
Digital Factory 2

Demo

CADlink Technology Corporation

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WELCOME TO DIGITAL FACTORY

Digital Factory is a production management tool that serves as a repository for all of your volume production printing and/or cutting activities. Sorting and accumulating jobs is accomplished by creating one-or-more queues for each of your machines, thereby providing a simple means for designers to output their designs.



Fig. 1 - The Digital Factory window. On the left, one-or-more queues organize your jobs for a particular machine or type of media. On the right, the Visual Print Manager shows jobs as they will appear on the media.

From a designer perspective, a queue in Digital Factory appears as a print destination (i.e., in the application **Print** dialog), and designers are otherwise insulated from the technical aspects of production. However, for the operator that oversees production, they are presented with a clean interface that allows them to preview jobs at a glance (Fig. 1), and intuitive controls that can be set behind-the-scenes.

DIGITAL FACTORY HIGHLIGHTS

For both new and experienced users, the following sections highlight key features and functionality of Digital Factory:

- Printing
- Print and Cut
- Job Management
- Layout Tools
- Media Support

PRINTING

- **RIP Engine** – Digital Factory is a high quality Raster Image Processor (RIP) solution that provides PostScript Level 3 compatible printing for Large Format Printers (LFP) and Desktop Printers (DTP).
- **Direct Printing From Your Design Application** – Digital Factory is a seamless interface that can be configured to run in the background and serve as a File menu >> Print destination for your designers.
- **Remote Printing Across Networks** – In cases where your designers are elsewhere on the Windows network, or even using other operating systems like Mac OSX or Linux, extra optional functionality using Hot Folders can be used to print despite network or hardware limitations (Fig. 2).

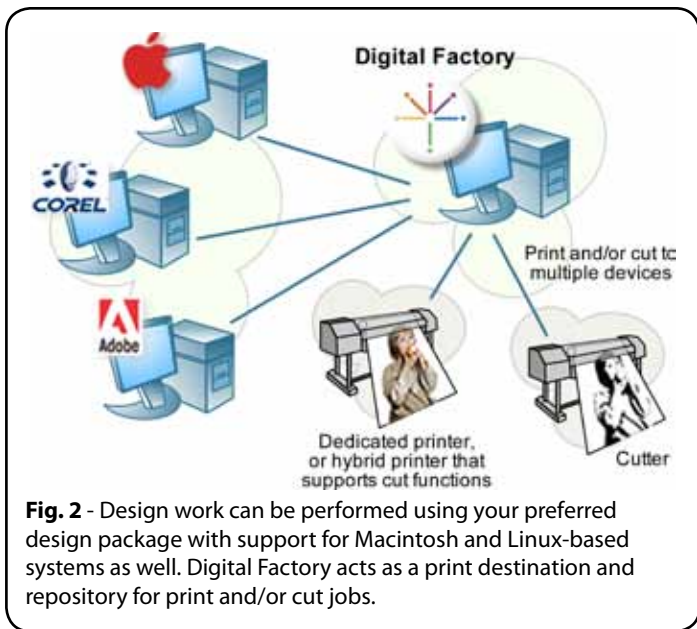


Fig. 2 - Design work can be performed using your preferred design package with support for Macintosh and Linux-based systems as well. Digital Factory acts as a print destination and repository for print and/or cut jobs.

PRINT AND CUT

- **Print and Cut Support** – For design applications that support vectors, you can create vectors of a specific color (Fig. 3), which can be interpreted as cut paths by Digital Factory.
- **Custom Cut Actions** – In addition to cutting vectors of a specific color, alternative actions and machine settings can be set. The machine model determines the available choices, such as: tool velocity, multiple cuts for thick media, trailing blade correction, pounce, half cut, tool number, etc.
- **Stand-Alone Cutter Support** – Queues in Digital Factory can be configured to use either a hybrid printer that performs its own cut operations, or a printer with stand-alone cutter.
- **Manual Cutter Calibration** – For heavily-used cutters that are demonstrating a need for replacement parts, Digital Factory provides an interim software solution (Fig. 4) that compensates for gradual shifts in cutter calibration.
- **Automatic Registration Marks for Cut Alignment** – If print&cut jobs will be completed by a hybrid printer that can perform its own cut operations, then the printer will manage its own cut alignment. However, if the cut-portion is to be completed by a stand-alone cutter, then registration marks can be automatically printed to provide cut alignment.

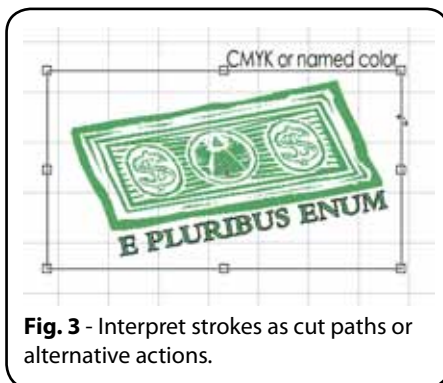


Fig. 3 - Interpret strokes as cut paths or alternative actions.

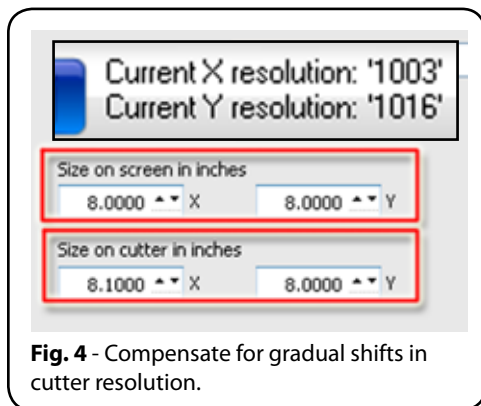


Fig. 4 - Compensate for gradual shifts in cutter resolution.

- **Spot White Background for Registration Marks**
 - For off-white and clear transparent media, print a spot white background for registration marks (Fig. 5), thereby enabling cutters with optical eye systems to automatically align to the marks. This feature requires a printer that is capable of printing spot white.
- **Printed Barcodes to Locate Cut Jobs** – Digital Factory supports hybrid printers that can read barcodes to locate the cut portion of print&cut jobs. Alternatively, Digital Factory provides a manual method of either scanning the barcode with a handheld reader, or typing the printed identification number.
- **Sort Cut Jobs** – Reduce cutting time by specifying the most efficient order in which cut paths should be performed.
- **Weed Borders** – A weed border is an additional rectangular (Fig. 6) cut around the primary shape (i.e., small script lettering), which is used to avoid stretched media when separating shapes from their adhesive backing.
- **Cut from End of Roll** – For print&cut jobs that use a stand-alone cutter, designate that the entire roll will be printed, and that the printed roll will then be fed into the cutter without rewinding the roll (Fig. 7). Digital Factory will process the cut jobs in reverse order, thereby avoiding the need to rewind the roll.

