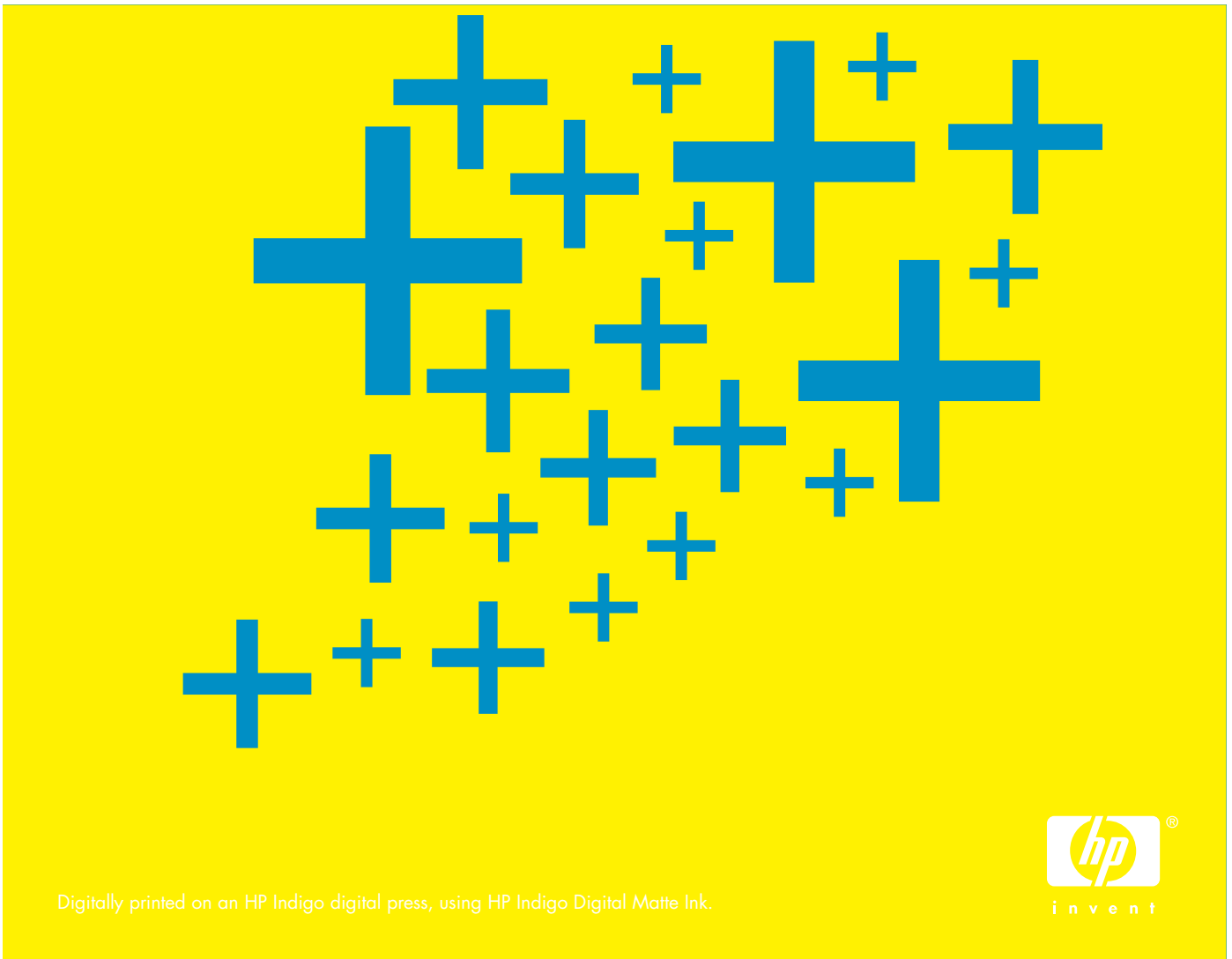
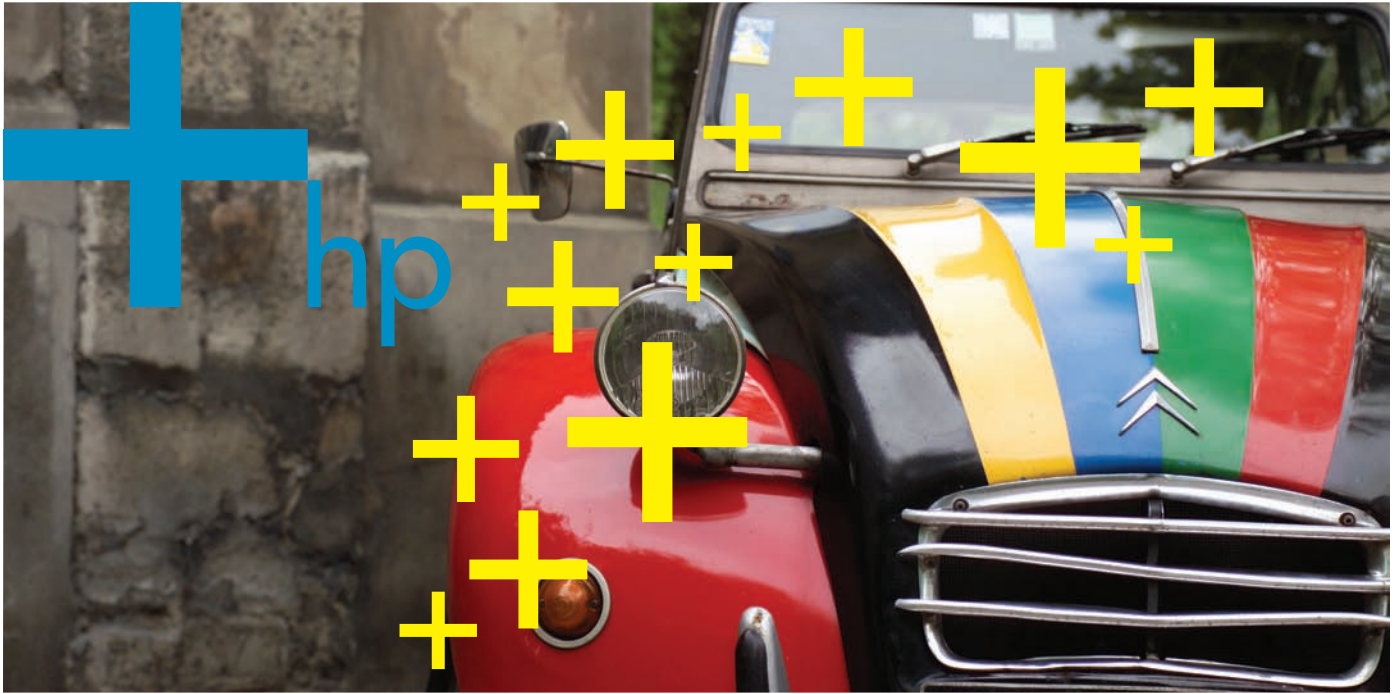


