ATD

AUTO-TRACKING DENSITOMETER

ATD Software Manual

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Getting Started with ATD

The ATD software drives your Scanning Spectrophotometer instrument. It allows you to easily organize each press run measurement according to project, job, and measured standards. ATD comes with pre-loaded libraries for different press specifications, colors, and color bars.

SYSTEM REQUIREMENTS

- Windows 98, NT (with Internet Explorer 5.0 or higher) or 2000.

- 64 MB of RAM (128 MB recommended).

- CD-ROM drive.

- High color (16 bit) or True Color (32 bit) graphic card support.

INSTALLING THE SOFTWARE

NOTE: Some users of this software purchased turn-key systems with a pre-installed application. These users can use the following instructions if they need to re-install the software from their backup CD.

The ATD software uses a standard Windows installation procedure.

To install ATD:

1. Insert the ATD CD into your computer's CD-ROM drive. The install program will start automatically.

   NOTE: If the install program does not start automatically, choose **Run** from the Windows **Start** menu, then type "*d:\setup.exe*", where "*d*" = your system's CD-ROM drive.

2. Follow the Install wizard prompts to start the software setup program.

3. Follow the instructions for a Full installation.

STARTING THE SOFTWARE

Before starting the Software, you should take a moment to check your display driver's color settings. For optimal representation of on-screen color simulations, your display driver should be set up for at least High Color (16 bit) resolution.

To check your display driver settings:

1. From the Windows **Start** menu, choose **Settings**, then choose **Control Panel**.

2. Double-click the Display program icon in the Control Panel directory. The **Display Properties** dialog box appears.

3. At the top of the **Display Properties** dialog box, click the **Settings** tab.

4. From the **Color Palette** list, select either High Color (16 bit) or True Color (24 bit). If neither of these settings is available, your display driver does not support these resolution settings.

Once the Software is installed on your computer, you can start it by double-clicking the Program Icon located in the Software's directory, or by selecting the item from the appropriate program folder on the Windows **Start** menu.

NOTE: You can create a shortcut to ATD on the Windows desktop by dragging the ATD program Icon onto the desktop.

As it opens, the Software checks your display driver settings. If you are not running at 16-bit resolution or better, a **Warning** message appears that informs you of the 16-bit resolution recommendation. Click **Close** to continue.

WHAT TO DO FIRST

The first time you open the software, the **Select Job** dialog box appears. You can use the buttons on the **Select Job** dialog box to create a new job, open an existing job, import a job, or close the application.

Once you open a job, you can use the rest of the software. The ATD user interface includes the Control Pane, display area, menu bar, toolbar, and status bar.

Before you can actually begin recognizing and measuring jobs, you need to set up your instruments.

The ATD User Interface

ATD uses standard Windows conventions, such as menus and submenus, toolbar buttons, list boxes, option buttons, and check boxes. If you are unfamiliar with the basic functions of the Windows environment, refer to your Windows documentation.

The user interface consists of the Control Pane, the menu bar, the toolbar, the status bar, and the display area (Desktop area).

USING THE CONTROL PANE

The Control Pane is located along the left side of the Main Window. You can display or remove the Control Pane by choosing **Control Pane** from the **View** menu (a check mark appears next to the command when the Control Pane is displayed). Use the tools on the Control Pane to measure, view, and evaluate job and sheet data.

NOTE: If you are working on a satellite workstation, you will not have access to all of the tools listed below.

- **Sheet Status.** A color-coded indicator above the **Status** button indicates the status of the current sheet: OK = green; Action = yellow; Control = red. Click the **Status** button to open the **Job Status** dialog box, where you can review detailed status information.

- **Color Bar Information.** Click the **Color Bar** button to open the **View Color Bar** dialog box. This dialog box shows the color bar information from the most recent scan.

- **Retarget.** Click the **Retarget** button to open the **Retarget** dialog box, where you can set up new target values for the current job.

- **Retolerance.** Click the **Retolerance** button to open the **Retolerance** dialog box, where you can set up new tolerances for the current job.

- **Delete.** Click the **Delete** button to delete the current sheet. The system asks if you are sure you want to delete the sheet. Click **Yes** to confirm the deletion.

- **Note.** Click the **Note** button to open the **Note Editor** dialog box, where you can enter text comments about this sheet. Click **OK** to save your comments and close the dialog box. (A note icon appears next to the **Note** button for sheets that have notes.)