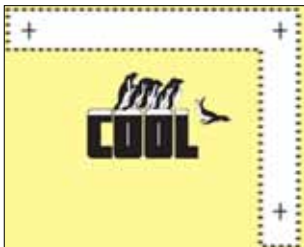


Fig. 5 - Print spot white to aid optical alignment systems.



Fig. 6 - Cut weed borders to avoid stretched media around delicate artwork.

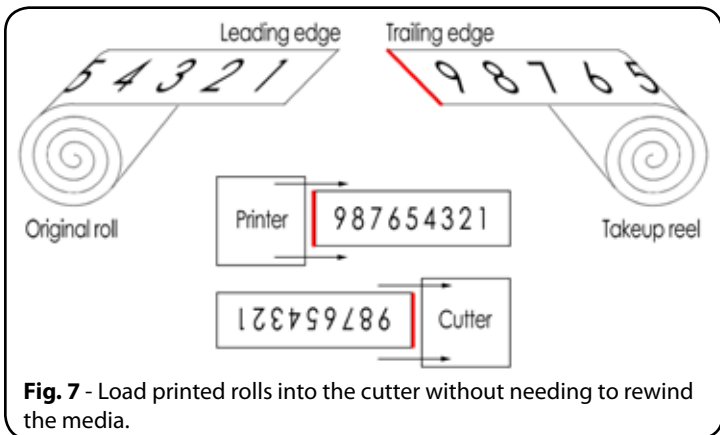
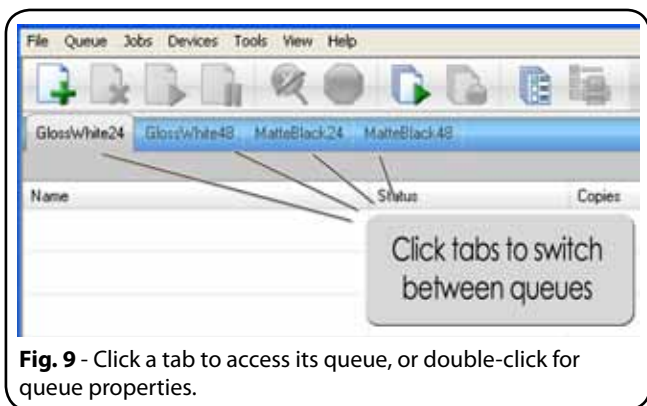
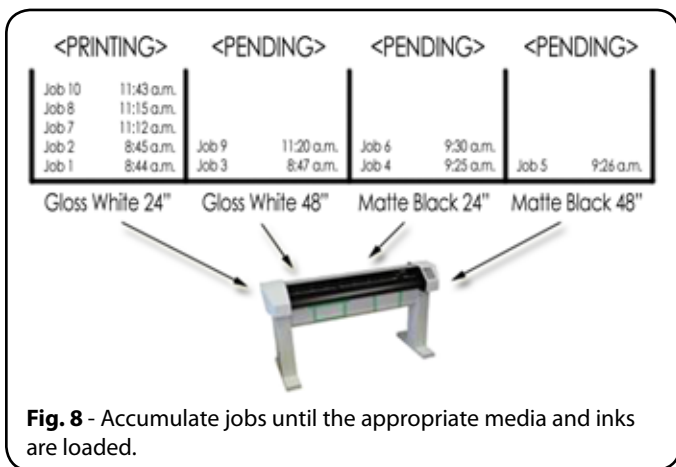


Fig. 7 - Load printed rolls into the cutter without needing to rewind the media.

JOB MANAGEMENT

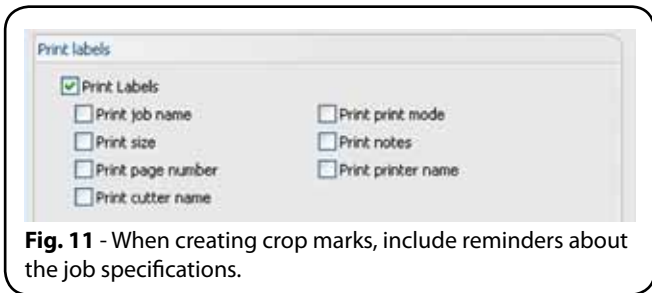
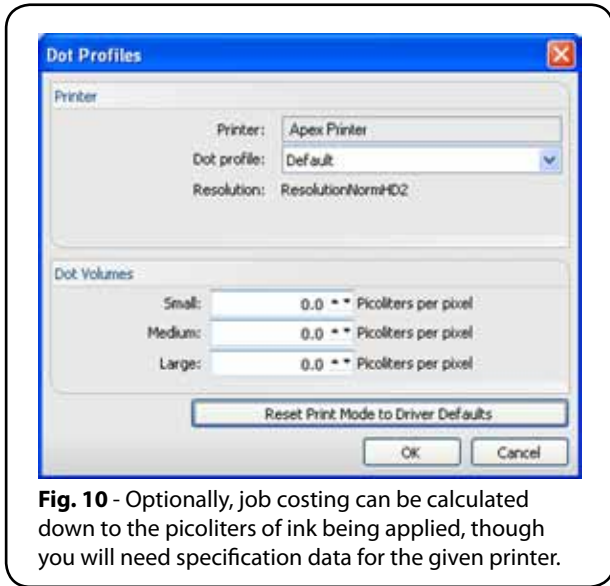
- **Queue Organization** – One-or-more queues can organize your jobs for each machine and for different types of media (Fig. 8). By accumulating jobs in each queue, they can be held until the required media and inks are loaded into the machine.
- **At-a-Glance Queue Switching** – Each queue is organized as a tab for convenient switching (Fig. 9). Merely click to see the jobs that have been accumulated, or double-click to check the properties of the given queue.
- **File Import** – Design files can be imported directly into Digital Factory, where they will become a job in the currently active queue. Importing a previously completed design file avoids the need to pre-load the file in the original design application.
- **Inherited Queue Properties** – When jobs are received in a given queue, they inherit the properties of that queue, thereby removing concern from the designer about what settings need to be used for the given media and inks.
- **Job Scheduling** – Choose how jobs should proceed based upon the type of job. For example, if print jobs are being held, then rasterize the job while waiting. Or for print-laminate-cut jobs, hold the cut portion until after the printed media has been laminated.