HP Indigo Digital Matte Ink

for HP Indigo Series 2 sheet-fed presses

How-to Guide



Digitally printed on an HP Indigo digital press, using HP Indigo Digital Matte Ink.



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Using Digital Matte Ink

Who can benefit from reading this document?

This document is intended for graphic designers and pre-press operators who want to incorporate the use of Digital Matte ink in their graphic designs.

Introduction

The new *Digital Matte* ink option enables you to define some areas of a page as matte, leaving other areas glossy. This technique has implications for various types of graphic design, including images, graphic elements and text. Selective use of matte ink enables you to achieve different degrees of gloss on the same page. Alternatively, you can apply matte ink to the whole page.

This document describes the how to use the *Digital Matte* ink option, with step-by-step instructions for attaining the best results.

Workflow overview

The workflow for using the *Digital Matte* ink option consists of the following steps:

- Configuring the press—installing HP Indigo Matte ink. This needs to be done only once. (This process is described in the *HP Indigo Digital Matte Ink User Guide*, Q5389-02210.)
- Configuring the RIP software—defining a 5-separation setup. This needs to be done only once. (This process is described in the “RIP configuration” section of this document.)
- Modifying the graphic files with a pre-press applications, such as QuarkXPress, FreeHand, Illustrator, or Photoshop. (This is described in the “Pre-press applications” section of this document.)