- **Tags.** Click the **Tags** button to open the **Add or Remove Tags** dialog box, where you can assign tags to the current sheet.

- **Sheet Slider.** Move the slider to the right and left to move through all sheets in the job. Above the slider, indicators display the date and time the sheet was measured and the number of the sheet in relation to the total sheets in the job (such as "5 of 10").

- **Recognize.** This button only appears if you have not recognized the current job. Click **Recognize** to start the Recognition wizard.

- **Measure.** This button only appears if you have already recognized the current job. Click **Measure** to start the Measurement wizard.

- **Key Slider.** Move the slider to the right and left to move through all keys in the job. The number of the current key appears above the slider.

- **Graph Controls.** Use the graph controls to select how you want data to appear in the current job window. Click **All Difference** if you want to display difference data (variation from the target values). Click **All Actual** if you want to display actual data.

USING THE TOOLBAR

The toolbar buttons provide shortcuts to several functions in the Software. You can display or remove the Toolbar buttons by choosing **Toolbar** from the **View** menu (a check mark appears next to the command when the Toolbar is displayed). To identify the function of a specific toolbar button, place your mouse cursor over the button and pause. A tool tip identifies the name of the button, and a description of the related function appears on the status bar.

USING THE STATUS BAR

The status bar at the bottom of the window provides descriptive information about menu commands and toolbar buttons, displays the sheet and key range, and identifies the current graph scale factor. To turn the status bar on and off, choose **Status Bar** from the **View** menu. When the status bar is turned on, a check mark appears next to the menu command. The status bar displays the following types of information:

- **Item Description and System Status**
  To view a description of a menu command, toolbar button, or Control Pane item, place your mouse cursor over the item and pause. The left portion of the status bar provides a brief description of the current item.

- **Sheet and Key Range**
  The current sheet range and key range in use appear in the **Sheet** and **Key** fields..

- **Graph Scale Factor**
  The far right field of the status bar displays the graph scale status— the current level of vertical scaling.

USING THE MAIN MENUS

All of the ATD menus provide access to the different functions of the software. Many of these functions are also accessible through other tools in the software. For example, you can change the view type in a job window by selecting a different view tab or by choosing a different command from the **View** menu.

Each menu operates according to standard Windows conventions. You can open menus and submenus by clicking the menu or submenu command. Choose the desired command from those that are displayed.

You can also open menus and choose commands using shortcut keys (shortcut keys are underlined in the menu or command name). To open a menu, press ALT + [shortcut key]. To choose a command from an open menu, you only need to press the shortcut key. For example, to open the **Job** menu, press ALT + J. To choose the **New** command, press N.

NOTE: When you highlight a menu item, a description of the function appears in the Status bar at the bottom of the application screen.

USING THE DESKTOP

The system displays your job data on the ATD desktop. Measurement data for each job is shown in a separate job window. Within a job window, you can display a different type of data by changing the view type and adding or removing graphs.

Working with Your Instrument

SETTING UP YOUR INSTRUMENT

Before you can use the scanning instrument, you must set up the instrument so that the software can properly read the instrument data. You can configure your instrument on the **Instruments** tab of the **Options** dialog box.

NOTE: If you have not properly connected the instrument to your computer or performed the following configuration steps, an error message appears when you start a measurement. Refer to your instrument documentation for specific instructions on how to connect the scanning instrument.

To configure your instruments:

1. From the **Instrument** menu, choose **Configure**. The **Instruments** tab of the **Options** dialog box appears.

2. Select the **Scanning Instrument** check box.

3. Click the **Configure** button to open the **Select Transport** dialog box. From the **Available Transport** list, select the port to which your scanning instrument is connected. Click **OK** to save your setting and return to the **Options** dialog box.

4. Click **OK** to save your instrument settings and close the **Options** dialog box.

NOTE: You can perform firmware updates using the **Instrument Diagnostics** dialog box.

CALIBRATING YOUR INSTRUMENT

To ensure accurate and reliable measurements, you should calibrate your instrument every day that it is used. The ATD software keeps track of each the instrument's calibration status. The software automatically starts the calibration process every 24 hours.