- **Job Archiving** – After a job has been completed, the job file can be saved for sending the job additional times without needing to re-send the file from the design application. Likewise, if the spool file has been archived, then the job can be resent without spending time rasterizing the job.

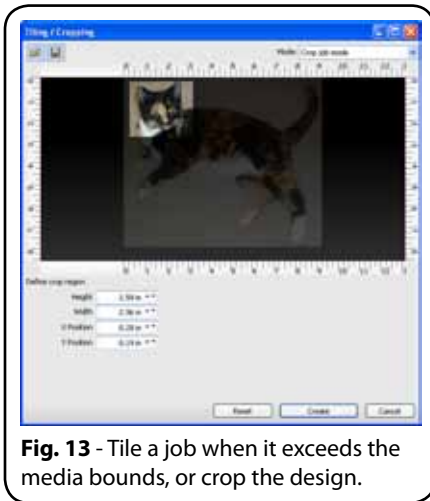
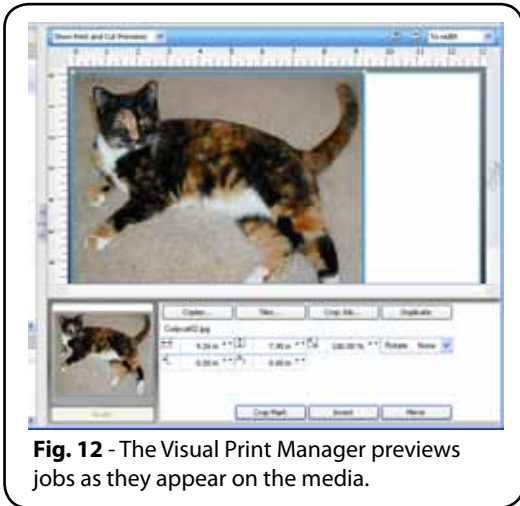
- **Job Costing** – Ink usage data can be collected (Fig. 10) to predict the production costs associated with the completing similar print runs. As more data is collected, an average trend in ink usage should be apparent, thereby providing greater ability to predict anticipated material needs for upcoming jobs.

- **Crop Mark Annotations** – In addition to marking the bounds of the print job, crop marks can now include job details (Fig. 11), such as job name, cutter name, job size, etc.



LAYOUT CONTROLS

- **Visual Print Manager** – As part of the Digital Factory interface, the Visual Print Manager (Fig. 12) previews jobs as they will appear on the media. Use this functionality to confirm spacing between jobs, positioning of jobs, usage of media, etc., with easy scrolling and zooming to inspect the media.
- **Tiling and Cropping** – Visually divide (Fig. 13) a large job into tiles by either specifying tile dimensions or dragging tile lines for careful positioning. Overlap and margin amounts are automatically taken into account.
- **Copies** – When copies are created within Digital Factory, only the original design will be rasterized, and the job copies will reuse the rasterization data (Fig. 14). In comparison, if multiple copies of a job are sent from the design application, then all such copies will be rasterized individually (i.e., more processing time would be required).
- **Template Media Layouts** – Create custom page layouts that will automatically place jobs at specific positions upon the media (Fig. 15). Templates can automatically scale, rotate, and create copies. Copies can be scaled and rotated on an individual copy basis.
- **Automatic Nesting** – Collect and reposition jobs to conserve media (Fig. 16), and then begin printing when there are enough jobs to fill an entire sheet or roll. Alternatively, specify that printing should begin when a certain proportion of the media can be filled.



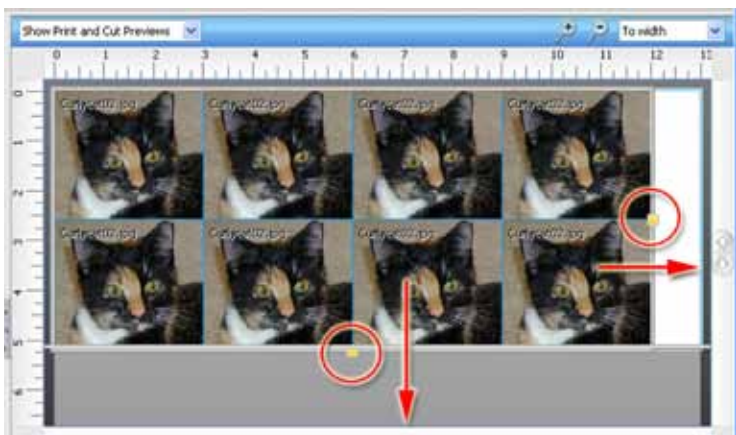


Fig. 14 - When making copies in Digital Factory, print data will only be calculated for the original, and processing time will be avoided by reusing the original print data.

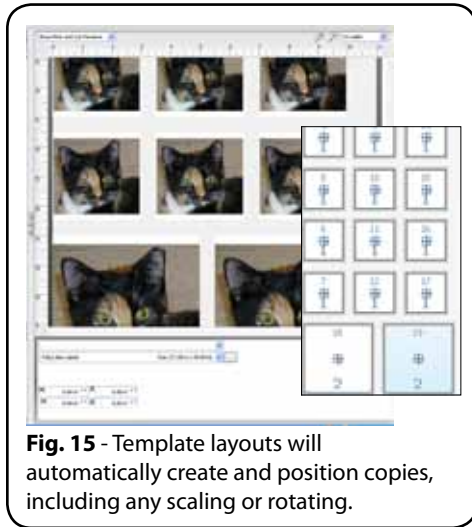


Fig. 15 - Template layouts will automatically create and position copies, including any scaling or rotating.



Fig. 16 - Automatic nesting will collect and reposition jobs to conserve media.

MEDIA SUPPORT

- **Online Printer Support File Updates** – Digital Factory already comes equipped with a broad selection of media profiles, which are organized according to printer model, media, inks, print speed, and print quality. The latest support files can be quickly obtained through your Internet connection (Fig. 17).
- **Color and Image Adjustments** – These adjustments to the color and image settings can compensate for non-standard media and inks (Fig. 18), where the cost of producing a new media profile is otherwise prohibitive.
- **Ink Volume Control** – To improve the color saturation of your prints, use Max Ink adjustments (Fig. 19) to increase the volume of ink that is absorbed by the media. Like the color and image adjustments, the max ink settings can be used to compensate for slightly different absorbency of a substitute media.
- **Separation Curves** – For printers that combine inks to obtain a wider range of hues (e.g., cyan in combination with light cyan), the separation curves can be adjusted to maximize the possible range of hues (Fig. 20).
- **Custom Halftone Settings** – Override the halftone settings (Fig. 21) to obtain the optimum frequency, angle and dot shape for high quality jobs.
- **Preview Raw Print Data** – Inspect print data on-screen prior to printing (Fig. 22), so that print data can be confirmed on a per color channel basis.