Modifying Files in Pre-press applications

After you configure the press and the RIP software for Digital Matte, perform the following steps in any pre-press application to create output files with Digital Matte separations:

1. Add a spot color and name it Digital Matte.
2. Mask the areas to be printed with the Matte ink.
3. Color the mask with the Digital Matte spot color and define it as overprint.
4. Create a 5-separation PostScript output file.
5. Place the PostScript file in a pre-defined, 5-separation RIP Hot Folder. (Creating the required Hot Folder is described under the "RIP configuration" section of this document.)

In most applications, to print glossy text on a matte background, the text should be duplicated and converted to a path, then cut out of the matte background. To print matte text on a glossy background, it is sufficient to duplicate the text and color the duplicate layer with the Digital Matte spot color.

Below are examples of how to use Digital Matte with pre-press applications. The procedures in these examples describe steps used with QuarkXPress, Yours Truly Designer, Freehand, Illustrator, and Photoshop but all of the effects can be applied using similar methods in other pre-press applications.

Applying Digital Matte ink using QuarkXPress

Applying Digital Matte ink to images using QuarkXPress

In this example, the entire design, except for the purple star will be defined as Matte. This will leave the purple star to shine.

1. Open a QuarkXPress document.
2. Define a new spot color and name it Digital Matte.

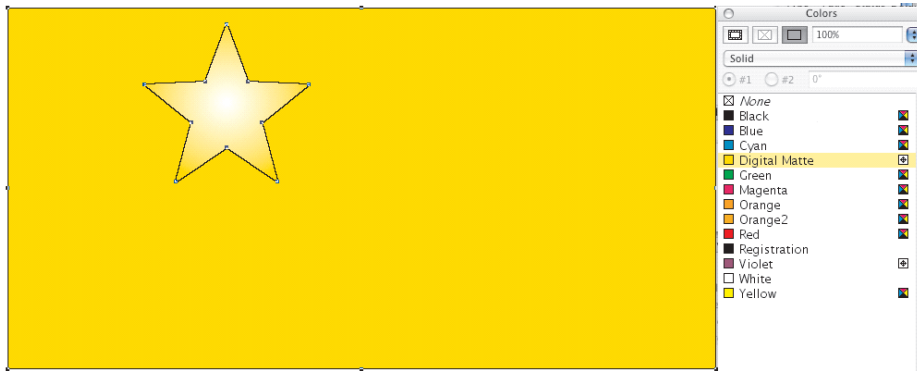
Figure 11: Defining Spot Color



3. Duplicate the purple star and place it exactly over the original purple star.
4. Create a box covering the entire design, and color it with the Digital Matte spot color.
5. Place the duplicated star over this box.

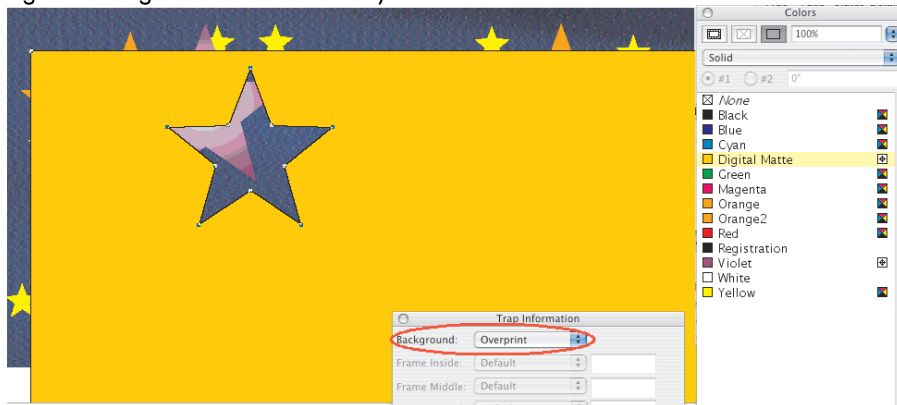
6. Select both the Digital Matte box and the duplicated star using the Shift key (see figure 12).

