ink at the same time. In this mode, white and color areas cannot overlap.

Press the **Page Setup** icon in the lower left corner for detailed white ink setup options.



4.2. Enable separation and method selection

Click on the tab labeled **White** in the Page Setup window. Click on the **Enable Separation** checkbox, and then select the *Method* for generating the white ink layer. The Method selection identifies what data will determine where white ink will be used.



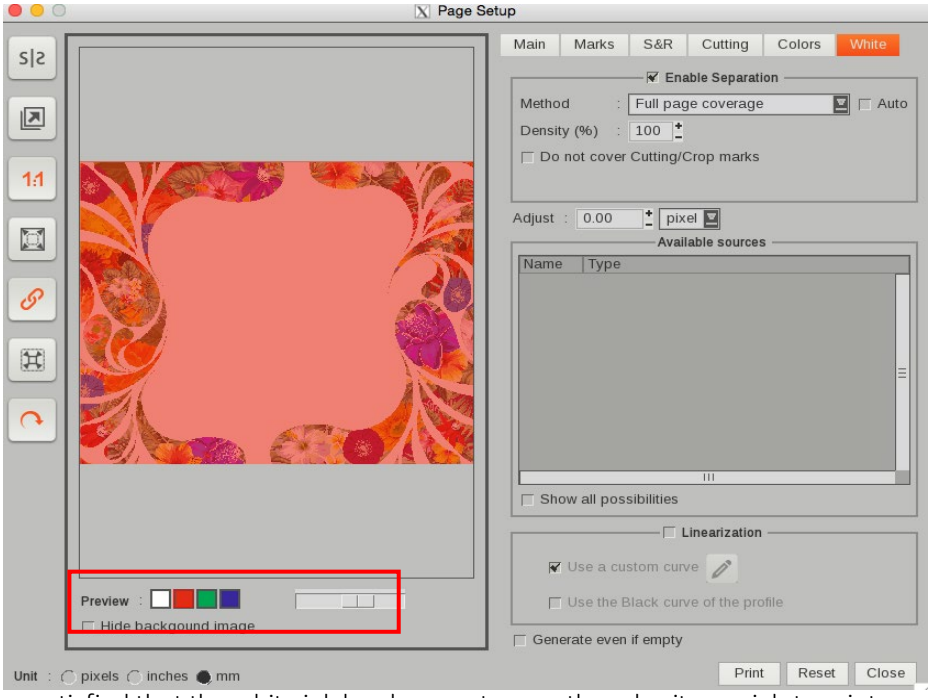
The choices are:

8. **Use a Spot Color** – for files that have been created in Illustrator and contain a spot color identified as "White." See section 3.1 for more details.
9. **Use an Extra-Channel** – for files that have been created in Photoshop and contain a spot channel identified as "White." See section 2 for more details.
10. **Fill a contour** – for files that have been created in Illustrator and contain a spot color stroke identified as "WhiteContour." See the *Caldera – User Guide* for more details.
11. **Generate from CMYK data** – selecting this provides three options:
    - Generate where there is some ink - a white ink fill is added to areas where there is CMYK image data
    - Generate where there is no ink - a white ink fill is added to areas where there is no CMYK image data.
    - Use a transfer function – a more precise method, using a look up table to adjust white ink, by pixel, based on the density of CMYK ink
12. **Full page coverage** – this option generates a white ink fill over the entire page.

The density of the white ink can be controlled by entering a value in the **Density (%)** box for all but the "Use a Spot Color" and "Use an Extra-Channel" options, as these are controlled within the design application. You can also choke and spread the white ink by changing the **Adjust** value.

4.3. White ink preview

A preview of the page is displayed at the left. Normally it displays the CMYK data and white data. However, to more clearly see the white ink only, click on **Hide background image** checkbox in the lower left of the preview area.



Once you are satisfied that the white ink has been set correctly, submit your job to print.

5. PRINTING WHITE FROM ONYX

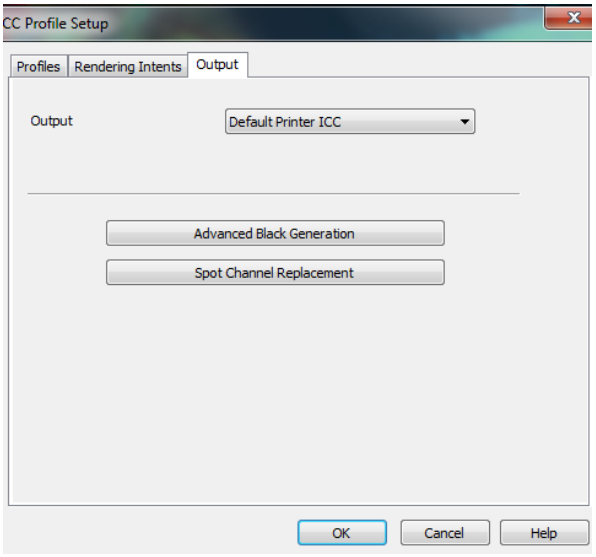
Depending on the file and how you set up your white ink data, there are specific methods to get your white ink data recognized by the Onyx RIP software.

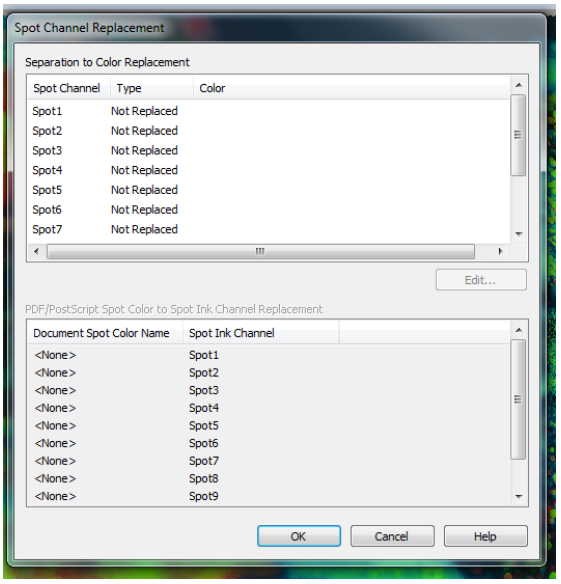
5.1. Selecting the media profile

With a file open in Job Editor, from the Printer & Media tab, select a Media Configuration for the type of job you intend to print and the appropriate white print mode for the application wanted.

If you did not create the file and the spot color is named something other than "Spot1," it is possible to assign that spot color name to the white ink channel in ONYX.

To do so, open your file with Job Editor and go to the **Printer and Media** tab. Click **ICC profile set up**. Then go to **Output** and click **Spot Channel Replacement**.





The *Spot Channel Replacement* option allows you to specify which spot color will be assigned to which spot ink channel. Either edit or create a QuickSet. Under the first window, click the **Change Profiles** button from the Color Management section. Click on the **Output** tab and select the **Spot Channel Replacement** button.

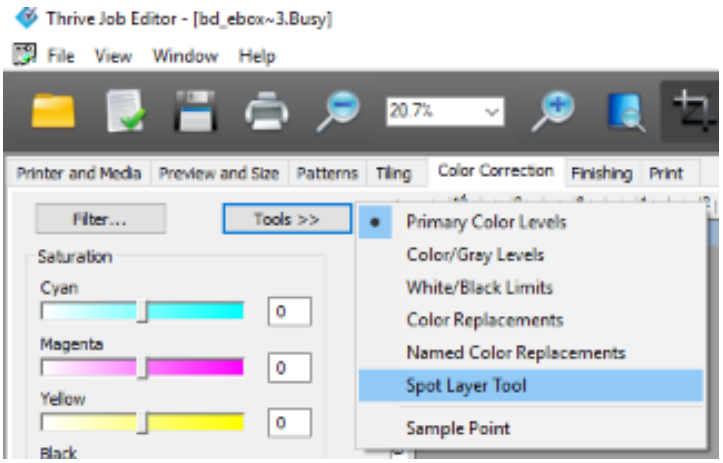
Then, under the first entry, double-click on *<None>* and type in the spot color name. The name needs to match the spot color's name exactly in order to map it to the Spot1 white ink channel. Once completed, click **OK** and then **OK** again to get out of the dialogues.

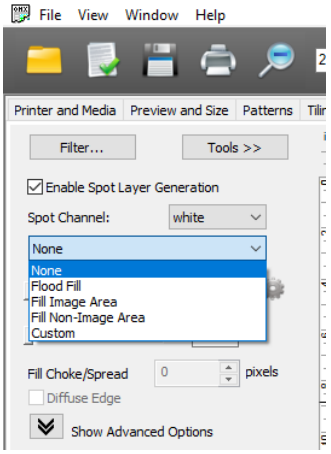
5.2. Enable separation and method selection

When opening a file with a white layer defined with the correct name, Onyx will recognize it automatically. It is visually displayed as a green layer wherever the white ink was defined by the design software.

If the file doesn't have any white layer determined, it is possible to create one from Onyx.

To do so, open your job with Job Editor, go to **Color Correction** > **Spot layer tool**, and enable **Spot layer generation**.



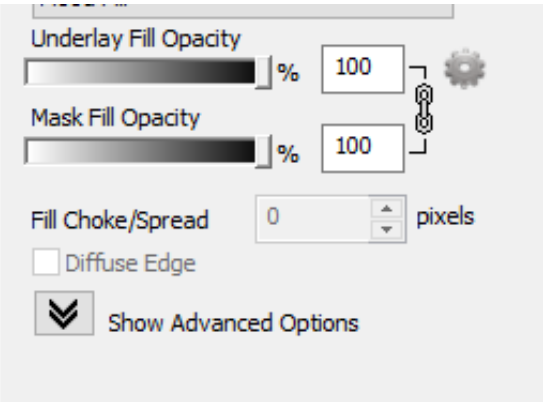


The Method selection identifies what data will determine where white ink will be used.