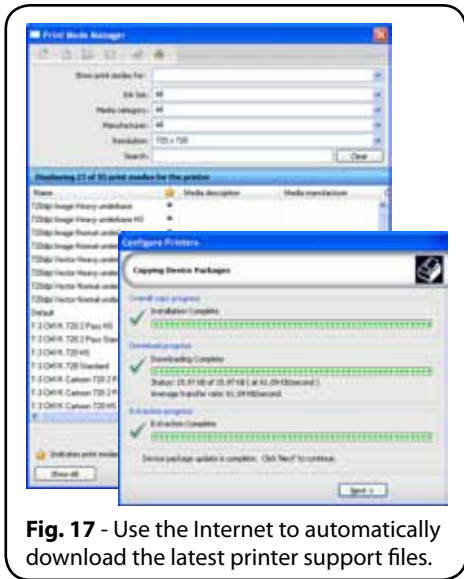


Fig. 17 - Use the Internet to automatically download the latest printer support files.

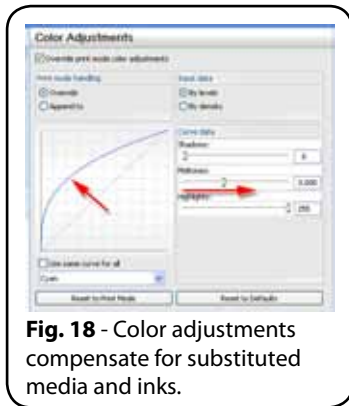
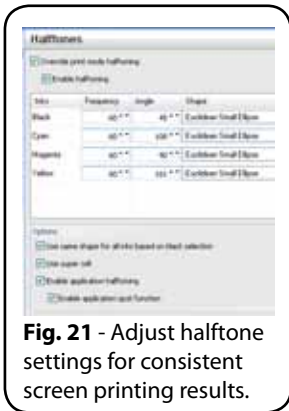
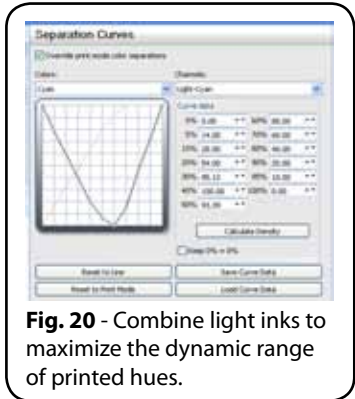
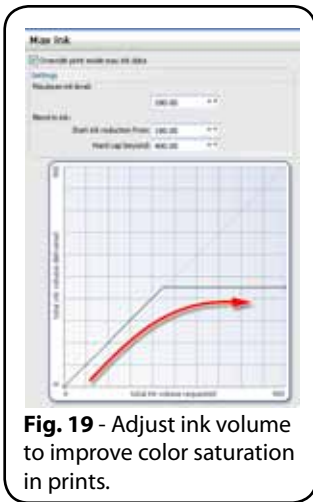


Fig. 18 - Color adjustments compensate for substituted media and inks.



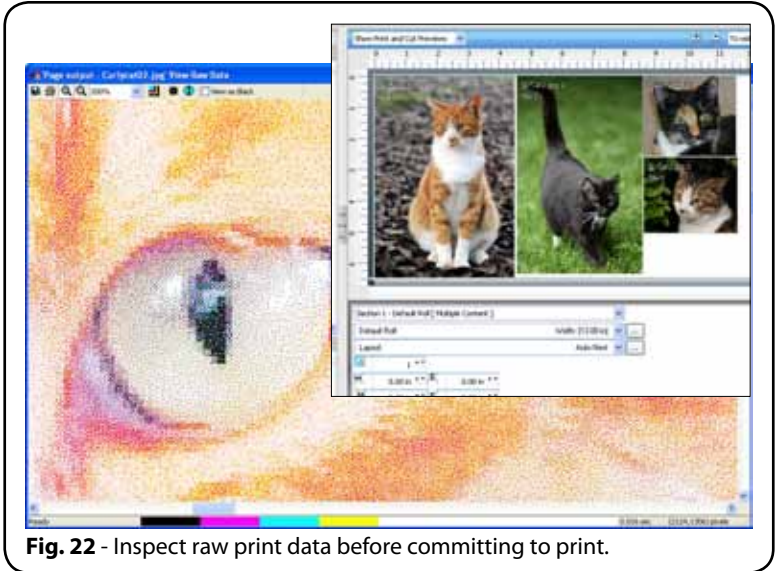


Fig. 22 - Inspect raw print data before committing to print.

INSTALLING DIGITAL FACTORY

STEP 1 - PROGRAM INSTALLATION

The following steps are an overview of installing Digital Factory, and further information is provided within each stage of the install wizard.

1. Insert the Digital Factory CD into your CD-ROM drive. The install wizard should “auto start”.

If the install wizard fails to auto start, then start the installation process manually:

- a) From the **Start** menu, choose **Run** to open the **Run** dialog.
- b) Click **Browse** and locate the setup.exe file that is on the CD in the CD-ROM drive.
- c) Click **Open** to choose the setup.exe file, and click **OK** to close the **Run** dialog.

2. The **First Time Setup** dialog will prompt for your default layout settings.
3. Proceed to *Step 2- Printer Installation*.

STEP 2 - PRINTER INSTALLATION

1. Previously, the **First Time Setup** dialog was used to define your default layout settings.
2. Next, the **Create Queue Wizard** will launch (**Introduction** page), which will be used to install support files for your printer and/or cutter.
At this time, it is recommended that you install your primary production printer into Digital Factory. Later, it will be possible to install additional printers.
3. If your Digital Factory package includes a **Printers DVD**, then insert the DVD into your DVD-ROM drive.
4. From the **Introduction** page, click **Next**.
5. From the **Printer Defaults** page (Fig. 23):
 - a) Click the **Install Printer** button, and follow the steps for choosing the printer model and installing its printer support files.
 - b) Once the support files have been installed, click the **Port** drop-list and indicate the computer port that the printer is connected to.
 - c) To the right of the **Print Mode** drop-list, click the ellipsis button.
 - d) From the **Print Mode Selection** dialog, use the drop-lists to refine the selection of print modes (i.e., media profiles), such that you can choose the

most appropriate print mode for the loaded inks and media.