Figure 12: Duplicated star and full size cover box



7. From the *Item* menu select **Merge** and **Difference**. The result is a Matte mask, for the entire design—except for the purple star.
8. In the *Trap Information* palette, define the mask as *Overprint*. (In figure 13, the mask has been moved, showing the transparent star.)

Figure 13: Digital Matte mask is ready



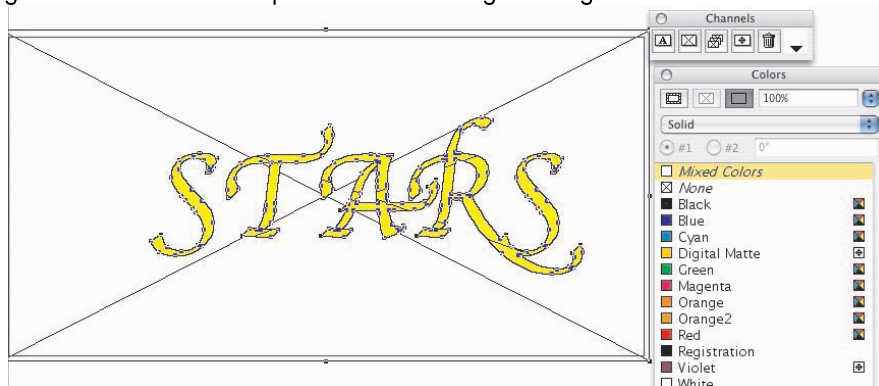
9. Place the mask exactly in the top-left corner, over the original background.
10. Create a PostScript output file with 5 separations: C, M, Y, K, and Digital Matte.
11. Place the PostScript file in the Digital Matte RIP Hot Folder.
When the RIP process completes, the job appears in the Press Job Manager, ready to be printed.

Defining a matte background with glossy text using QuarkXPress

In the following example, Digital Matte ink is applied to the background, leaving the text glossy.

1. Open a QuarkXPress document.
2. Define a new spot color and name it Digital Matte.
3. Duplicate the text box and place it exactly over the original text.
4. Select the text, and in the menu, select **Style**, then **Text to Box**. The text converts to a path.
5. Create a box covering the entire design.
6. Place the converted text over this box.
7. Using the Shift key, select both the converted text and the box covering the design.

Figure 14: Text converted to path and box covering the design



8. In the menu, select **Item, Merge**, then **Difference**. A mask box with a transparent area shaped like the text is created.
9. Color the box with the Digital Matte spot color and define it as Overprint.
10. Place the mask exactly in the top-left corner, over the original background. (In the following figure, the mask has been moved, showing the transparent text.)

Figure 15: Digital Matte mask



11. Create a PostScript output file with 5 separations: C, M, Y, K, and Digital Matte.
12. Place the PostScript file in the Digital Matte RIP Hot Folder.

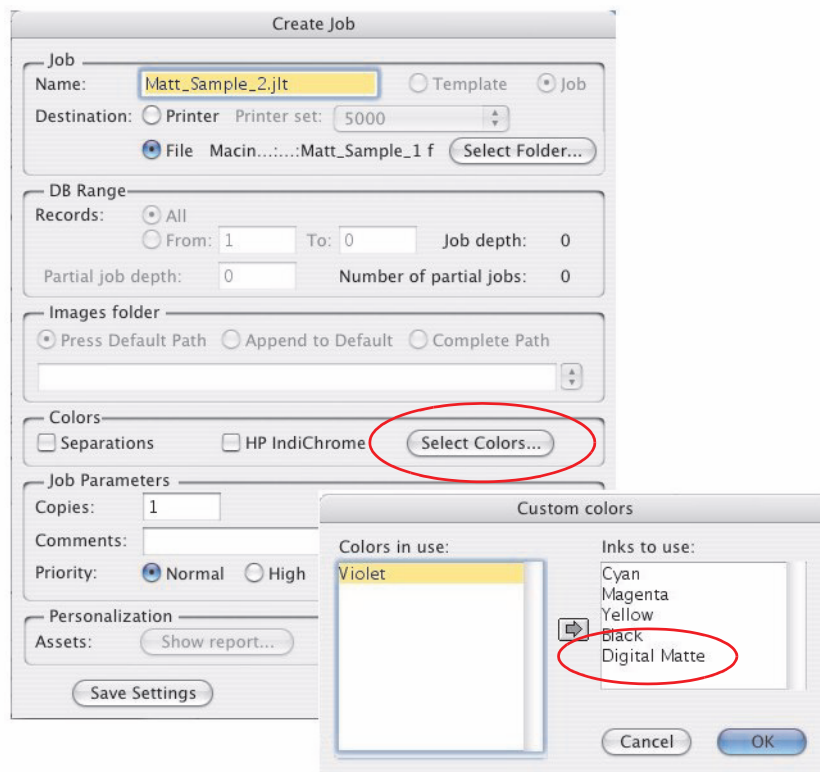
When the RIP process completes, the job appears in the Press Job Manager, ready to be printed.