The choices are:

13. **Flood Fill** – this option generates a white ink fill over the entire page.
14. **Fill Image area** – a white ink fill is added to areas where there is CMYK image data
15. **Fill Non-Image area** – a white ink fill is added to areas where there is no CMYK image data

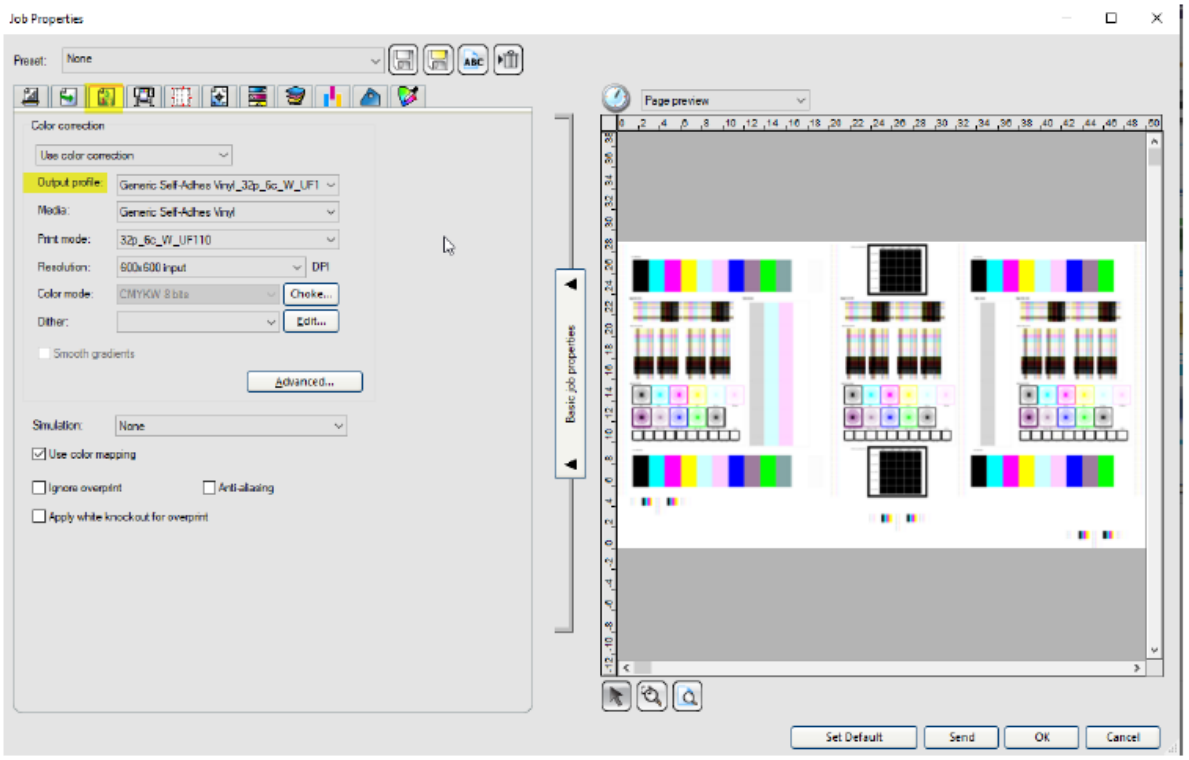
The density of the white ink can be controlled by entering a value in the **Density (%)** box. You can also choke and spread the white ink by changing the **Fill Choke/Spread** value.



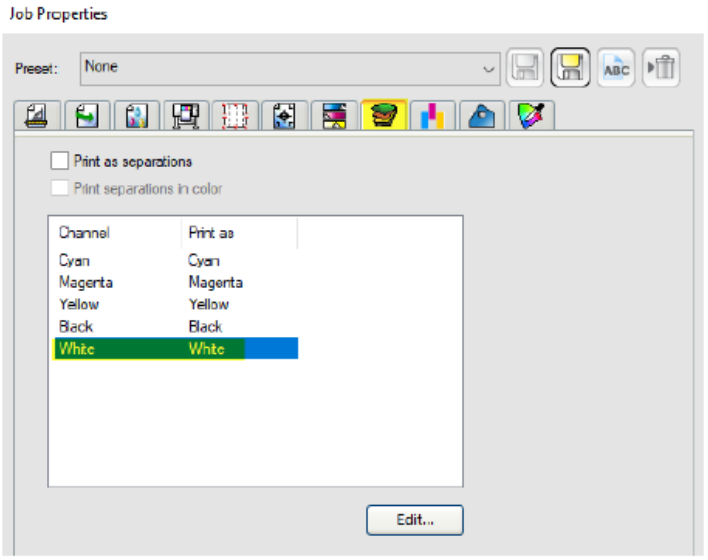
6. PRINTING WHITE FROM FLEXI SAI

To print in White mode (CMYKW) with the SAi RIP, open an image with a white channel and follow the next steps:

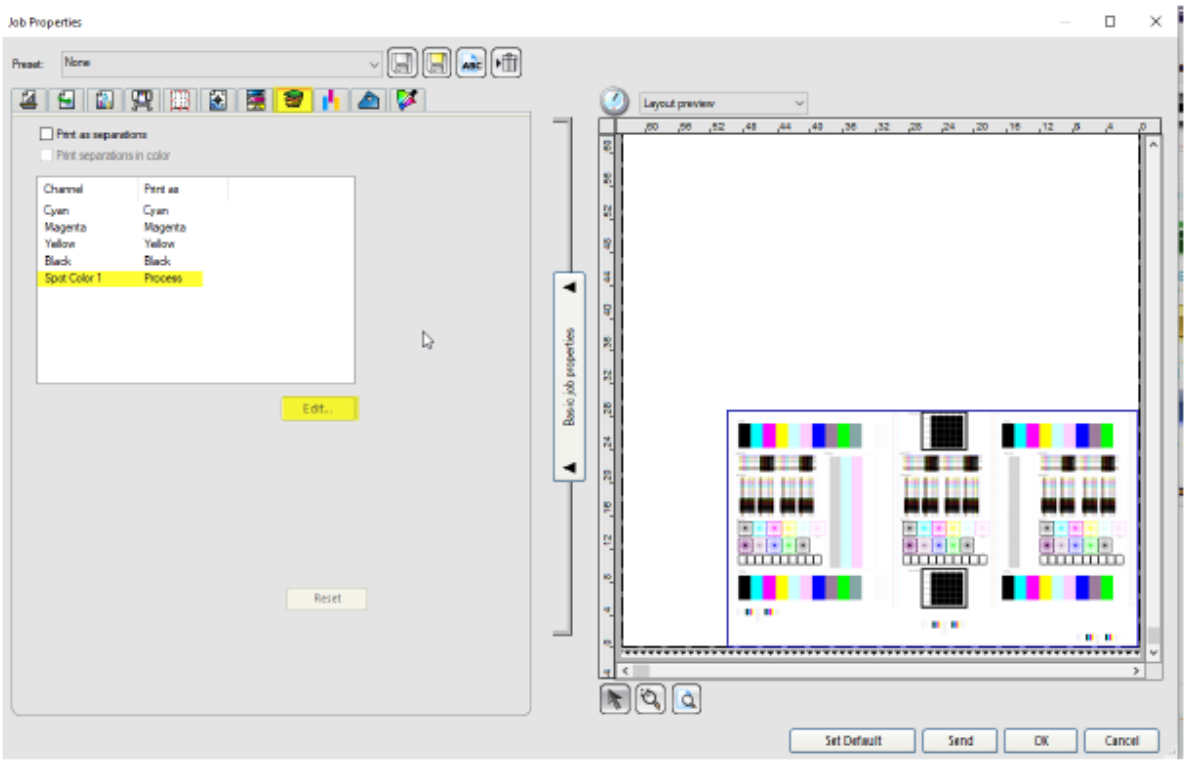
1. From the **Color Management** tab, choose one of the White print modes available in the printer in the **Output profile** drop-down list:

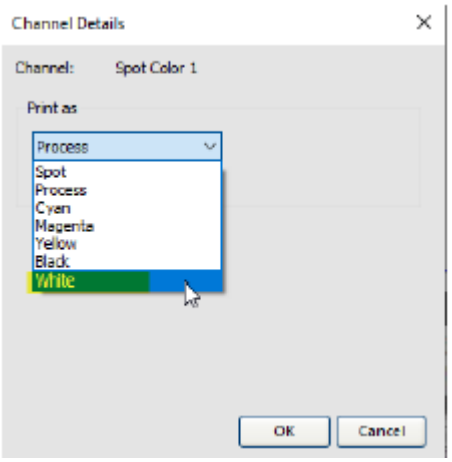


2. From the **Separations** label, check that White channel (the last channel in the list) has the **Print as** value equal to **White**:



- If YES, the job is OK to be printed with the SAi RIP
- If NOT, then click the **Edit** button and select the **White** value from the drop-down list:





7. HOW TO PROFILE WITH WHITE INK

To profile with white ink, a white ink layer needs to be applied by the RIP software while doing the process. Once we know where this option is, the profiling process is the same as for a white substrate.

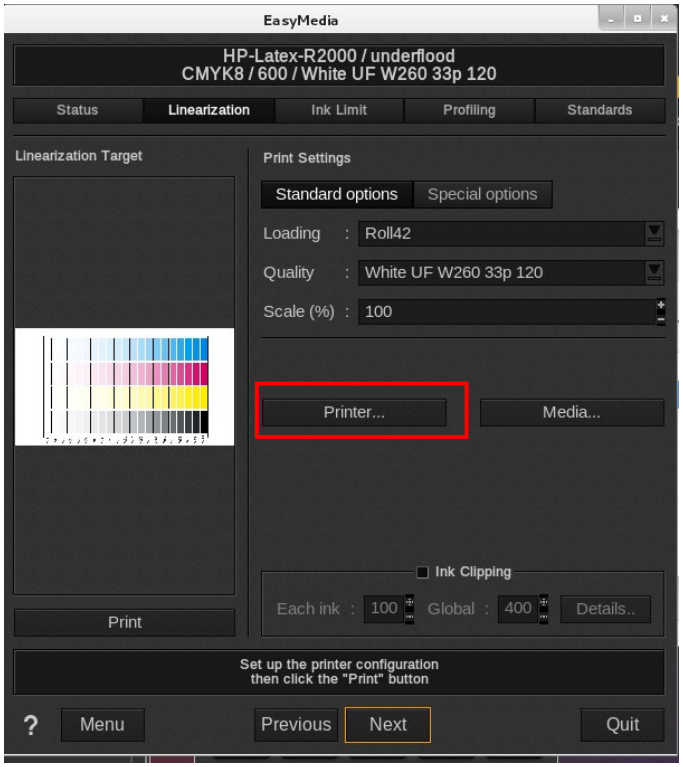
7.1. Caldera

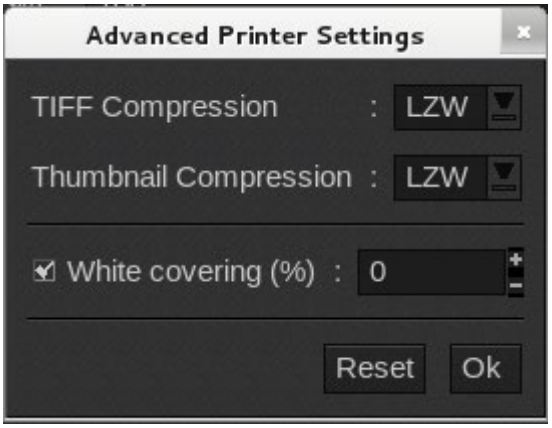
From the IPS, create your print mode with white ink (CMYKcmW).

Synchronize *Easy Media*, and select the media preset desired.

For each chart, go to **Printer**, tick the **White ink** box and enter in the desired white ink **%.** Depending on the print mode you selected beforehand, it will either print overflood or underflood.

Then, follow the normal profiling steps.





NOTE: If next you need to profile *without* white, make sure that the white covering option is *unticked*. Remember, Caldera keeps what was done last.