- e) From the **Printer Defaults** page, click **Next** to proceed.

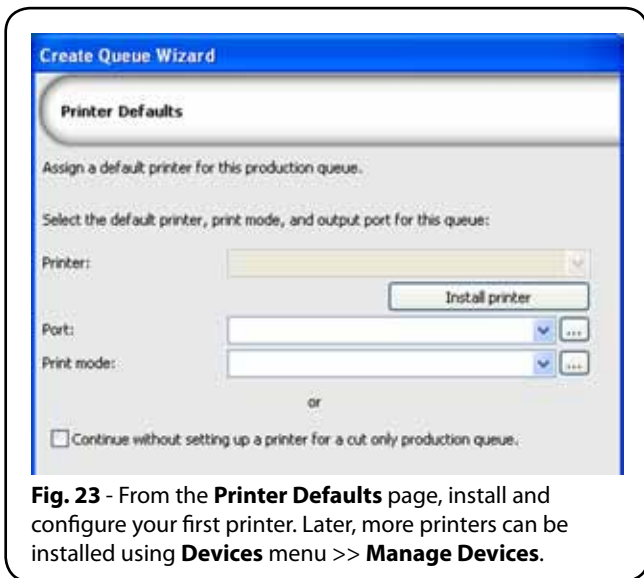


Fig. 23 - From the **Printer Defaults** page, install and configure your first printer. Later, more printers can be installed using **Devices** menu >> **Manage Devices**.

STEP 3 - CUTTER INSTALLATION

1. From the **Cutter Defaults** page (Fig. 24), click the **Install Cutter** button and follow the steps for choosing the cutter model and installing the cutter driver.

For hybrid printers that can perform their own cutting, the printer name will be available as a **Cutter** drop-list option.

2. Once the cutter driver has been installed, click the **Port** drop-list and indicate the computer port that the cutter is connected to.
3. From the **Cutter Defaults** page, click **Next**.



Fig. 24 - From the **Cutter Defaults** page, install and configure your first cutter. As with printers, more cutters can be installed using **Devices** menu >> **Manage Devices**.

STEP 4 - QUEUE CREATION

Click **Next** to proceed through each remaining step of the wizard.

1. The **Name Your Production Queue** page asks you to provide a meaningful name that this queue will be referred to.
2. The **Media Setup** page asks you to define the media size and margins.
3. The **Registration Marks** page asks for the alignment system that will be used. Refer to the cutter operation manual for an explanation of the available choices.
If print&cut jobs will be completed by a hybrid printer that can perform its own cut operations, then the printer will manage its own cut alignment. However, if the cut-portion is to be completed by a stand-alone cutter, then registration marks are printed to provide cut alignment.
3. The **Layout Mode** page asks you to choose how jobs will be nested on the media.
4. The **Output Options** page is used to choose how jobs are held when received by Digital Factory.
5. When ready, click **Finish** to conclude the wizard, and **Digital Factory** will launch.

To test that your designs are being processed correctly, proceed to the next section, *Sending Jobs to Digital Factory*.

SENDING JOBS TO DIGITAL FACTORY

Once you have installed Digital Factory, each of the following workflows is designed to help you confirm that print and/or cut jobs are being received and processed by Digital Factory correctly. Choose the workflow that best represents the method by which you will use Digital Factory.

Sending Jobs on Same Computer

For these workflows, your design application and Digital Factory have been installed to the same computer.

- Sending Jobs from SignLab
- Sending Jobs from PhotoShop
- Sending Jobs from Illustrator
- Sending Jobs from CorelDraw
- Sending Jobs from Other Design Applications

Sending Jobs from Separate Computers

For these workflows, your design application and Digital Factory have been installed on separate computers.

- Importing Designs Directly into Digital Factory
- Sending Jobs Across a Network
- Sending Jobs from Non-Windows Computers

SENDING JOBS FROM SIGNLAB®

In the following procedure, the gray boxes represent steps that are necessary in order to include cut paths with your print job (i.e., to create a print&cut job). If you wish to complete a print-only job, then skip the steps in gray.

In Digital Factory

1. From the toolbar, click the **Start Queue** button.
2. Choose **Queue** menu >> **Manage Queues**.
3. In the **Control Panel** column, click the **Install** button, such that the queue is available as a print destination for other Windows applications.
4. Click the **Close** button.

Print&Cut

5. In Digital Factory, go **Queue** menu >> **Properties** >> **Color Actions** tab.
6. Click **Add Color** to define a specific vector color (CMYK or named) that Digital Factory will recognize as a cut path.
7. Click **OK** to close the **Queue Properties** dialog.

In SignLab

8. Prepare the print design on the SignLab workspace.

Print&Cut

9. Create a shape that will represent the cutting path.
10. For the cut path shape, assign an invisible fill, and create a hairline stroke that uses the color set in step (6).

11. Save the design file, such that the design is not “untitled.”
12. Choose **File** menu >> **Print** to open the **Print** dialog.
13. From the **Printer** tab, choose the queue that had been designated in step (3).
14. Click **OK** to accept the **Print** dialog settings, and the job will be received in Digital Factory.

In Digital Factory

Print&Cut

15. In the Active List, the job thumbnail will have a knife icon to indicate that cut data has been located.
16. To see the cut paths in the Visual Print Manager, choose **Show Print and Cut Previews** from the drop-list.
17. If your queue is set to hold received jobs, then select the job and choose to either print, cut or print&cut from the **Jobs** menu.

SENDING JOBS FROM PHOTOSHOP®

In the following procedure, the gray boxes represent steps that are necessary in order to include cut paths with your print job (i.e., to create a print&cut job). If you wish to complete a print-only job, then skip the steps in gray.

In Digital Factory

1. From the toolbar, click the **Start Queue** button.

In PhotoShop

2. Prepare the print design in PhotoShop.

Print&Cut

3. Create a path that will represent the cutting path (See *Creating Paths in PhotoShop*).
4. Save the PSD file, such that the design is not “untitled.”
5. Choose **File** menu >> **Automate** >> **Send to VPM**.
6. In the **Send to VPM** dialog, choose the queue name and click **OK**.
7. The job will be received in Digital Factory.