Calibrating the Scanning Instrument

Every 24 hours (since the most recent automatic calibration), the system pauses briefly to calibrate the scanning instrument. If you are performing a measurement at this time, the system waits until your measurement is complete before it attempts to calibrate the scanning instrument.

When the system automatically calibrates the scanning instrument, it displays the **Instrument Calibration** dialog box. Allow the calibration procedure to continue. When the calibration process is complete, the dialog box automatically closes.

To manually start the calibration process, choose **Calibrate** from the **Instrument** menu.

NOTE: The software prompts you to clean the calibration plaques located in the track before a calibration can be performed. Refer to your instrument operation manual for instructions on cleaning the plaques.

Calibrating the Scanning Instrument Track

Over time, the characteristics of the scanning track surface may change due to dirt buildup, cleaning methods, etc. You will know that a track calibration is required if the following symptoms occur:

• Black data is read before paper data when the system tries to recognize a color bar.

• The scanning head accelerates immediately after leaving the docking station, rather than searching for the edge of the paper first.

To calibrate the scanning track:

1. From the **Instrument** menu, choose **Scanning**, then choose **Calibrate Track**.

2. The system prompts to you to clean the track area and remove the press sheet. Click **OK** after you complete these tasks.

3. The system performs the track calibration. When the calibration is finished, the dialog box automatically closes.

INSTRUMENT DIAGNOSTICS

The **Instrument Diagnostics** dialog box provides information regarding the instrument scanning head, docking station, and scanning software. You can this dialog box to perform firmware updates.

From the **Instrument** menu, choose **Diagnostics** to open the dialog box. You can also open the dialog box by double-clicking the Instrument Diagnostics icon in the program group.

The following information appears on the dialog box:

- **Scanning Instrument Information.** The version numbers for the current firmware and system configuration data appear here. If necessary, click **Find Instrument** to have the system look for your instrument on your computer's COM ports. You can click **Write Configuration to File** to output the instrument configuration to a file for advanced troubleshooting. Additional diagnostic support comes in the form of a log file to which instrument warning and error messages are written.

- **Scanning Instrument Firmware**. Use the options and buttons in this area to update to a new version of firmware for the scanning head and docking station. To install new firmware, select the appropriate option (Head or Station) and click **Install New Version**. If necessary, you can return to the previous version of firmware by selecting the appropriate option and clicking **Install Previous Version**.

- **Scanning Instrument Calibration.** Whenever the track or scanning head is replaced, calibration plaque values that exist in the docking station memory must be adjusted. Click **Set Calibration Plaque Values** to update those values. If necessary, you can also calibrate the scanning instrument and scanning instrument track by clicking **Calibrate** and **Calibrate Track**, respectively.

Setting up the Software Options

Before you being setting up, measuring, and evaluating a new job, you need to set up the different software options. You can select your options using the **Options** dialog box. From the **Tools** menu, choose **Options** to open the dialog box. Each tab on the dialog box allows you to define parameters for a different aspect of the software.

NOTE: If restrictions are set up, you will only have access to the **Instruments** tab. To disable any restrictions and view the remaining tabs, choose **Restrictions** from the **Tools** menu. You must then enter the correct password to disable the restrictions.

When working in the **Options** dialog box, you can change the settings on any of the available tabs. When you are satisfied with your selections, click **OK** to save the new settings and close the dialog box. You can also click **Apply** to save your changes without closing the dialog box.

GENERAL TAB

Use the **General** tab to define application startup defaults and other software parameters, as follows:

- Select the **Lock main window in the maximized state** check box if you want to lock the size of the main application screen. When this check box is selected, the screen size will maximize to display across your entire computer screen whenever the application is opened. When the screen size is locked in this way, you must use the shortcut keys (ALT + F4) to exit the application.

- Determine how you want to display graphs when a job is first opened (you can change the display settings after the job is opened). Select **Show a default graph for each ink in the Job** if you want to display a solid ink density graph for each ink in the job. Select **Show the most recently used graphs in the job** to show the graphs that you were using when you last closed the job. Select **Show no graphs** if you want the current job window to remain empty until you manually select specific graphs for display.

- Select how you want to enter and display unit amounts: in **English** or **Metric** measurements.

- Select the default calculation method for graph information. Select **Absolute** if you want to calculate and display graph information with the paper (substrate) data included. Select **Minus Paper** if you want to calculate and display graph information without the paper data.