Preparing a Digital Matte job with YTD

Configure YTD to use Digital Matte after you create a Digital Matte job with QuarkXpress as described above.

1. In the **Yours Truly** menu, select **Create Job**. The *Create Job* window opens.
2. In the Colors pane, click **Select Colors**. The *Custom Colors* window opens.
3. Move Digital Matte from the *Colors in Use* list to the *Ink in Use* list.
4. Click **OK**.
5. Continue the job creation process using YTD as you normally do.

Figure 16: Adding Digital Matte to Yours Truly Designer colors



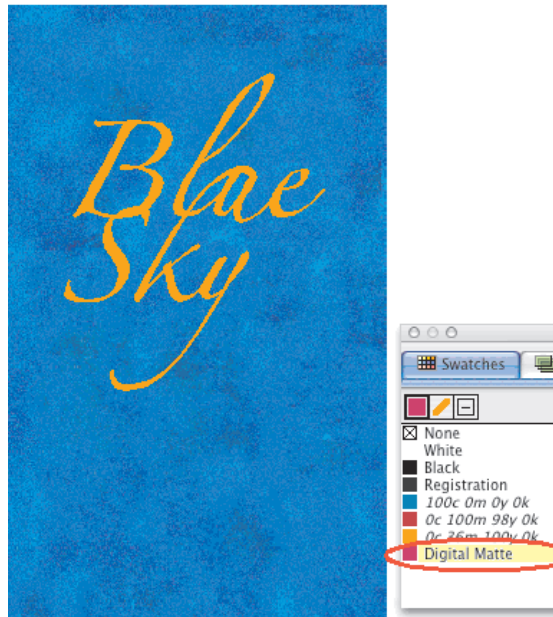
Applying Digital Matte ink using FreeHand

Applying matte to text or objects on glossy background using FreeHand

In the following example, Digital Matte ink is applied only to the text, leaving the background glossy. The same procedure can also be used to apply Digital Matte ink to graphic objects.

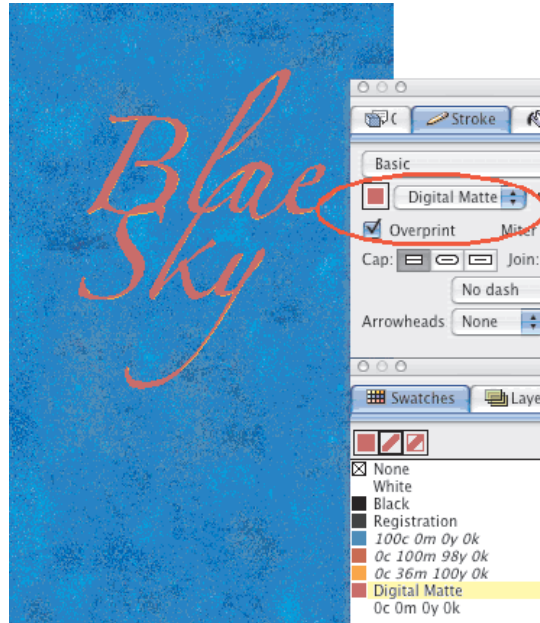
1. Open a FreeHand document.
2. Define a new spot color and name it Digital Matte.

Figure 17: Freehand document



3. Duplicate the text and position it exactly on top of the original text.
4. Apply the Digital Matte spot color to the duplicated text and define it as *Overprint*.