Alternatively, the PSD file (or an exported file in TIFF or JPEG format) will preserve the path information, which can then be loaded into Digital Factory via **File** menu >> **Import File**.

8. The **PhotoShop Document Path Import Options** dialog will open.
9. Tick the **Import working path as cut lines** checkbox.
10. In the **Cut Line Color** section, choose the color that will identify the path within the imported file (i.e., the imported path will be converted into a “cut path” and assigned this color).

Note: For the path color, choose an unique color that will specifically represent paths to be cut from Digital Factory. All vectors that have this stroke color will be processed as cut paths.

11. Click **OK** to proceed with the import options.
12. (Optional) If the **Image Import** dialog is enabled, then clicking **OK** will proceed with the import.

13. In the Active List, the job thumbnail will have a knife icon to indicate that cut data is present.
14. To see the cut paths in the Visual Print Manager, choose **Show Print and Cut Previews** from the drop-list.

15. If your queue is set to hold received jobs, then select the job and choose to either print, cut or print&cut from the **Jobs** menu.

CREATING PATHS IN PHOTOSHOP

The following are quick pointers for creating paths in PhotoShop:

- To view paths within a PhotoShop file, inspect the **Paths** palette (**Window** menu >> **Paths**)
- To draw paths from the **Paths** palette, click the **Create new path** button, and then use the **Pen Tool (P)**. The **Path Selection Tool (A)** is used to select and move path nodes.
- If shape tools (U) are being used, then click the **Paths** button. When shapes are drawn, paths will be created instead of filled pixels.
- If the selection marquee would make a good path, then from the **Paths** palette click the **Make work path from selection** button.

SENDING JOBS FROM ILLUSTRATOR®

In the following procedure, the gray boxes represent steps that are necessary in order to include cut paths with your print job (i.e., to create a print&cut job). If you wish to complete a print-only job, then skip the steps in gray.

In Digital Factory

1. From the toolbar, click the **Start Queue** button.

Print&Cut

2. Choose **Queue** menu >> **Properties** >> **Color Actions** tab.
3. Click **Add Color** to define a specific vector color (CMYK or named) that Digital Factory will recognize as a cut path.
4. Click **OK** to close the **Queue Properties** dialog.

In Illustrator

5. Prepare the print design in Illustrator.

Print&Cut

6. Create a shape that will represent the cutting path.
7. For the cut path shape, assign an invisible fill, and create a hairline stroke that uses the color set in step (3).

8. Save the design file, such that the design is not “untitled.”
9. Choose **File** menu >> **Send to VPM**.
10. In the **Send to VPM** dialog, choose the queue name and click **OK**.
11. The job will be received in Digital Factory.

In Digital Factory

Print&Cut

12. In the Active List, the job thumbnail will have a knife icon to indicate that cut data has been located.
13. To see the cut paths in the Visual Print Manager, choose **Show Print and Cut Previews** from the drop-list.

14. If your queue is set to hold received jobs, then select the job and choose to either print, cut or print&cut from the **Jobs** menu.

SENDING JOBS FROM CORELDRAW®

In the following procedure, the gray boxes represent steps that are necessary in order to include cut paths with your print job (i.e., to create a print&cut job). If you wish to complete a print-only job, then skip the steps in gray.

In Digital Factory

1. From the toolbar, click the **Start Queue** button.

Print&Cut

2. Choose **Queue** menu >> **Properties** >> **Color Actions** tab.
3. Click **Add Color** to define a specific vector color (CMYK or named) that Digital Factory will recognize as a cut path.
4. Click **OK** to close the **Queue Properties** dialog.

In CorelDraw

5. Prepare the print design in CorelDraw.

Print&Cut

6. Create a shape that will represent the cutting path.
7. For the cut path shape, assign its fill to None, and assign a hairline stroke that uses the color set in step (3).

8. Save the design file, such that the design is not “untitled.”
9. From the **Application Launcher** button (Fig. 25), choose **Send to VPM**.

10. In the **Send to VPM** dialog, choose the queue name and click **OK**.
11. The job will be received in Digital Factory.



Fig. 25 - Send jobs to Digital Factory using the Application Launcher.

In Digital Factory

Print&Cut

12. In the Active List, the job thumbnail will have a knife icon to indicate that cut data has been located.
13. To see the cut paths in the Visual Print Manager, choose **Show Print and Cut Previews** from the drop-list.
14. If your queue is set to hold received jobs, then select the job and choose to either print, cut or print&cut from the **Jobs** menu.

SENDING JOBS FROM OTHER DESIGN APPLICATIONS

For other design applications that were not covered in the previous sections, the **File** menu >> **Print** command can be used to send jobs to Digital Factory. However, please note that the design application must be capable of defining vectors, which will be converted into cut paths when received by Digital Factory.

In the following procedure, the gray boxes represent steps that are necessary in order to include cut paths with your print job (i.e., to create a print&cut job). If you wish to complete a print-only job, then skip the steps in gray.

In Digital Factory

1. From the toolbar, click the **Start Queue** button.
2. Choose **Queue** menu >> **Manage Queues**.
3. In the **Control Panel** column, click the **Install** button, such that the queue is available as a print destination for other Windows applications.
4. Click the **Close** button.

Print&Cut

5. Choose **Queue** menu >> **Properties** >> **Color Actions** tab.
6. Click **Add Color** to define a specific vector color (CMYK or named) that Digital Factory will recognize as a cut path.
7. Click **OK** to close the **Queue Properties** dialog.

In Your Design Application

Once your queue has been installed in the Windows Control Panel, it can be selected as a print destination within your graphic design application.

8. In your design application, prepare the print design.

Print&Cut

9. Create a shape that will represent the cutting path.
10. For the cut path shape, assign an invisible fill, and create a hairline stroke that uses the color set in step (6).
11. Choose **File** menu >> **Print**.
12. From the **Printer** drop-list, choose the queue that had been designated in step (3).
13. The description for the printer (if any) should indicate that it is a “Visual Production Manager” or “CADlink” destination.

Note: It is possible for printer names to be quite similar to the queue name you have selected. If description does not indicate “Visual Production Manager” or “CADlink,” then check for a similar name from the **Printer** drop-list.

Set the Media Profile

Media profiles in Digital Factory are referred to as “print modes,” which contain all of the printer settings (resolution, printer options, ink levels, etc.) that are used with a given job. Use the following procedure to set the print mode from within your graphic design application.

14. From the **Print** dialog of your graphic design application, there should be a **Page Setup** or **Properties** button that will open the **Document Properties** dialog (Fig. 26).