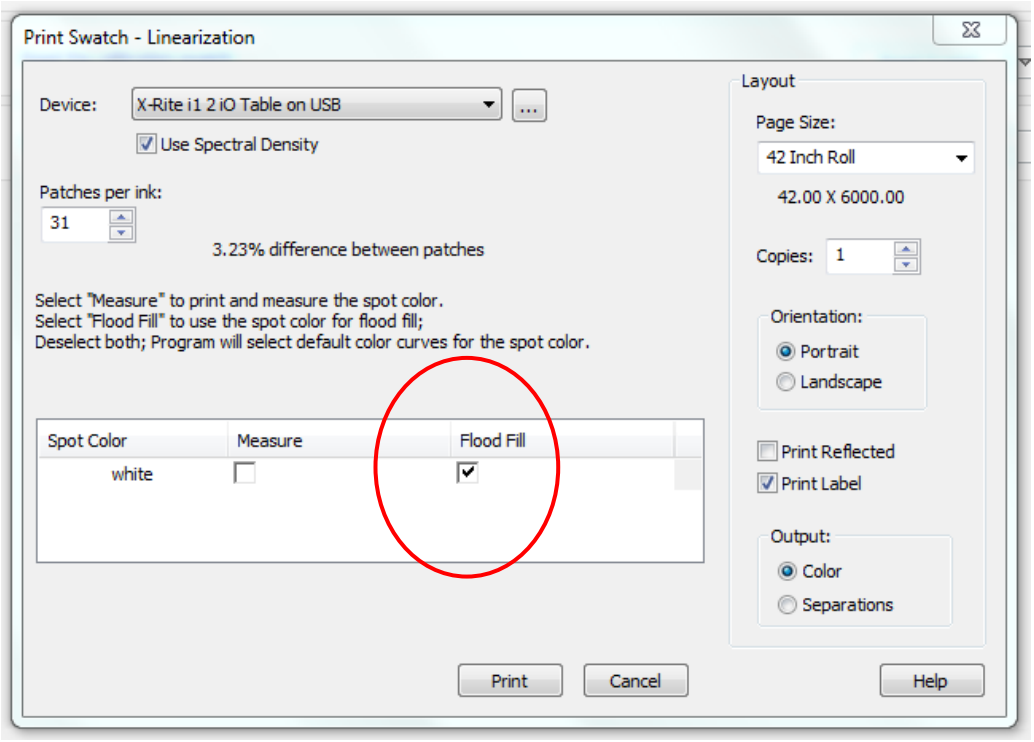
7.2. ONYX

Go to **Media Manager**. select the print mode with white created before in the IPS.

Follow the steps to profile.

In the Print Swatch window, select your spot white and tick **Flood Fill**. This will create an underflood or overflood, depending of the print mode that was previously selected.

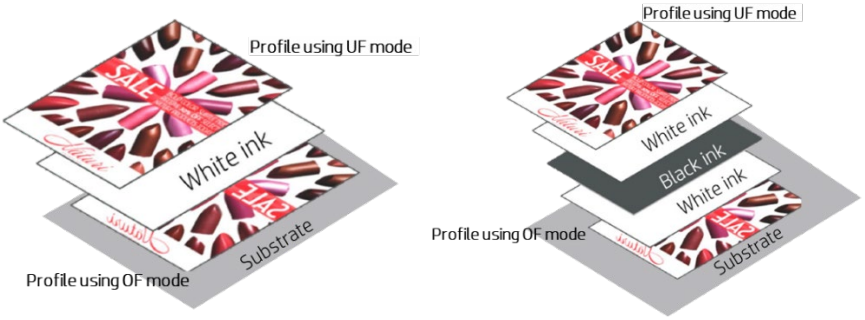
Print and follow the steps. Make sure the same flood type is selected for each step for the profiling process.



7.3. Profiling for Sandwich

HP Profiles for sandwich print modes were created as follows:

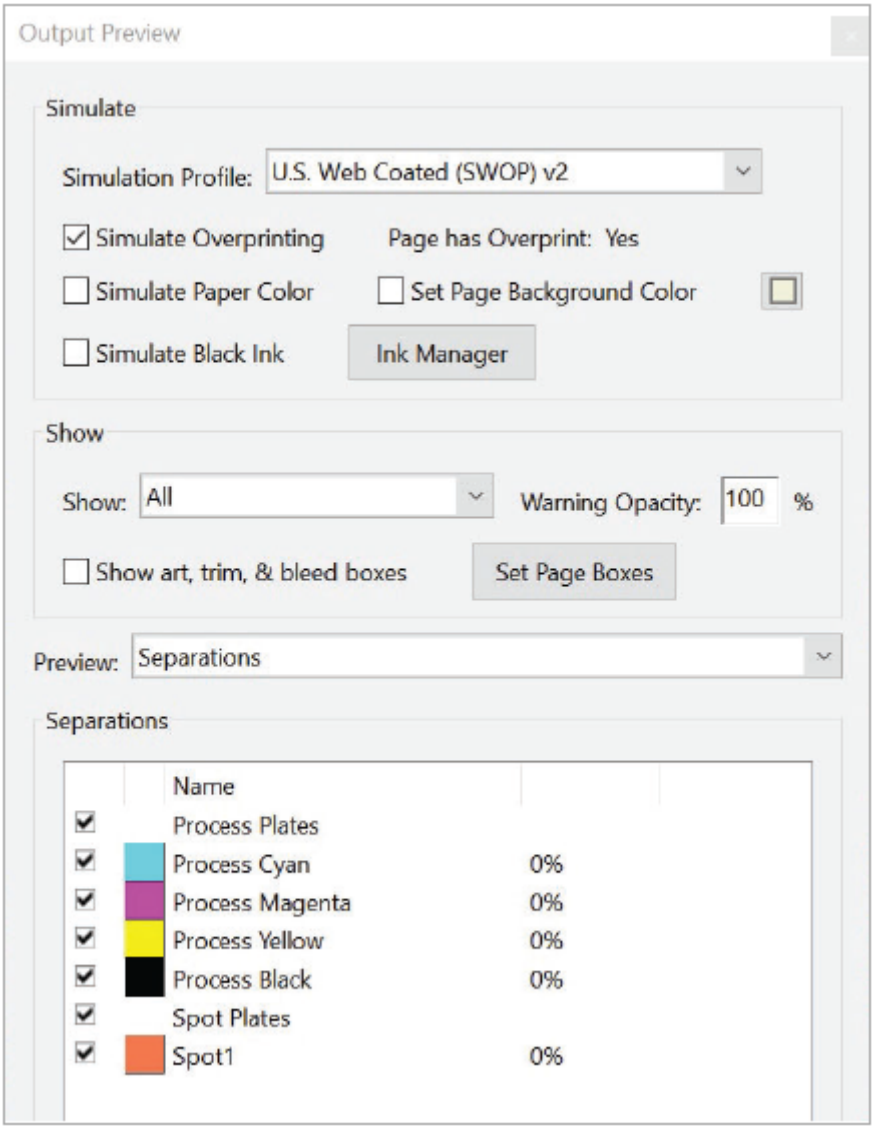
- For the layer in contact with the substrate: The color charts were printed in OF and were protected for reading purposes
- The external layer was profiled printing the color charts in UF



8. HOW TO CHECK IF A WHITE LAYER IS CREATED IN ADOBE ACROBAT

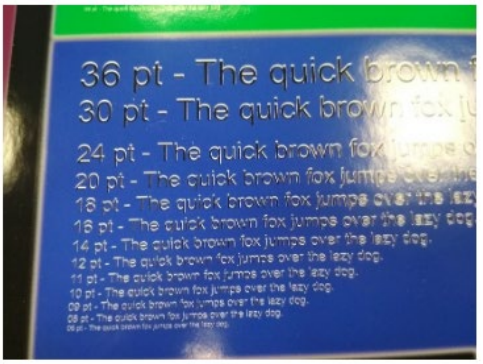
In order to check if there is a white layer created in a pdf document, there is a simpler option than opening it in Adobe Illustrator.

In Adobe Acrobat, go to **Print Production/Output preview**. You will see, in the Separations preview, if a White layer has been created and if the naming is correct for your RIP.



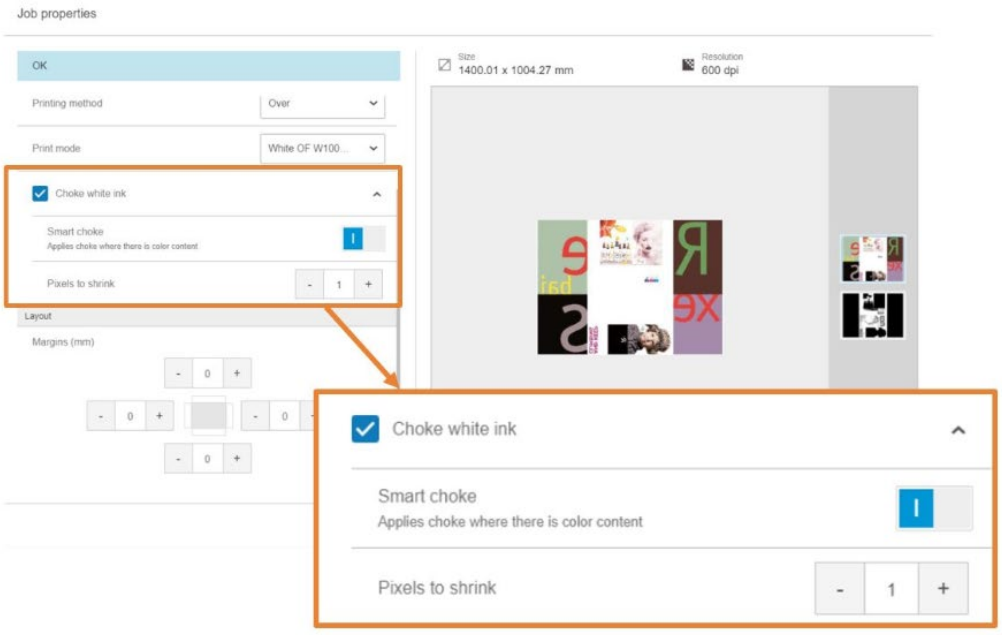
9. HOW TO USE CHOKE

Choke is used to shrink the white layer if there is a misalignment between the color layer and the white layer in the printed output when using Underflood or Overflood modes. Examples:



9.1. Choke from the IPS in R Series

Using the IPS: There is new functionality in the Job Properties panel that allows choke to be applied.



The options for choke, at this point, are detailed in the following two sections:

9.1.1. Choke white ink

- If disabled (default), choke is not applied, and the white layer is not shrunk. It is maintained as in the original image.
- If enabled, choke will be applied, and some pixels will be removed from the white layer. The remaining choke settings will need to be defined.

9.1.2. Smart choke

- If disabled (default), choke will be applied to the full white layer.

  NOTE: Using this option, small text and details might disappear.

- If enabled, choke will only be applied in the areas of the image where there is color over/under the white layer. It will not be applied if only white is present. In addition, small text and details will be protected and will not disappear from the image.