Figure 18: Duplicated text



5. Create a PostScript output file with 5 separations: C, M, Y, K, and Digital Matte.
6. Place the PostScript file in the Digital Matte RIP Hot Folder.
When the RIP process completes, the job appears in the Press Job Manager, ready to be printed.

Matte background with glossy text

In the following example, Digital Matte ink is applied to the background, and the text remains glossy. The same procedure can also be used for graphic elements.

1. Create a rectangle with the exact size of the background.
2. Apply the Digital Matte spot color to the rectangle and define it as *Overprint*.
This is the Digital Matte mask.
3. Place the text element on top of the Digital Matte mask.
4. Create an output file, as described in steps 5 and 6 above.

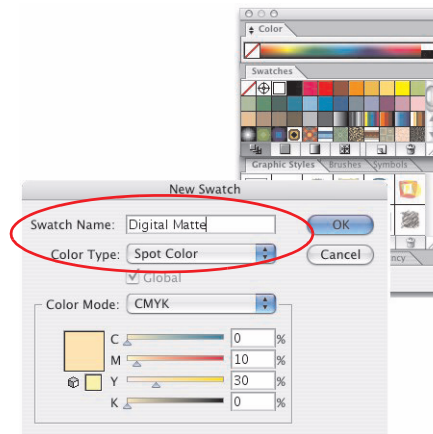
Applying Digital Matte ink using Adobe Illustrator

Applying Digital Matte ink to a background image using Adobe Illustrator

In this example, Digital Matte is applied to the background leaving a glossy image and text.

1. Open an Illustrator document.
2. Define a new swatch and name it Digital Matte.
3. Define the Color Type as Spot Color.

Figure 19: Defining a Digital Matte swatch



4. Create a box covering the entire design, and color it with Digital Matte.
5. Duplicate the text and graphic elements/images that will remain glossy, and place them exactly over the original text and objects.

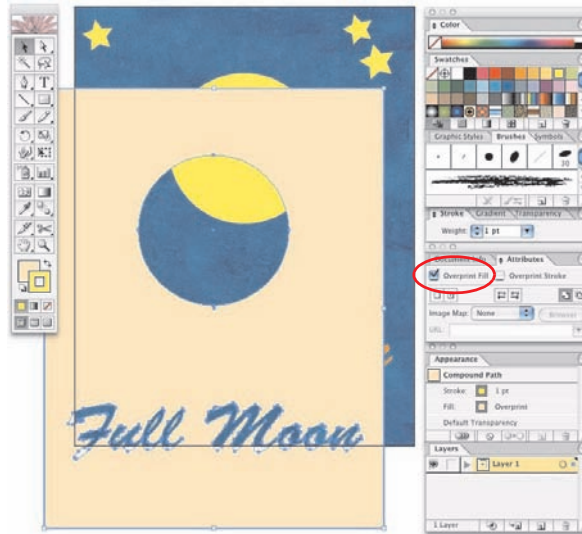
Figure 20: Placing Digital Matte box over design



6. Select the text. On the menu, choose **Type**, and **Create Outlines**. The text converts to an outline.
7. Using the Shift key, select the box covering the design, the duplicate graphic element/image and the text outline.

- On the menu, choose **Object, Compound Path, and Make**. The resulting Digital Matte mask covers the entire design except for the text and the image areas. (In the following figure, the mask has been moved to show the result).

Figure 21: Digital Matte mask



- In the *Attributes* palette, check **Overprint Fill**. The Digital Matte mask is defined as overprint.
- In the **File** menu, select **Print, and Separations**.
- Create a PostScript output file with 5 separations: C, M, Y, K, and Digital Matte.
- Place the PostScript file in the Digital Matte RIP Hot Folder.
When the RIP process completes, the job appears in the Press Job Manager, ready to be printed.

Applying matte text and image on glossy background using Adobe Illustrator

In this example, Digital Matte is applied to text and to an image element, leaving the background glossy.