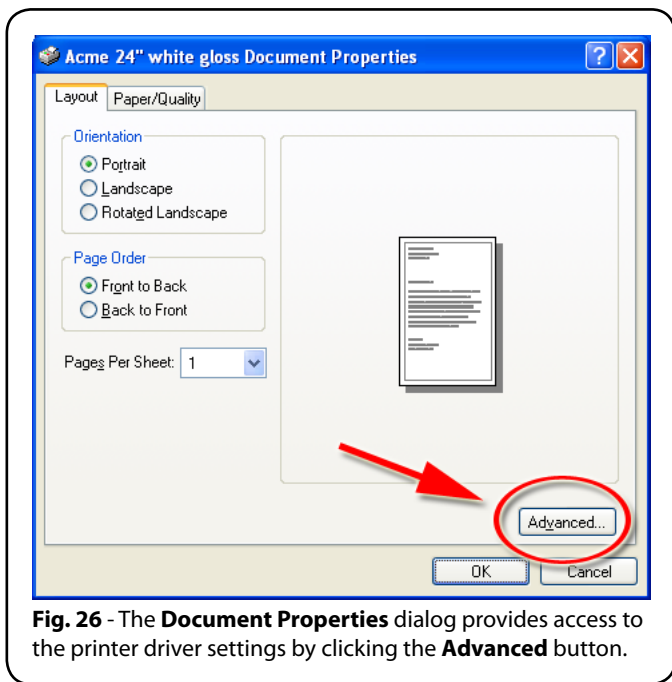
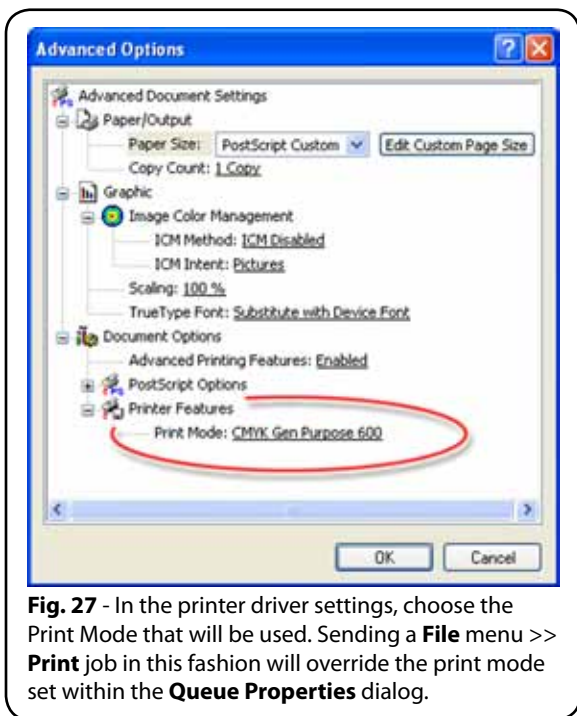


Fig. 26 - The **Document Properties** dialog provides access to the printer driver settings by clicking the **Advanced** button.

15. Click the **Advanced** button. The **Advanced Options** for the driver will open (Fig. 27).



16. Under **Document Options**, locate the **Printer Features** category and click the **Print Mode** field.
17. The **Print Mode** drop-list will become active.
18. Choose the print mode that is most appropriate for the media and image quality. Print modes are typically named according to media, print resolution, ink density, halftone frequency, and ink set.

19. Click **OK** to close the **Advanced Options**.
20. Click **OK** again to close the **Properties** dialog.
21. Click **OK** to close the **Print** dialog, and the job will be received in Digital Factory.

In Digital Factory

Print&Cut

22. In the Active List, the job thumbnail will have a knife icon to indicate that cut data has been located.
 23. To see the cut paths in the Visual Print Manager, choose **Show Print and Cut Previews** from the drop-list.
-
24. If your queue is set to hold received jobs, then select the job and choose to either print, cut or print&cut from the **Jobs** menu.

IMPORTING DESIGNS DIRECTLY INTO DIGITAL FACTORY

Design files can be imported directly into Digital Factory, without the need to open the files in their original design applications. Use this workflow where you have a design file that must be printed without having access to the original design application. For example, the customer has sent you a design file, and you need to print the file “as is” without importing it into a design application.

Note: The supported image formats are subject to change, though common image formats are supported (e.g., EPS, AI, PDF, BMP, JPEG, TIFF, etc.).

In the following procedure, the gray boxes represent steps that are necessary in order to include cut paths with your print job (i.e., to create a print&cut job). If you wish to complete a print-only job, then skip the steps in gray.

In Digital Factory

1. From the toolbar, click the **Start Queue** button.

Print&Cut

2. Choose **Queue** menu >> **Properties** >> **Color Actions** tab.
3. Click **Add Color** to define a specific vector color (CMYK or named) that Digital Factory will recognize as a cut path.
4. Click **OK** to close the **Queue Properties** dialog.

In the Design Application

5. Prepare the print design.

Print&Cut

6. Create a shape that will represent the cutting path.
7. For the cut path shape, assign its fill to None, and assign a hairline stroke that uses the color set in step (3).

8. Save the design file.

For print&cut designs, the file must be saved in a format that supports stroke information (i.e., EPS, AI, PDF, etc.).

In Digital Factory

9. Load the design file using one of the following three methods:
 - a) Choose **File** menu >> **Import File**.
 - b) From the toolbar, click the **Open** button.
 - c) Drag-and-drop the file into the Digital Factory window.

Print&Cut

10. In the Active List, the job thumbnail will have a knife icon to indicate that cut data has been located.
11. To see the cut paths in the Visual Print Manager, choose **Show Print and Cut Previews** from the drop-list.

12. If your queue is set to hold received jobs, then select the job and choose to either print, cut or print&cut from the **Jobs** menu.

SENDING JOBS ACROSS A NETWORK

Use this workflow when your design application is on a separate computer from where Digital Factory is installed. Once this configuration is complete, the **File** menu >> **Print** command will be used to send jobs across the network to Digital Factory.

Note: This workflow uses Windows remote printer sharing. If the design application is installed on a non-Windows computer, then please use the next workflow, “*Sending Jobs from Non-Windows Computers.*”

Note: For Windows remote printer sharing, the computers must be either **BOTH** 32-bit Windows, or **BOTH** 64-bit Windows. Otherwise, a mismatch between 32-bit and 64-bit will cause a Windows driver incompatibility that prevents jobs from proceeding.