- In the **Max Trend Graphs (per page)** box, type the maximum number of Trend graphs to display in a single job window, or use the arrow buttons to select the maximum number. You can view up to eight Key trend or Sheet trend graphs simultaneously in a maximized job window. If you select more than eight graphs, you must use the scroll bar to view some of the graph data. With more graphs displayed in a single job window, less detail is provided on each individual graph.

- Select the **Show numbers on key trend graphs** check box if you want to display the actual value of each key within that key bar.

- In the **Company Name** box, type a name to appear in the header of all printed reports.

- From the **Default Status** list, select the default status to use when calculating densitometric limits and displaying density graphs.

DEFAULTS TAB

Use the **Defaults** tab to set up the default parameters for sheet, job, and recognition/measurement controls, as follows:

- Select the **Retarget All Sheets Whenever Targets change** check box if you only want to use one set of target values for each job. This means that whenever you change the target values, the system retargets all of the existing sheets to the new values. If there was a previous OK sheet, that sheet is changed from an OK sheet to a makeready sheet. If you do not select this check box, the system uses the new target values for future sheets only.

- Enter the default sheet width to use when creating new jobs. Type the desired width in the **Width** box, or use the arrow buttons to select the width.

- Select the default location of the color bar on a sheet edge. If you center your sheet on the press, select **Centered**. If you do not center the sheet, select **Left edge on key**, and then type the key number corresponding to the left edge of the sheet.

- Select the **Use "based on" jobs** check box to have the related check box automatically selected in the **New Job** dialog box. When this is selected, all new jobs are initially based on a previous job. You can change this option when you create a new job.

- Select the **Watch only density during makeready** check box if you only want to use density computations during a makeready phase. If this option is selected, it is used by default when you set up a new job (when setting up targets and tolerances for the job, you can only define the Density target values and tolerance limits).

- Select the **Adjust for stock thickness** check box if you want the system to prompt you to measure the stock (sheet) during a recognition sequence. This option can be changed during recognition.

- Select the **Use recognition scans as first sheet in Job** check box if you want the system to use the measurement data taken from the recognition process as an actual sheet for your job. When this check box is selected, the system will automatically create a sheet based on the recognition scan.

- Select the **Automatically advance to the next step of the recognition wizard (if possible)** check box if you want the software to automatically move to each step in the recognition/measurement wizards. At those steps in the wizards where no additional input is required from the user, the system will automatically display the next dialog box.

- In the **Minimum recognition percentage** box, type the minimum percentage considered acceptable for the amount of patch recognized on a scan, or use the arrow buttons to select the desired percentage. If the amount of patches recognized is less than this percentage, the wizard will require user intervention before proceeding to the next step.

POST SCAN TAB

Use the **Post Scan** tab to automatically generate output data after a sheet measurement, as follows:

- Select the **Print a Single Sample, Single Attribute report after each measurement** check box to automatically generate a report for solid ink density immediately after each measurement is completed.

- Select the **Create Scan Density File** check box to automatically generate a density report for each patch of the color bar. The report is then output to a specified file location after every measurement. If you select this check box, you must enter the file name and directory location to which the scan density file information should be written. In the **Filename** box, type the file information or click the **Browse** button (**…**) to select the location from a directory dialog box. If you want each new report to be appended to this file, select the **Append** check box. If you want each new report to overwrite the previous report, make sure this check box is not selected.

- Select the **Create a Scan Value File** (SVF) check box to create a Scan Value File. The Scan Value File consists of job information plus densitometric data for each patch scanned. If you select this check box, you must enter the file name and directory location to which the Scan Value File should be written. In the Filename box, type the file path or click the Browse button (…) to select the location from a directory dialog box.

NETWORK TAB

The networking feature supports remote operation for the monitoring of press jobs, allowing a single instrument to be shared among several presses. Any Windows-compatible network can support a satellite workstation.

The master system operates in the same manner as any normal, stand-alone system. A satellite (remote) workstation operates under the following restrictions:

- No recognitions can be performed.

- No measurements can be performed.

- No retargeting or retolerancing can be performed.

- Color bars cannot be edited.

- Sheets cannot be deleted.

On the **Network** tab, you select the type of system that you are using and define the location of the master database directory.

- If you are using a networked system, select the **Network** check box. This activates the remaining items on this tab.

- Select the type of workstation that you are using: **Master** or **Satellite**.