To apply Digital Matte to text and images

- Open an Illustrator document.
- Define a new swatch and name it Digital Matte (figure 19).
- Duplicate the text and images that will be matte, and place them exactly over the original text and images.
- Select the duplicate text and images and color them with Digital Matte.
- In the *Attributes* palette, check **Overprint Fill**. The Digital Matte objects are defined as overprint.
- In the **File** menu, select **Print, and Separations**.
- Create a PostScript output file with 5 separations: C, M, Y, K, and Digital Matte.
- Place the PostScript file in the Digital Matte RIP Hot Folder.
When the RIP process completes, the job appears in the Press Job Manager, ready to be printed.

Applying Digital Matte ink using Photoshop

Applying Digital Matte ink to selected parts of an image using Photoshop

In Photoshop, text and images are treated in the same way. This example show how Digital Matte is applied to selected areas within a Photoshop image.

To apply Digital Matte to parts of a Photoshop image

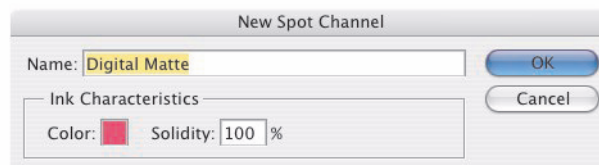
1. Open a Photoshop document
2. Select the elements or areas for which you want to apply Digital Matte.

Figure 22: Selecting Digital Matte areas



3. In the *Paths* palette, select **Make Work Path**.
4. In the window that opens, click **OK**. A work path is created.
5. Select **Make Selection**. The path is selected.
6. In the *Channels* palette, select **Create New Spot Channel**. The *New Spot Channel* window opens

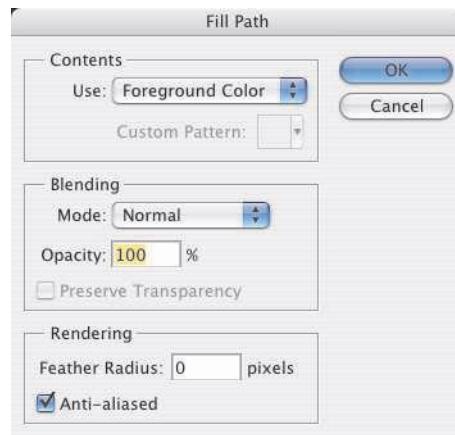
Figure 23: New Spot Channel window



7. Name the new channel Digital Matte.
8. Set the Solidity value to 100 percent.
9. Click **OK**. The Digital Matte channel is created.
10. Select the Digital Matte channel.

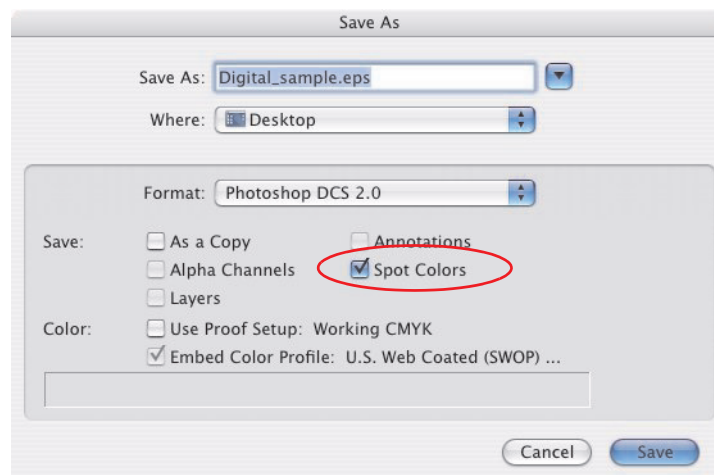
11. In the Paths palette, select **Fill Path**. The *Fill Path* window opens.

Figure 24: Fill Path window



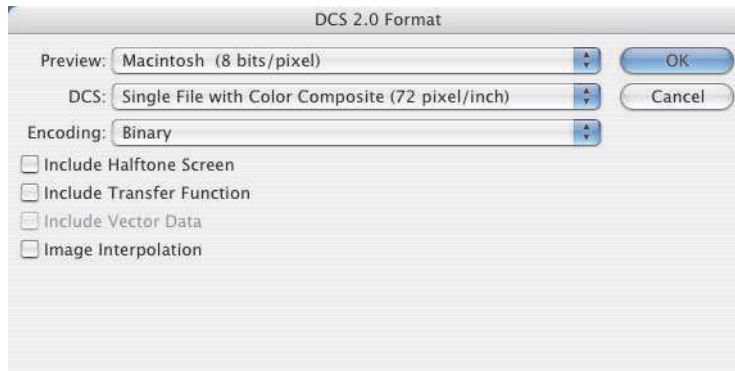
12. In the *Contents* pane, Use field, select **Foreground Color**, (the Digital Matte).
13. Select **File, Save as**, and **Photoshop DCS 2.0**. The *Save As* window opens.