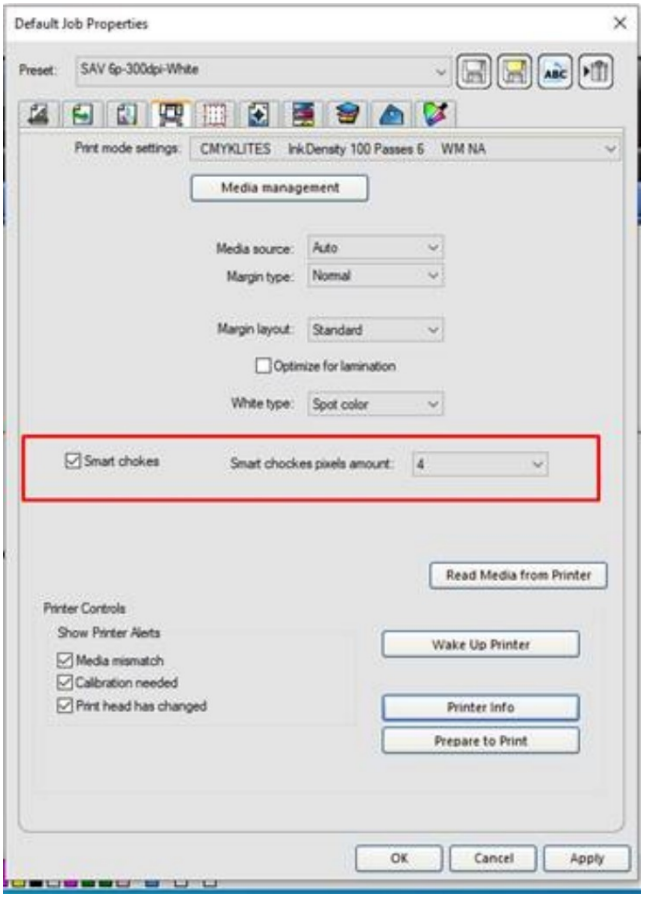
HP recommends starting with 4 pixels (600 dpi) and then adjusting if necessary.

NOTE: The final area removed from the white layer is relative to the image resolution. Example: 2 pixels at 300 dpi is equivalent to 4 pixels at 600 dpi.

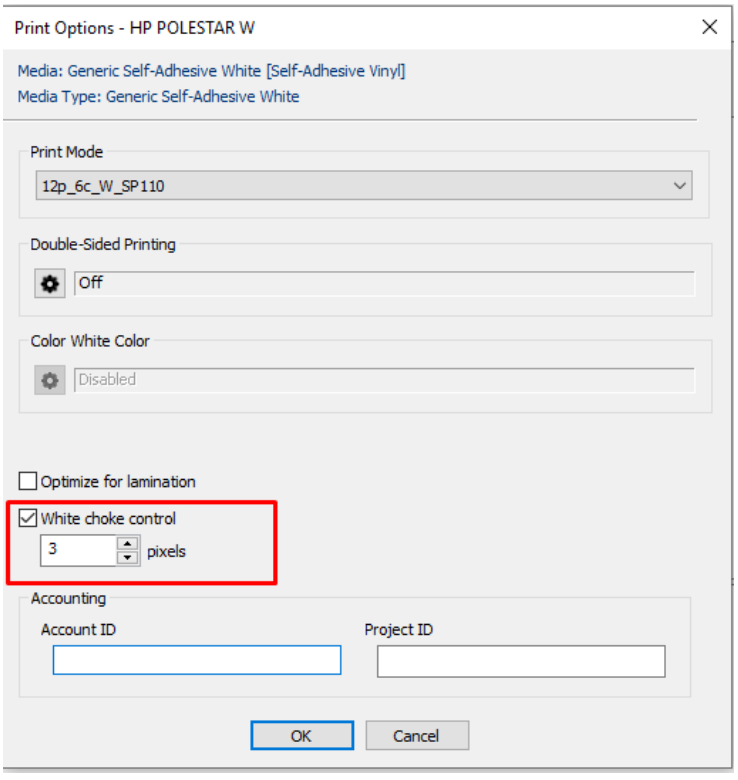
9.2. Choke from the RIP in Latex 700W and 800W

In Latex 700W and 800W printers, choke is set from the RIP. HP recommends starting with 3 pixels. If needed, it can be modified as follows:

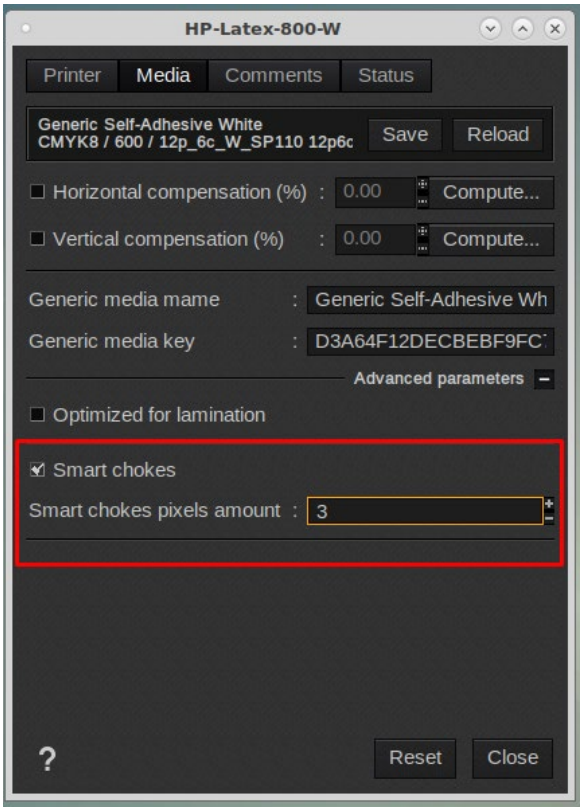
9.2.1. SAI



9.2.2. Caldera

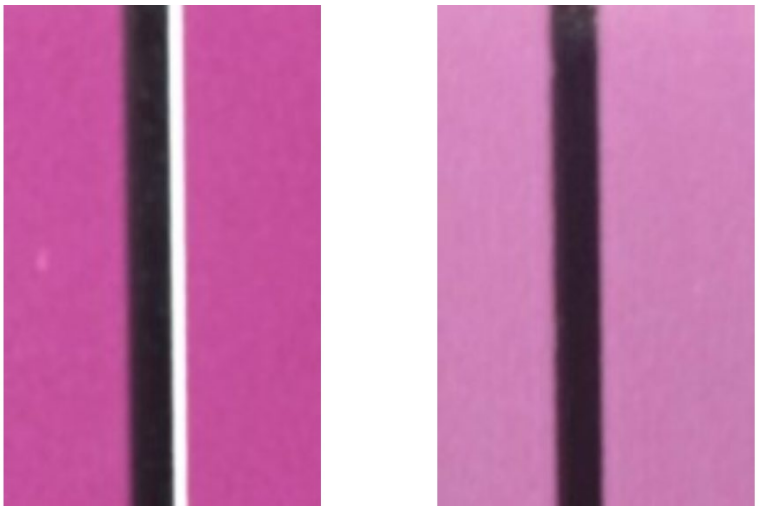


9.2.3. ONYX



9.3. Comments and considerations

- High opacity white print modes might require greater shrinking than fast white print modes.



Example: W260 (right) and W60 (left) with the same number of pixels choked.

- It is possible that choke may work very well in some areas of the plot, but that the misalignment is not completely removed in other areas.

  Contributing factors to this:

- Quality of the printhead alignment.
- Media deformation.
- Print mode used.

10. PRINTING IN SANDWICH MODE

10.1. Considerations

- TOP LAYER: identifies the color layer that is physically printed over all the rest. It is the layer that you can see while printing, and it covers all other layers.
- BOTTOM LAYER: identifies the image to be printed in contact with the substrate. When printing, this layer remains hidden from sight, as all other layers are printed on top of it. The file containing the bottom layer contains the white layer as well, which will be printed between the top and the bottom layers.
- LIGHT SIDE: the translucid nature of this application is usually intended to be backlit from one side and exposed to the viewer on the other. The side facing the light source is named the “light side.”
- VISUAL SIDE: refers to the image printed which will face the viewer once the application is exposed. It is opposite to the light side, and is called the “visual side.”

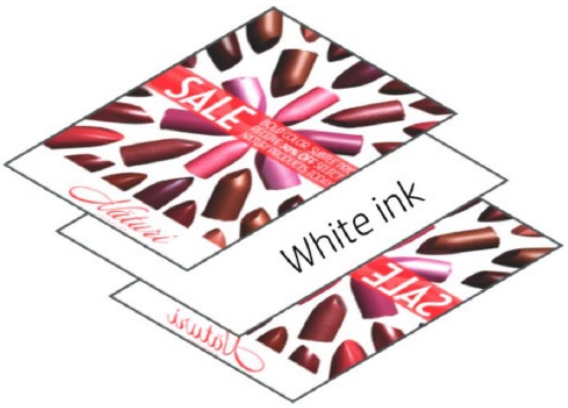
10.2. Constraints

- The two images must have the same size and resolution.
- The image you want to be in contact with the substrate (bottom layer) must have the white layer inside.
- The image you want to be in contact with the substrate (bottom layer) will always be the source of the composition. The other image (top layer) will be the one added to this one, not the other way around.
- Files ripped against a backlit category substrate are printed assuming they will be illuminated and are going to be the “light side.”
- Files ripped against a non-backlit category substrate will be those exposed to the sight of the user, thus being the “visual side”.

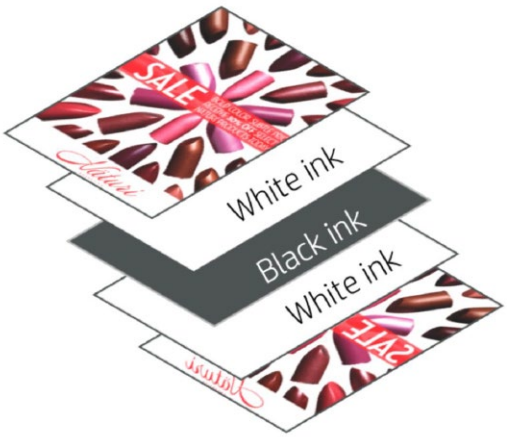
10.3. Dual Side vs Day and Night

Sandwich Mode comes with two different applications: Dual Side and Day and Night. A Dual Side application allows an image to be viewed from both sides of the transparent media equally, while a Day and Night application is designed to be viewed from one side only, and it changes if it is backlit.

Day and Night (3 Layers)

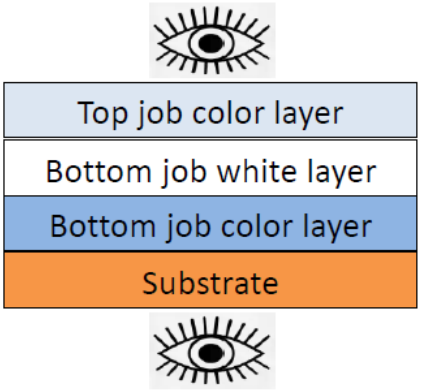


Dual Side (5 Layers)



10.4. How to print a Dual Side (5L) application in R series

10.4.1. Ripping

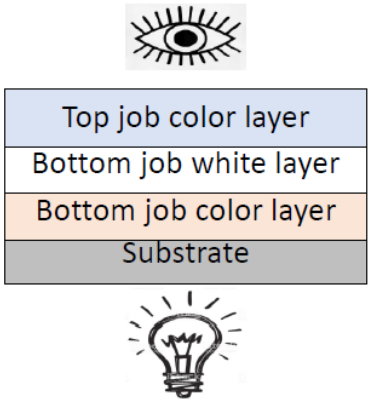


When we RIP images for a Dual Side print job, the image printed as the Bottom Layer Job (to be in contact with the substrate) must be ripped as a Frontlit Polyester Film (under the Film substrate family). The print mode should be set to **Heat Sensitive White UF W260 33p 120** and it must be mirrored. The Top Layer Job is ripped as a Frontlit Polyester Film, with print mode set to **Heat Sensitive White UF W260 33p 120**, but *not* mirrored.