- The database for the master and satellite workstations is set to the master system's database. All satellite data is stored on the master database. To change the default database directory, enter the path of the directory in the appropriate box, or click the **Browse** button (**…**) to select the directory location from a directory dialog box. You can then select the directory location from any folder on any available directory or shared network drive.

FILE FORMATS TAB

The settings on the **File Formats** tab allow you to exchange press densitometric data between "on-board" scanning systems and a print data analysis (PDA) program. The Print Data Exchange File Format function generates the file format—a cross-platform, device-independent file specification—used for this data exchange.

The PDA file structure includes a header portion, followed by the data. This header contains the file location, project name, job name, status, and a user-defined comment. The data is organized by sheets and "alleys." A line of data is provided for each sheet, and each sheet is divided into alleys. An alley, measured in keys, consists of data from each color in the job. For each color, the file lists values for three density measurements, print contrast, and dot gain.

Since the keys are used to establish the alleys, you must specify the number of keys per alley, as well as the starting key number for each alley. A PDA file can contain a maximum of eight alleys.

Enter the file format information, as follows:

- In the **Custom Comment** box, type any desired text information to include in the PDA file header.

- In the **Number of Alleys** box, type the number of alleys to include in the PDA file, or use the arrow buttons to select the desired number. As you increase or decrease the number of alleys, the available **Alley Start Key** boxes increase or decrease, as applicable.

- In the **Alley # Start Key** boxes, type the number of the first key for each alley, or use the arrow buttons to select the key number.

NOTE: PDA files are exported with a *.pda extension.

REPORTS TAB

Use the **Reports** tab to set up the available print area on a page for all reports and print screens output to a printer. Enter the margin values in the left, right, top, and bottom text boxes.

RESTRICTIONS TAB

Use the **Restrictions** tab to disable various functions throughout the software. Once restrictions are set up, a password is required in order to enable or disable the restrictions. You can restrict the following functions:

- Select the **Changing Options** check box to disable all of the **Options** dialog box tabs except for the **Instruments** tab. When this check box is selected, only the **Instruments** tab is displayed on the **Options** dialog box.

- Select the **Performing Job and Project Maintenance** check box to disable all of the job maintenance and project maintenance functions, including creating new projects and jobs. When this check box is selected, the maintenance commands on the **Job** menu are unavailable.

- Select the **Modifying Libraries** check box to disable all Library Manager maintenance functions. When this check box is selected, users can view and select library items, but cannot add, edit, or delete library items.

- Select the **Deleting Sheets** check box to disable the delete function from the sheet options.

- Select the **Setting up Jobs** check box to disable all of the Job Setup functions. When this check box is selected, users cannot access the Job Setup wizard functions.

After you select the items that you want to restrict, click **Set Password** to set up a password which will allow you to enable and disable the restrictions. The password can consist of any combination of five through fifteen characters. You can also use the **Set Password** function to change an existing password. On the **Change Password** dialog box, you are prompted to enter and confirm your new password. Once set, this password is required to enable and disable the restrictions.

To immediately enable the restrictions, select the **Enable restrictions** check box at the bottom of the tab. If this check box is not selected, you must enable the restrictions by choosing **Restrictions** from the **Tools** menu. When restrictions are enabled, a check mark appears next to the **Restrictions** command; to disable restrictions, choose **Restrictions** and enter the correct password when prompted.

Using the ATD Libraries

Once you have installed your instrument and set up the software options, you need to prepare your ATD libraries. Before you can begin measuring and evaluating press sheets, you must define the type of presses and color bars that you want to use. You can also set up custom colors, tags, and shop targets and tolerances.

ATD comes with pre-loaded libraries for:

- press types from different manufacturers.

- industry-standard color bars.

- commonly used standard colors.

- Job tags.

You can use the pre-loaded information, or you can set up custom configurations for all of your libraries. You can perform all of the library management and maintenance functions by using the commands on the **Library** menu.

USING THE LIBRARY MANAGER DIALOG BOXES

The **Library Manager** is a common type of dialog box that is used by four types of libraries (each accessible through the commands on the **Library** menu): Color Bars, Presses, Targets, and Tolerances. This type of dialog box allows you to edit, create, delete, duplicate, import, and export specific library items.