In the following procedure, the gray boxes represent steps that are necessary in order to include cut paths with your print job (i.e., to create a print&cut job). If you wish to complete a print-only job, then skip the steps in gray.

In Digital Factory

1. From the toolbar, click the **Start Queue** button.
2. Choose **Queue** menu >> **Manage Queues**.
3. In the **Control Panel** column, click the **Install** button, such that the queue is available as a print destination for other Windows applications.
4. Click the **Close** button.

5. Choose **Queue** menu >> **Properties** >> **Color Actions** tab.
6. Click **Add Color** to define a specific vector color (CMYK or named) that Digital Factory will recognize as a cut path.
7. Click **OK** to close the **Queue Properties** dialog.

Enable Windows Remote Printer Sharing

(On the computer that has Digital Factory)

8. From the **Start** menu, open the Windows **Printers and Faxes** (This is also available through the Control Panel).
9. In the list of printers, the queue name will be listed as one of the available printers.
The **Comments** column will indicate that this is a “CADlink Printer,” and the **Model** column should indicate the printer model.
10. Right-click the queue name, and choose **Sharing** from the drop-list.
11. The **Properties** dialog will open, and the **Sharing** tab will be active.
12. Click the **Share this printer** option.
13. For the **Share** name, type a meaningful name. This name will appear to design computers when they are connecting to the Digital Factory computer.
By default, Windows will initially truncate the share name to eight (8) characters, which is a precaution

against incompatible filename lengths with older Windows versions.

14. Click **OK** to close the **Properties** dialog.

Connect to the Shared Printer

(On the computer with the design application)

15. From the **Start** menu, choose **My Network Places** and browse the network to the (remote) computer that has Digital Factory.
16. In the top directory of the remote computer, the shared printer should be listed as a “CADlink Printer.”
17. Right-click the shared printer and choose **Connect** from the drop-list.
18. The printer will now be available through the **File >> Print** command of your design application.

Note: In the Windows **Control Panel**, a Digital Factory printer can be identified by opening its **Properties** dialog and inspecting the **Ports** tab.

In the Design Application

19. In the design application, prepare the print design.

Print&Cut

20. Create a shape that will represent the cutting path.
21. For the cut path shape, assign an invisible fill, and create a hairline stroke that uses the color set in step (6).

22. Choose **File** menu >> **Print**.
23. From the **Printer** drop-list, choose the queue that had been designated in step (3).
24. The description for the printer (if any) should indicate that it is a “Visual Production Manager” or “CADlink” destination.

Note: It is possible for printer names to be quite similar to the queue name you have selected. If description does not indicate “Visual Production Manager” or “CADlink,” then check for a similar name from the **Printer** drop-list.

In Digital Factory

Print&Cut

25. In the Active List, the job thumbnail will have a knife icon to indicate that cut data has been located.
 26. To see the cut paths in the Visual Print Manager, choose **Show Print and Cut Previews** from the drop-list.
27. If your queue is set to hold received jobs, then select the job and choose to either print, cut or print&cut from the **Jobs** menu.

SENDING JOBS FROM NON-WINDOWS COMPUTERS

This workflow uses a specially designated **Hot Folder** (i.e., a directory on the hard drive). When design files are printed as a file to the Hot Folder, they will be automatically detected by Digital Factory and processed.

Once configuration is complete, the **File** menu >> **Print** command (or equivalent) will be used to send jobs to Digital Factory. This configuration allows for design applications on non-Windows computers to print directly to Digital Factory.

In the following procedure, the gray boxes represent steps that are necessary in order to include cut paths with your print job (i.e., to create a print&cut job). If you wish to complete a print-only job, then skip the steps in gray.

Create an Empty Hot Folder

1. Create an empty directory on your Digital Factory computer, or elsewhere on your network. This will be your **Hot Folder**, which must satisfy the following two conditions:
 - a) The Digital Factory computer must have login permission to read and write to the Hot Folder.
 - b) Your graphic designers must have file access permissions to write/copy files into the Hot Folder.

In Digital Factory

2. From the toolbar, click the **Start Queue** button.
3. Choose **Queue** menu >> **Manage Queues**.

4. In the **Control Panel** column, click the **Install** button, such that the queue is available as a print destination for other Windows applications.
5. Click the **Close** button.
6. Choose **Queue** menu >> **Properties**.
7. Click the **Hot Folders** tab.
8. Tick the **Enable Queue Hot Folder** checkbox, which opens a browse dialog.
9. Browse to the **Hot Folder** that had been designated in step (1). Please note that the **Hot Folder** must be empty when it is initially chosen.
10. Click **OK** to accept the Hot Folder path.

Print&Cut

11. Click the **Color Actions** tab.
12. Click **Add Color** to define a specific vector color (CMYK or named) that Digital Factory will recognize as a cut path.

13. Click **OK** to close the **Queue Properties** dialog.

In the Design Application

14. In the design application, prepare the print design.

Print&Cut

15. Create a shape that will represent the cutting path.
16. For the cut path shape, assign an invisible fill, and create a hairline stroke that uses the color set in step (12).

17. Choose **File** menu >> **Print** (or the equivalent according to the software being used).

If it is permitted by the design software, then the design file can be “printed” to a data file that is placed directly into the **Hot Folder**. In this manner, printing will be seamless because Digital Factory will automatically process the file.

Alternatively, save the design file in a commonly accepted format (e.g., EPS, AI, PDF, BMP, JPEG, TIFF, etc.), and copy the design file into the **Hot Folder**. However, for print&cut designs, the file must be saved in a format that supports stroke information (i.e., EPS, AI, PDF, etc.).

In Digital Factory

Print&Cut

18. In the Active List, the job thumbnail will have a knife icon to indicate that cut data has been located.
19. To see the cut paths in the Visual Print Manager, choose **Show Print and Cut Previews** from the drop-list.
20. If your queue is set to hold received jobs, then select the job and choose to either print, cut or print&cut from the **Jobs** menu.

ADDITIONAL INFORMATION

To learn more about Digital Factory features and workflows:

- **Help File** - Consult the *Digital Factory Help File*, which is available via **Help** menu >> **Help Topics**. Additional configuration workflows are provided, and each of the Digital Factory features are explained in greater detail.
- **User Guide** - The bound *Digital Factory User Guide* is provided upon purchase of Digital Factory, which contains additional configuration workflows and detailed explanations of Digital Factory features.
- **InfoSource** - Review demonstration and training videos that are available through the CADlink web site (www.cadlink.com). These videos include both overviews and in-depth examples of how to use Digital Factory features.