10.4.2. Printing in IPS

1. Load the job into the IPS inbox and select **Bottom Layer job** in the IPS.
2. Select **Add Top Layer Job**.
3. Set the color mode to **Sandwich Mode**.
4. Set the printing method to **No Backlight**.
5. Set the print mode to **HS Dual Side 66p**.

10.5. How to print a Day and Night application (backlit from non-printed side) (3L)



10.5.1. Ripping

When we RIP images for this kind of Day and Night print job, the image printed as the Bottom Layer Job (to be in contact with the substrate) must be ripped as a Backlit Polyester Film (under the Film substrate family). The print mode should be set to **White OF W100 26p 140**. The Top Layer Job is ripped as a Frontlit Polyester Film, with print mode set to **Heat Sensitive White UF W260 33p 120**.

10.5.2. Printing in IPS

1. Load the job into the IPS inbox and select **Bottom Layer Job** in the IPS.
2. Edit the Top Layer Job to change the substrate type to **Backlit Polyester Film.**
3. Select **Add Top Layer Job**.
4. Set the color mode to **Sandwich Mode**.
5. Set the printing method to **Backlight From Not Printed Side**.
6. Set the print mode to **HS Backlit from Not Printed side 66p**.

10.6. How to print in Day and Night application (backlit from printed side)

10.6.1. Ripping

When we RIP images for this kind of Day and Night print job, the image printed as the Top Layer Job (to be in contact with the substrate) must be ripped as a Frontlit Polyester Film (under the Film substrate family). The print mode should be set to **White OF W260 33p 120** and it must be mirrored. The Bottom Layer Job is ripped as a Backlit Polyester Film, with print mode set to **Heat Sensitive White UF W100 26p 140**, and it must be mirrored as well.

10.6.2. Printing in IPS

1. Load the job into the IPS inbox and select **Bottom Layer Job** in the IPS.
2. Edit the Job to change the substrate type to **Backlit Polyester Film**.
3. Select **Add Top Layer Job**.
4. Set the color mode to **Sandwich Mode**.
5. Set the printing method to **Backlight from Printed Side**.
6. Set the print mode to **HS Backlit from Printed side 66p**.

Further information on how to print in Sandwich Mode can be accessed from the IPS help button, which will enable the user to print any job exactly the way it is meant to be printed.

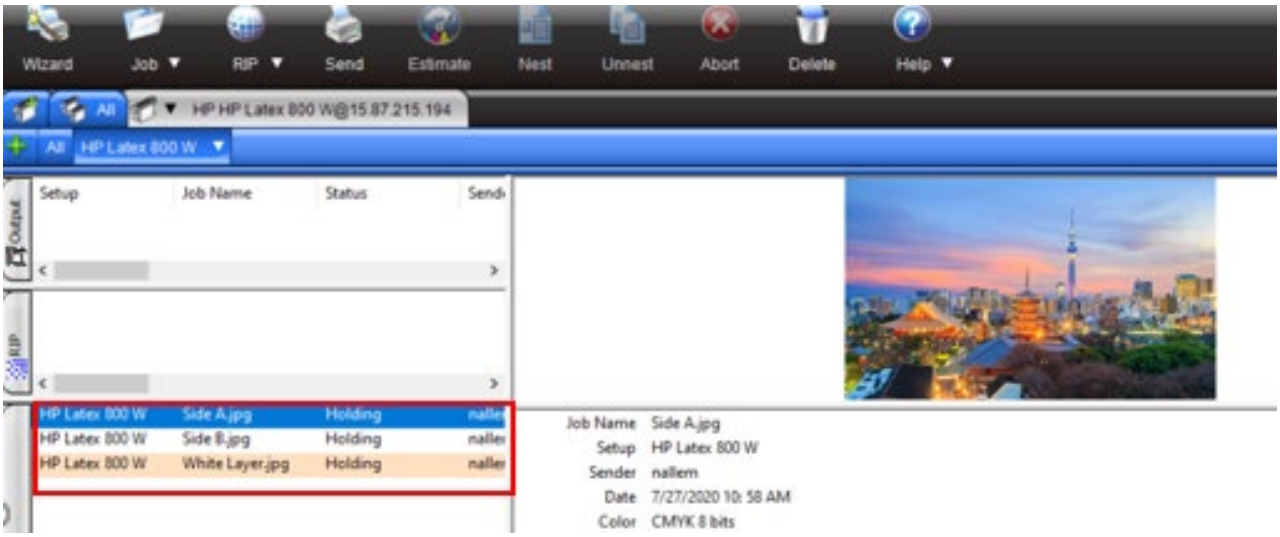
10.7. How to print in Sandwich Mode in Latex 700W and 800W (3L and 5L)

Preliminary information for ONYX and Caldera:

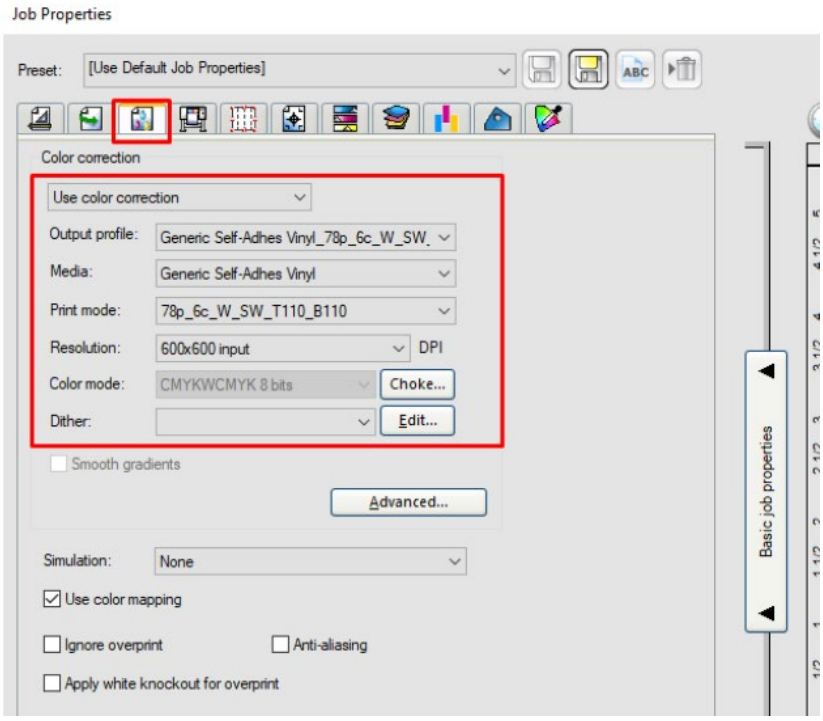
- **Side A**: CMYKW
- **Side B**: CMYK

10.7.1. SAi

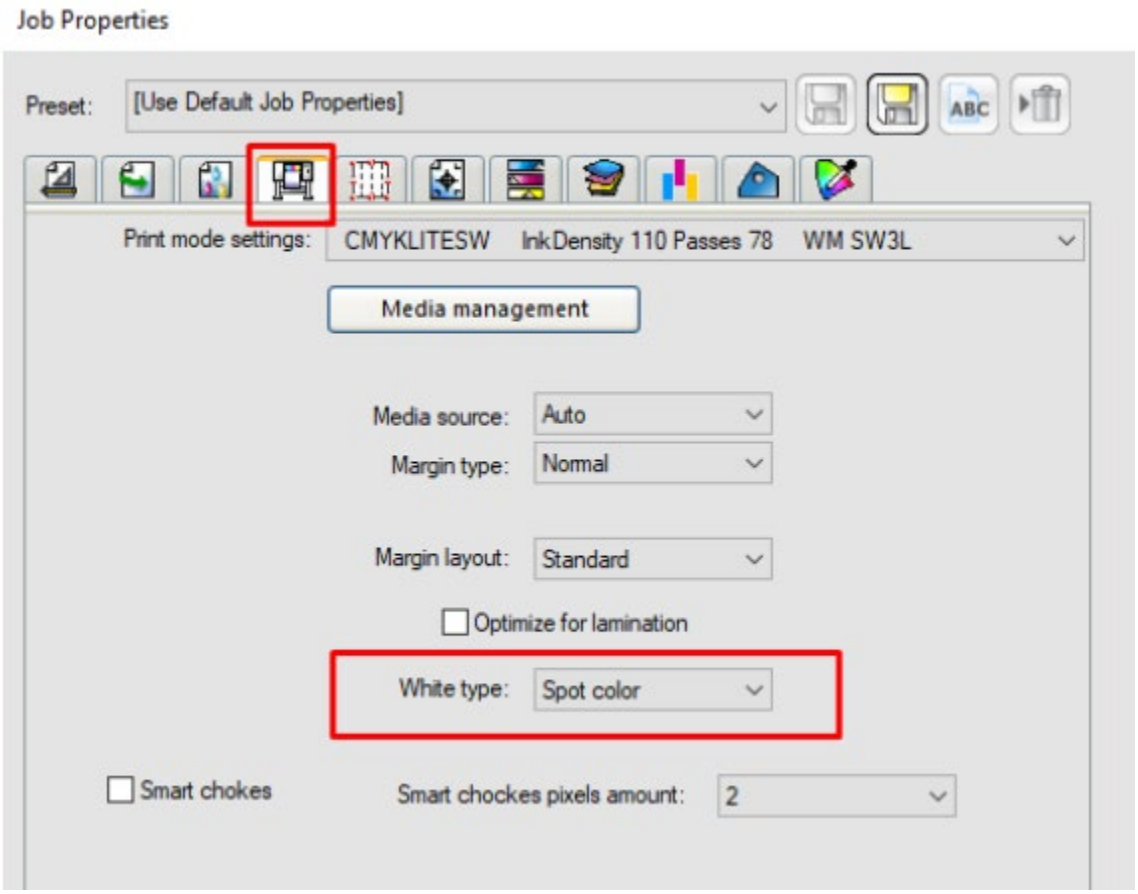
1. In Production Manager, load **the Side A, White Layer** and **Side B** jobs:



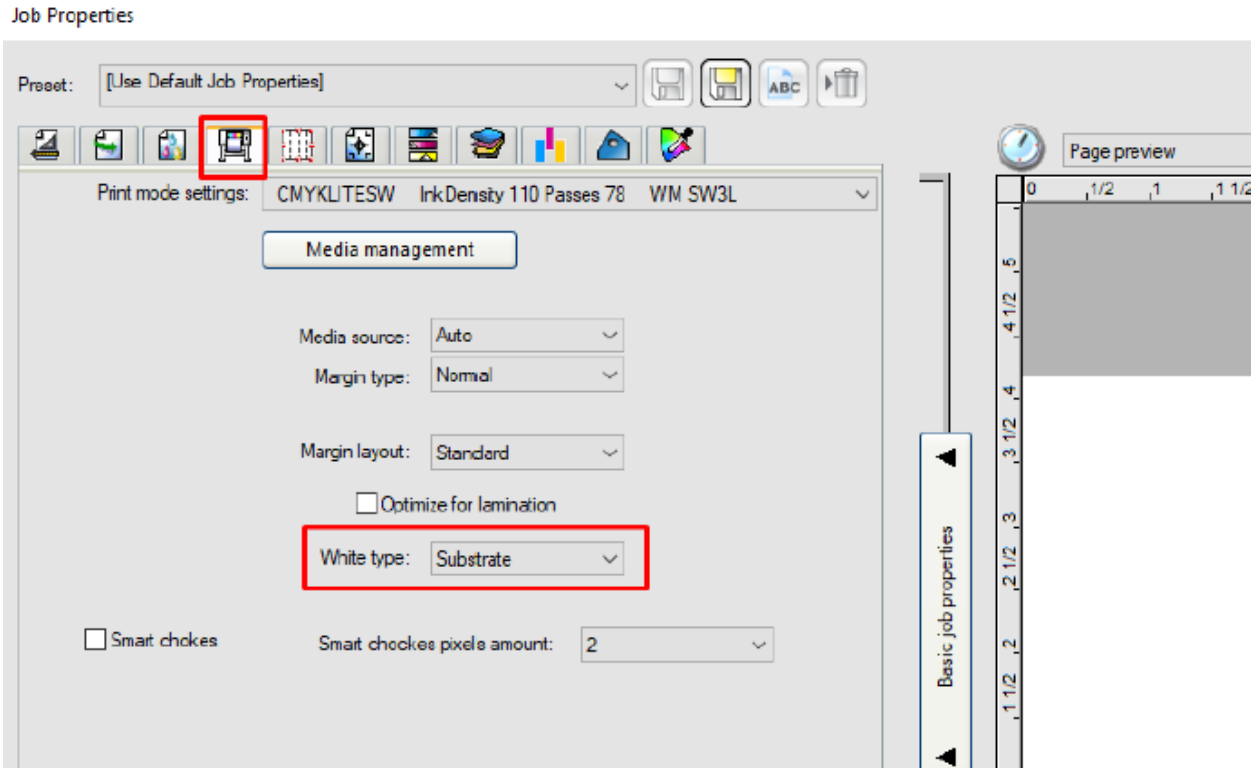
2. For the **Side A** job, open the **Job Properties**.
3. In the **Color Management** tab be sure to set the right Print mode for the Sandwich job:



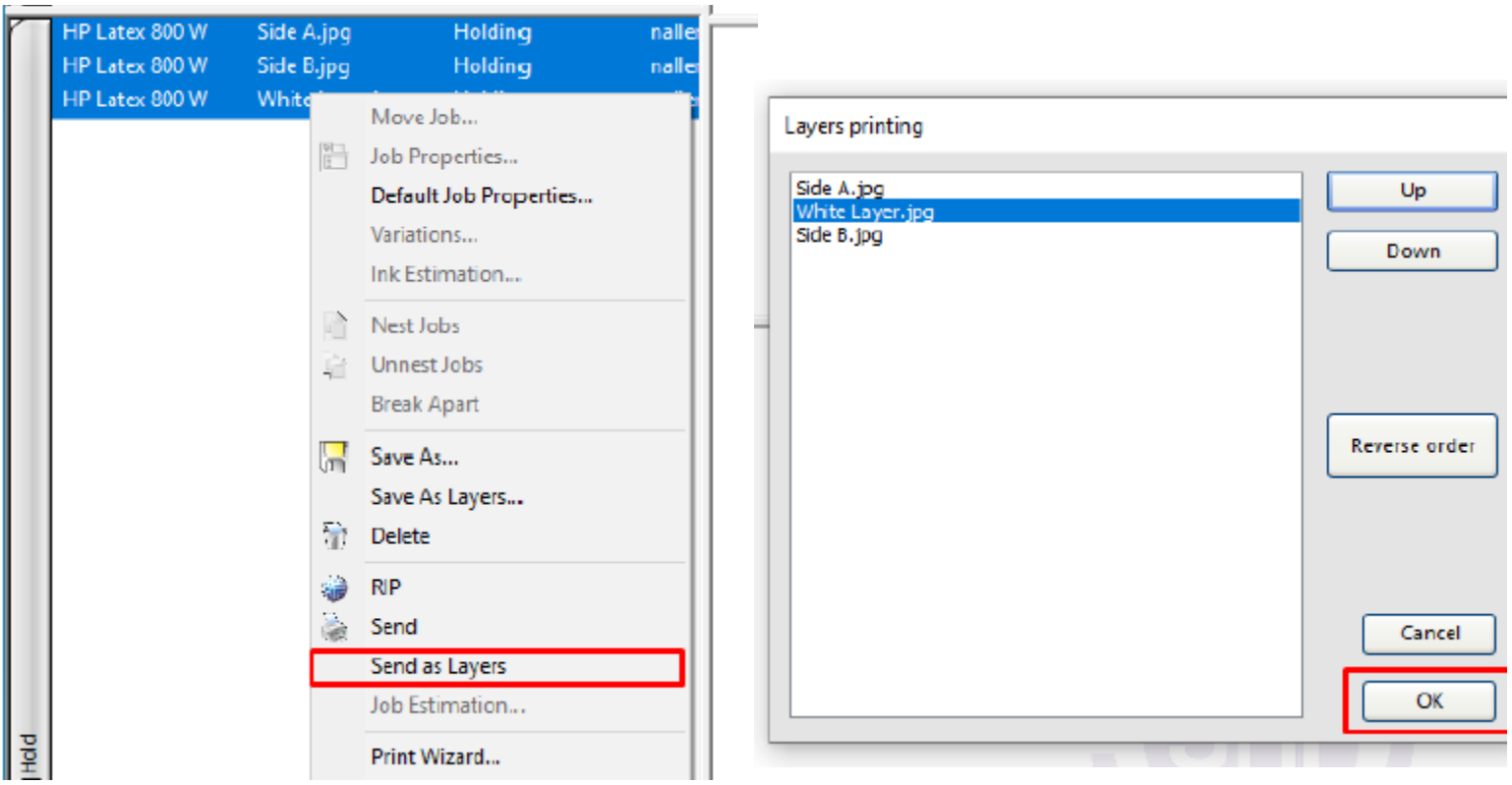
4. In the **Printer Options** tab, set the **White type** to **Spot color**:



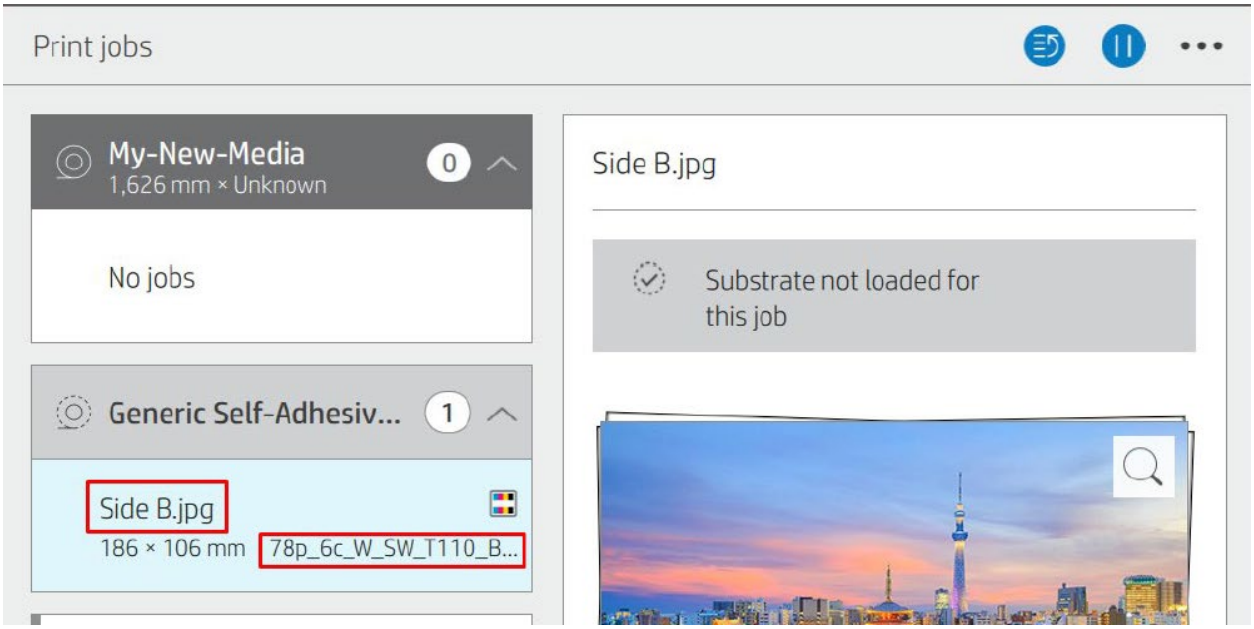
5. Repeat steps 2 and 3 for the **White layer** job.
6. In the Printer Options tab, set the White type to Substrate:



7. Repeat steps 2,3 and 4 for the **Side B** job. (Side B as Spot color.)
8. Select all jobs—**Side A, White Layer** and **Side B**—and select the option **Send as Layers** (right-click to open the menu).
9. Put the jobs in the right order (CYMK+W+CMYK), and then just click **Ok** in the **Layers printing** window:

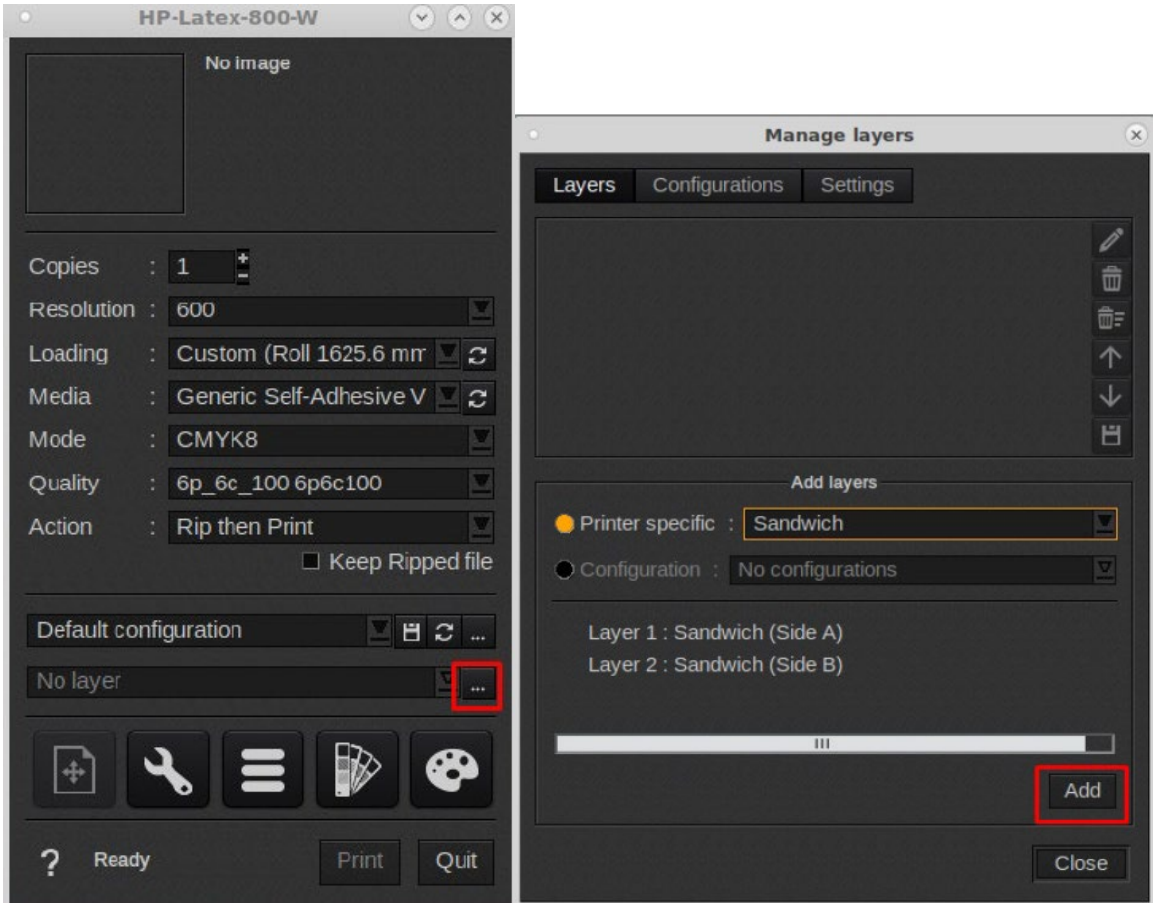


The Production Manager will first rip the 3 jobs and after it will send the Jobs to the printer (In the printer queue, you will see only one job with the name of the Side B job).

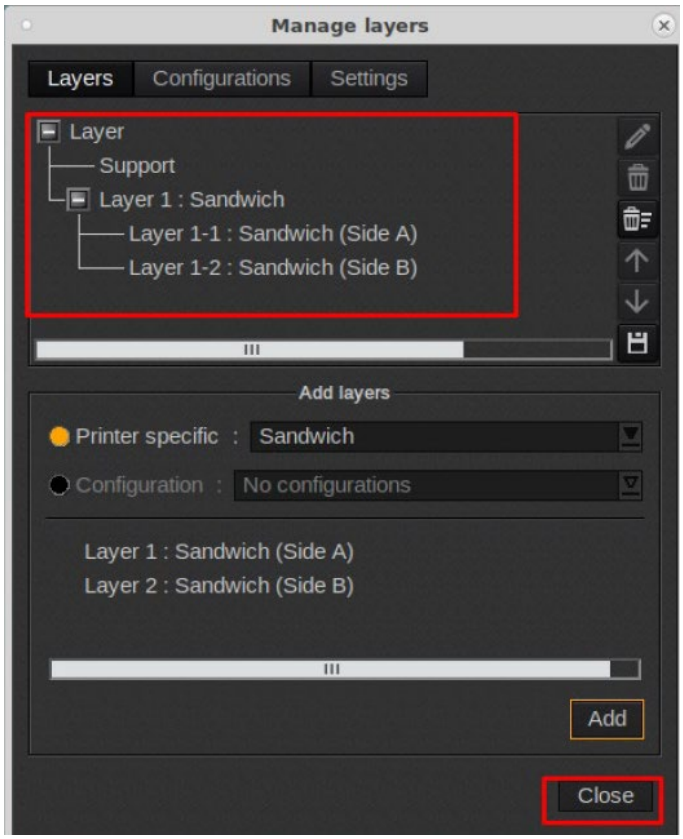


10.7.2. Caldera

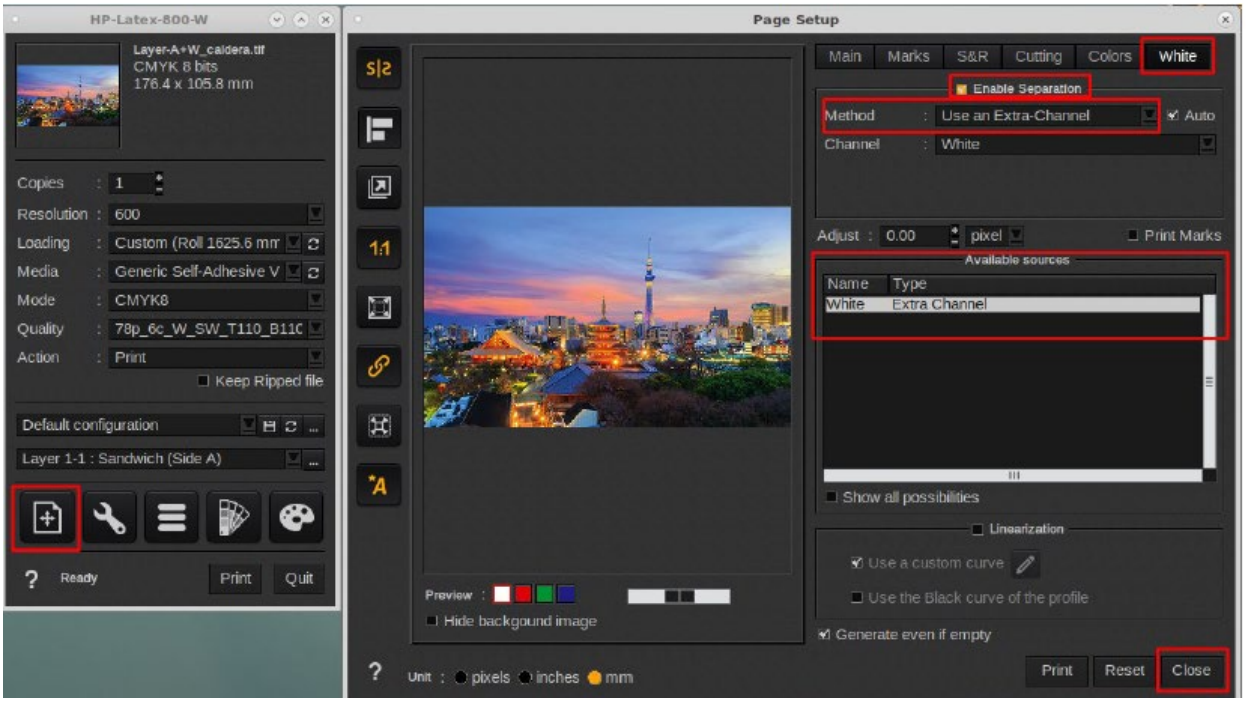
1. To start the Sandwich, click on the **Options** (…) button.
2. In the **Manage Layers** window, click **Add**:



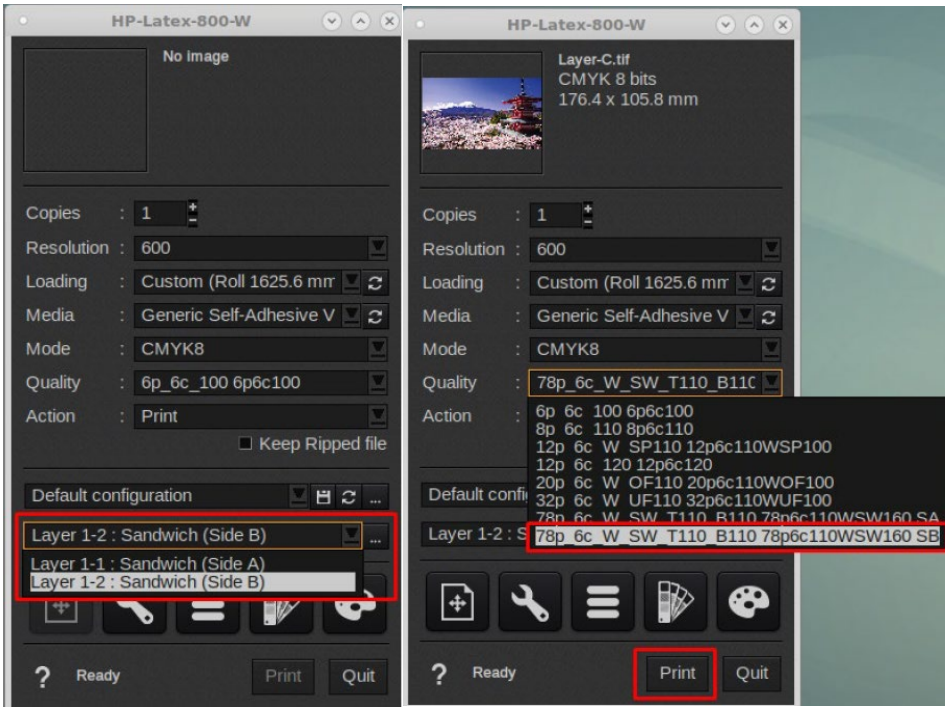
3. The layer structure will now be present. Click **Close**:



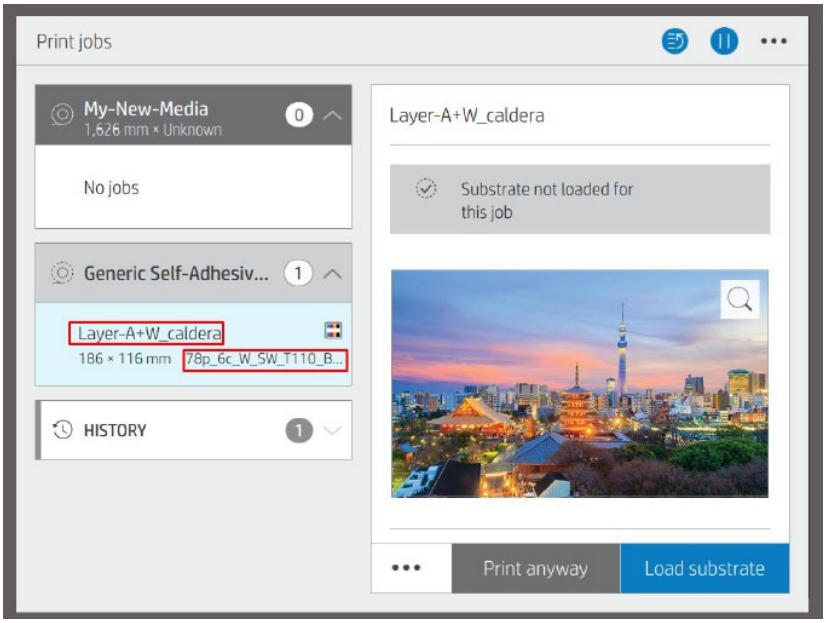
4. Load the Side A image to the driver window; you will need to set the right print mode.
5. Add the extra White layer to the **Side A** image:



6. To load the Side B image to the driver window, you need to select **Layer 1-2 : Sandwich (Side B)** from the menu.
7. Select the appropriate print mode.
8. Sent to print:

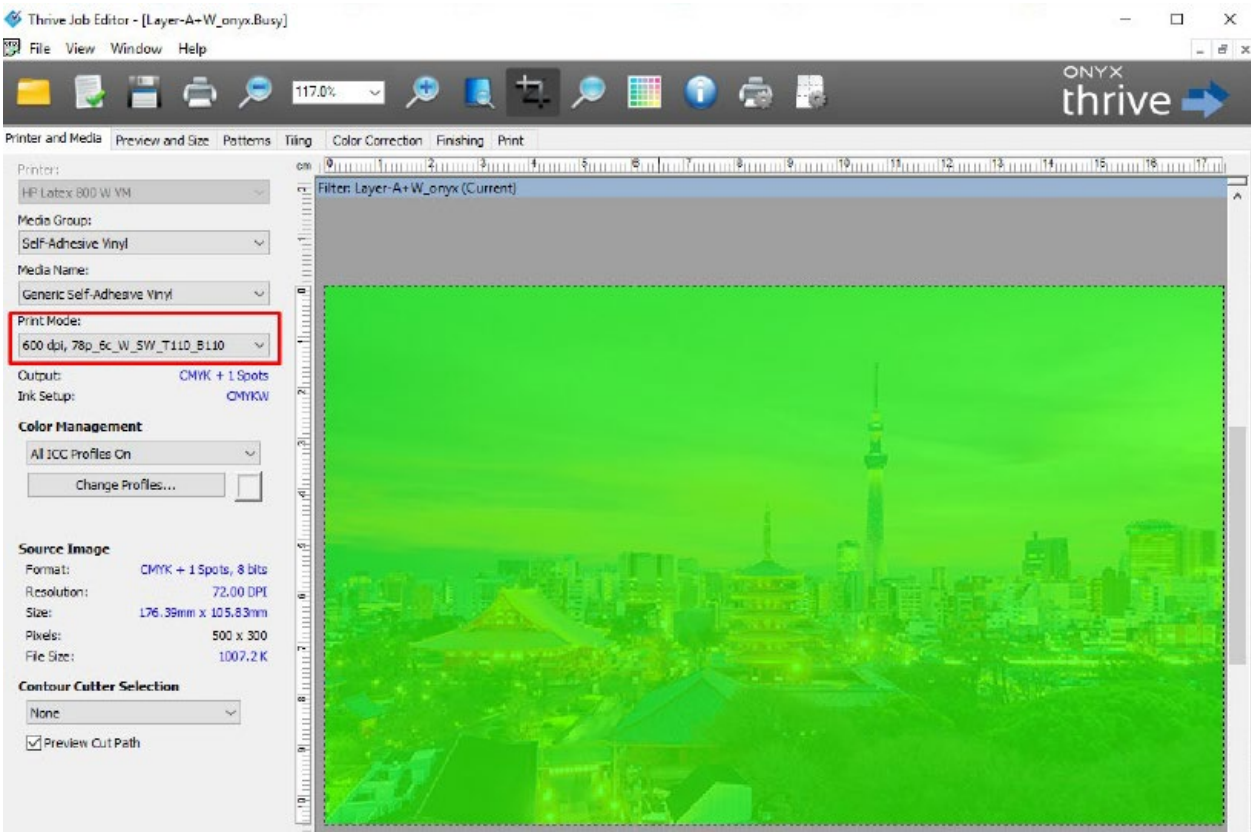


9. On the printer's front panel, you will see:

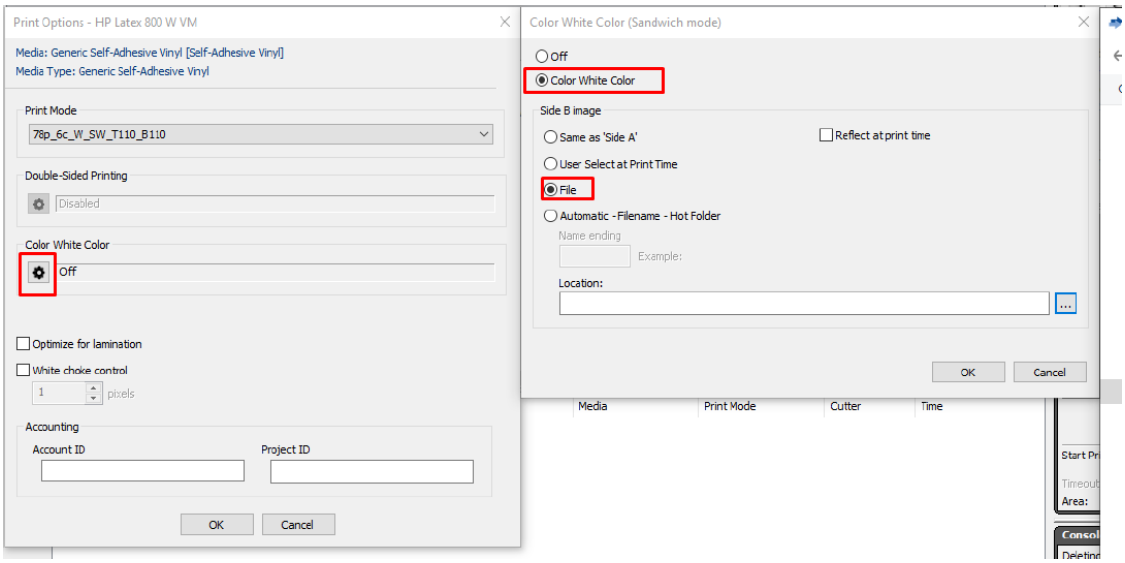


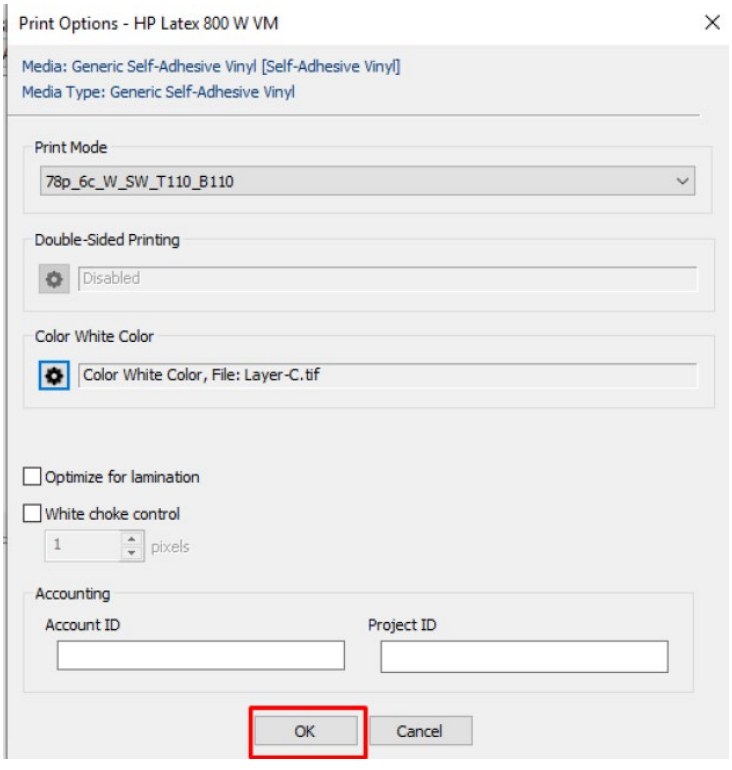
10.7.3. ONYX

1. Load the **Side A** job and open it in Job Editor.
2. In the **Printer and Media** tab, set the right Sandwich print mode; the RIP will automatically detect the white layer of the job and will represent it as a light green shade.

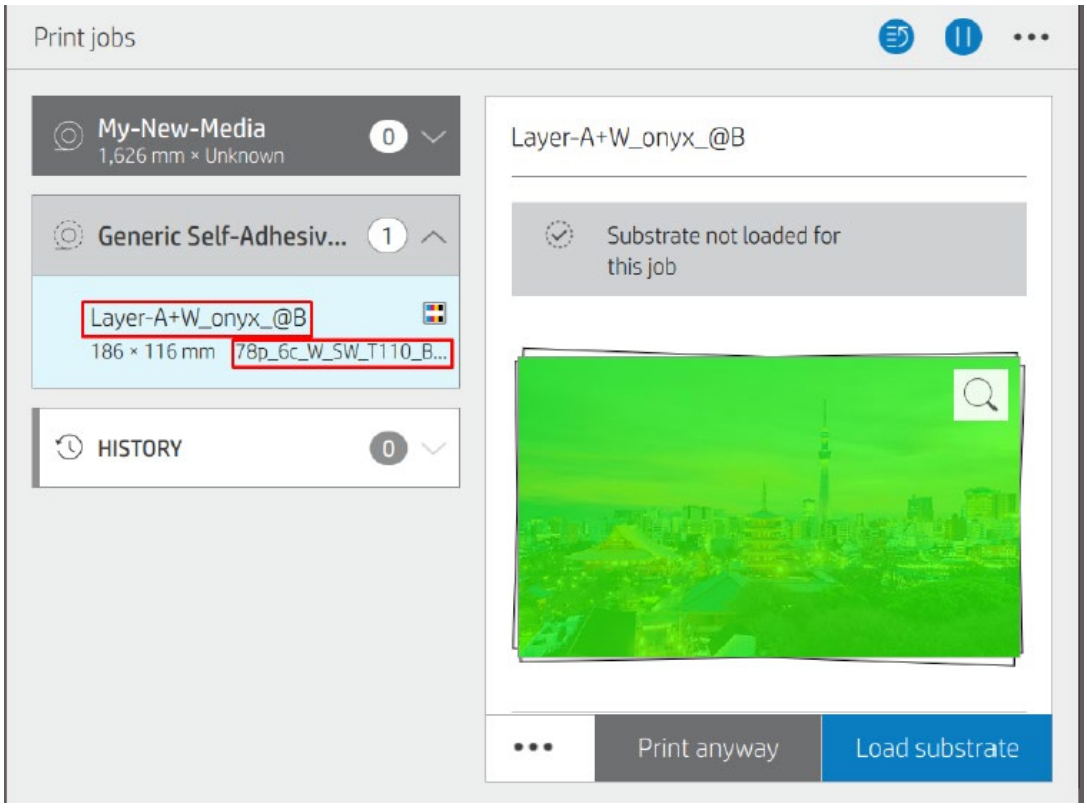


3. Go to the **Print** tab and press the **Submit** button.
4. In the Rip Queue just right-click on the job and select the option **Edit and Printer Settings**.
5. Click the **Gear button** to open the **Color White Color** window.
6. In the **Color White Color (Sandwich mode)** window, click first on the Color White Color radio button.
7. On the **Side B** image group, select the **File** option and click the ... button. In the next window, select the Side B image and click **Open**.
8. When finished, click **OK.**





9. In the Rip Queue, now just click the **Print Now** button. You will see that side A will be moved to the bottom of the Rip window and the side B will remain on top.
10. Click the **Print Now** button again to send side B to the printer. (The job will only be displayed in the printer queue after sending the side B job. The name of the job, in the printer queue, will be <Side B>_@B).
11. On the printer's front panel you will see:


Print jobs
My-New-Media
1,626 mm × Unknown
0
Generic Self-Adhesiv...
1
Layer-A+W_onyx_@B
186 × 116 mm
78p_6c_W_SW_T110_B...
HISTORY
0
Layer-A+W_onyx_@B
Substrate not loaded for this job
Print anyway
Load substrate


Layer-A+W_onyx_@B
1:1