While each **Library Manager** is specific to the type of information it supplies, you perform certain functions in the same way for all types of library items. Common functions include:

- duplicating a library item.

- deleting a library item.

- setting a library item as a default.

- printing a report for a library item.

- importing a library item.

- exporting a library item.

Duplicating a Library Item

Use the Duplicate function to save data from an library item under a new name. This function is useful if you want to create a new item based on an existing item.

NOTE: When you duplicate a target, the associated tolerance information is also duplicated, and vice versa.

To duplicate an item:

1. Open the Library Manager that you want to use by choosing the appropriate command from the **Library** menu.

2. From the **Names** list, select the item that you want to duplicate.

3. Click **Duplicate** to open the appropriate editor for this library item.

4. Type a new name for this library item. If necessary, you can also edit any of the other information.

5. Click **OK** to save the new information.

Deleting a Library Item

When you delete a library item, you permanently remove that item from the library.

NOTE: If you delete a target, the associated tolerance is deleted, and vice versa.

To delete a library item:

1. Open the Library Manager that you want to use by choosing the appropriate command from the **Library** menu.

2. From the **Names** list, select the item that you want to delete.

3. Click **Delete**. A confirmation message asks you to verify the deletion. Click **Yes** to complete the deletion.

Setting a Default Library Item

If you use one particular library item frequently, you can identify that item as the default. For example, if you use one type of press for a number of different jobs, you could set up that press as the default. That press is then selected by default when you set up a job.

To set an item as a default:

1. Open the Library Manager that you want to use by choosing the appropriate command from the **Library** menu.

2. From the **Names** list, select the item you want to use as a default.

3. Click **Set Default**.

Printing a Library Item Report

1. Open the Library Manager that you want to use by choosing the appropriate command from the **Library** menu.

2. From the **Names** list, select the item you want to use to generate the report.

3. Click **Report**. You can then select your print options from the standard Windows **Print** dialog box.

Importing a Library Item

Use the Import function to import a library from a different directory location.

To import an item:

1. Open the Library Manager that you want to use by choosing the appropriate command from the **Library** menu.

2. Click **Import** to open the **Import** dialog box.

3. From the **Look In** list, select the drive or folder which contains the file you want to import.

4. The contents of the selected drive or folder appear in the folders list (only files of the appropriate type are displayed.) To begin the import process, select the file you want to import, then click **Open**.

Exporting a Library Item

Use the Export function to export a library item to a different directory location.

To export an item:

1. Open the Library Manager that you want to use by choosing the appropriate command from the **Library** menu.

2. From the **Names** list, select the item that you want to export.

3. Click **Export** to open the **Export** dialog box.

4. From the **Save In** list, select the drive or folder to which you want to export the file.

    To export the file to a new folder, click the **New Folder** button. A new folder appears, and you can type a name for the folder.

5. In the **File name** box, type a name for the file.

6. Click **Save** to export the item to the specified location.

THE PRESSES LIBRARY

To open the **Presses Library Manager**, choose **Presses** from the **Library** menu. Using the function buttons, you can edit existing presses, create new presses, duplicate presses, import and export presses, and delete presses.

Creating and Editing Presses

Use the **Press Editor** dialog box to create and edit presses. You define a press by its name, size, type, and related attributes. This information is then used in the measurement calculations.

To create a new press or edit an existing press:

1. From the **Library** menu, choose **Presses**. The **Presses Library Manager** appears.

2. If you want to create a new press, click **Create**. The **Press Editor** dialog box appears

    If you want to edit an existing press, select the press that you want to edit from the **Names** list, then click **Edit**. The **Press Editor** dialog box appears.

3. In the **Press Name** box, type a name for this press. This name identifies this press on the **Presses Library Manager**. The name is different from the Press Type, which refers to a manufacturer brand name or generic name. The name allows you to differentiate between different presses of the same type.

4. If necessary, type any comments about this press in the **Comments** box.

5. From the **Press Type** list, select the type of press you want to use. When you select a press type, a diagram representing the type appears below the **Press Type** list, and the system automatically updates the **Press Size Information** and **Press Attributes** based on the values of the selected press type. If you want to customize your press settings, select the generic press type, rather than a specific manufacturer press type.

6. If necessary, adjust the number of ink keys in the appropriate box under **Press Size**. The number of keys must be between 1–99.