Figure 25: Save As window

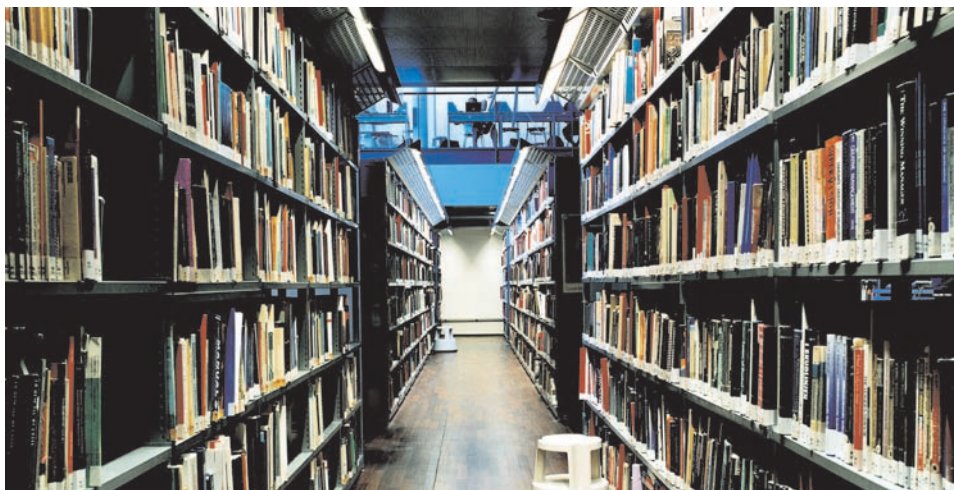


14. Make sure that **Spot Colors** is checked.
15. Click **Save**. The *DCS 2.0 Format* window opens.

Figure 26: DCS 2.0 Format window



16. In the DCS field, select **Single File with Color Composite (72 pixel/inch)**. (Note, this resolution is for preview only, and does not impact the final printed image resolution).
17. Set encoding to **Binary** or **JPEG (maximum quality)**. Setting encoding to JPEG creates a smaller PS file and faster processing.
18. Click **OK**. The file is now an EPS file which can be placed in any desktop publishing application. Make sure that your application is configured to create an output file with 5 separations: C, M, Y, K, and Digital Matte.



Design Guidelines

This section presents some useful design guidelines to follow when applying Digital Matte ink. As a rule, remember that the matte effect is most noticeable:

- when applied to dark areas that contrast with light, glossy areas;
- when applied to wider elements rather than thinner elements.

The following guidelines are based on these principles.

Colored areas

Dark shades

The matte effect is more noticeable when applied to darker areas that also contain similar shades.

Degradè

When applied to degradè areas, the matte effect is more noticeable if the area contains relatively dark and similar colors. For example, the effect is stronger if applied to colors ranging from dark blue to light blue; weaker if applied to colors ranging from dark blue to white.)

Mixed colors

The matte ink is not as effective when applied to designs containing a mixture of light and dark colors (a rainbow, for example).

Images

Dark images on a light background

It is recommended that you apply Digital Matte ink to relatively dark images (that do not contain extremely light elements). If the background is relatively light and remains glossy, the effect is more pronounced.

Light images on a dark background

It is recommended that you apply Digital Matte ink to the dark background of an area containing light images. This highlights the light images.

Light images on a light background

If both the background of the design and foreground objects are light, the contrast between matte sections and glossy sections is not very noticeable. For this reason, the application of Digital Matte ink in this case is not recommended.

Images containing dark and light objects

In images containing dark and light objects, the light objects can be highlighted if you apply Digital Matte ink to the dark objects.

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