7. If necessary, adjust the size of the ink keys in the appropriate box under **Press Size**. The key size must be between 6mm and 275mm (.235in.–10.2in.). Keys are incremented in .25 mm (.01 in.) intervals.

8. Under **Press Attributes**, select the appropriate key order—progressing from first to last or from last to first.

9. Click **OK** to save the press information.

THE COLOR BARS LIBRARY

To open the **Color Bar Library Manager**, choose **Color Bar** from the **Library** menu. Using the function buttons, you can edit existing color bars, create new color bars, duplicate existing color bars, import and export color bars, and delete color bars.

Requirements for Creating Color Bars

Listed below are Repeat, Stripping, and Paper guidelines to help you create a color bar. These guidelines ensure strip readability by the instrument.

Repeat Requirements

- You can use up to eight inks in a repeat.

- If the paper color is not white, you must include a paper patch in the repeat.

- Repeats can contain the following types of patches: solid ink, 25% tint, 50% tint, 75% tint, two-color overprints, gray balance, paper, and "not used."

- Repeats can be longer than the sheet length.

- The smallest measurable patch width is 3.8 mm, and smallest measurable patch height is 3.2 mm.

- A gap must be greater than a patch width, equal to a patch width, or less than half a patch width. For a gap that is less than half a patch width, add the gap's width to one of the two patches adjacent to the gap. For example, if you have a 5 mm patch with a 1 mm gap, make one of the patches adjacent to the gap 6 mm wide.

- The repeat cannot be symmetric in both directions.

- A patch cannot be wider than a key width.

- Patches of the same color can be adjacent.

Stripping Requirements

- Repeats must be constant in length.

- All repeats, except those at the beginning and end of the sheet, must be full repeats. A masked repeat is considered a full repeat.

- Fractional repeats can only exist at the beginning or end of a sheet.

- Repeats can be masked only in a manner which does not increase the overall length of the repeat (that is, pieces can be covered, but not moved).

- Only paper can reside within the masked region of a repeat.

- A single repeat can be masked into more than two pieces; however, the unmasked portion must contain at least one unique patch.

- Extra non-paper information (patches not defined in the repeat or other marks on the paper) cannot appear between repeats.

- Repeats can be forward, reversed, or both on the same sheet.

- No more than 1024 patches can exist in a single color bar.

- If there is no paper patch in the repeat, there must be paper somewhere in the scan area.

- The color bar can be stripped at a slight angle (with respect to sheet edge), as long as it is within 1.5 inches of the sheet edge for the entire length. It is recommended that any angle be kept to less than 1° for maximum readability during the recognition process.

- The color bar cannot be "bowed." While it can be at a slight angle (as indicated above), it must be in a straight line (the middle of the color bar cannot be higher or lower than both of the ends).

Paper Requirements

- Nominal paper size must remain constant throughout the run. Paper which is cut and re-measured may have patch-to-key assignment differences.

Creating and Editing Color Bars

New color bars are based on a default repeat consisting of the four process ink colors in the sequence of Black, Cyan, Magenta, and Yellow. If you specify more than four inks, these indicators are left "blank" and are numbered from 5–8. (You can use up to eight inks.)

NOTE: The system always uses this default repeat for new color bars.

To create a color bar:

1. From the **Library** menu, choose **Color Bar** to open the **Color Bar Library Manager**.

2. Click **Create**. The **Create Color Bar** dialog box appears.

   NOTE: To edit an exiting color bar, select the color bar you want to edit from the **Names** list, and then click **Edit**. You can then edit the color bar information as explained in steps 6-10.

3. In the **Number of Patches** box, type the total number of patches in the color bar repeat, or use the arrow buttons to select the number of patches.

4. In the **Nominal Patch Width** box, type the nominal patch width, or use the arrow buttons to select the width. As the default, the system assigns this width to all of the patches on the new color bar repeat.

5. Click **OK** to continue and open the **Color Bar** dialog box.

6. In the **Name** box, type a name for the new color bar. You can enter a name of up to 20 characters.

7. If necessary, type any comments about this color bar in the **Comments** box.

8. Under **Color Bar**, set up the color bar repeat (the basic color bar component that may be printed several times, depending on the press sheet width). The system labels each patch icon according to the patch type and ink color. You can add new patches, rearrange patches, and change patch information, as follows:

- Use the **Insert** button to add new patches to the color bar.

- Use the **Cut**, **Copy**, and **Paste** buttons to rearrange the existing patches.

- Use the **Edit Patch** dialog box to define individual patches (such as changing the type of patch, the percent tint, or the ink color).

9. If necessary, click **Change Nominal Width** to open the **Change Nominal Width** dialog box. You can then enter a different width to use as the nominal patch width for the color bar.

10. When you are satisfied with the color bar information, click **OK**. The new color bar name appears in the **Names** list of the **Color Bar Library Manager**.

Adding a Patch to a Color Bar

Use the **Insert** button on the **Color Bar** dialog box to add a new patch to the color bar repeat.

To add a patch:

1. Select the location on the color bar where you want to insert the new patch. The system inserts patches to the *left* of the selected patch.

2. Define the patch type and ink information on the **Edit Patch** dialog box (located below the **Color Bar** dialog box).

3. On the **Color Bar** dialog box, click **Insert** to add the newly defined patch to the color bar.

Rearranging Patches on the Color Bar

Use the **Cut**, **Copy**, and **Paste** buttons on the **Color Bar** dialog box to rearrange the color bar repeat.

To move a patch from the current location and paste in a different location:

1. Select the patch you want to move.

2. Click **Cut**. The patch is removed from the color bar.

3. Select the location on the color bar where you want to insert the patch. The system pastes patches to the *left* of the selected patch.

4. Click **Paste**. The cut patch is pasted to the left of the selected patch location.

To copy a patch to a second location on the color bar:

1. Select the patch you want to copy.

2. Click **Copy**.

3. Select the location on the color bar where you want to insert the copied patch.

4. Click **Paste**. The copied patch is pasted to the left of the selected patch location.

Defining Individual Patches (Color Bars)

Use the **Edit Patch** dialog box to define individual patches on a library color bar. On the **Color Bar** dialog box, select the patch in the color bar repeat that you want to modify. If you are inserting a new patch, select the patch to the right of the location where you want to insert the patch. You can select a patch by clicking it with your mouse, or by using the arrow buttons below the color bar display to move forward and backward through the patches.

To define a patch:

1. Under **Patch Types**, the system displays buttons for each possible patch type (Solid, Overprint, Gray Balance, 75% Tint, 50% Tint, 25% Tint, Not Used, or Paper). Click the button for the type of patch you want to define.

2. Under **Inks**, the system displays individual ink indicators for all of the inks used on the color bar. Select the ink or inks to use on the patch by clicking the appropriate ink indicators in the proper sequence.

   NOTE: If necessary, you can define new ink colors by selecting different colors from one of the color libraries.

3. After you define the patch type, the current information (including the patch type and inks used) appears under **Current Patch Settings**. If necessary, edit the patch identification in the **ID** box.

4. If necessary, edit the patch width in the **Size** box, or use the up and down arrows to adjust the patch size.

5. If you are using a Tint patch, you can edit the screen percentage in the **Screen** box—either type in a new screen percentage or use the arrow buttons to adjust the screen percentage.

6. Your patch setup is now complete. If you were editing an existing patch, re-select that patch on the **Color Bar** dialog box to update the patch information. If you were defining a new patch, click Insert on the **Color Bar** dialog box to add the patch to the color bar.

THE COLORS LIBRARY

The ATD software uses three different types of color libraries:

- The User Color library allows you to add custom colors to ATD and group together commonly used colors for easy access. You can add new colors to the User Color Library by importing colors from other ATD libraries, by manually defining a new color, or by measuring in a color with your handheld instrument.

- The Standard Color library includes 16 commonly used colors (selected and defined by X-Rite, Inc.).

- The Scanned Color library allows you to use your scanning instrument to create a color library.

To access these libraries, choose **Color** from the **Library** menu. This opens the **Select Color** dialog box, where you can add colors to the User Color library and the Scanned Color library, rename and remove colors from the User Color library, and search for a specific color name.

You can also use the **Select Color** dialog box to define ink colors (for ink indicators used on presses, color bars, targets, and spot measurements).

Adding Colors from Other Libraries to the User Color Library

1. From the **Library** menu, choose **Colors** to open the **Select Color** dialog box.

2. From the **Library** list, select the color library which contains the color you want to add to the User Color library. All of the colors in the selected library appear in the list area.

3. From the list area, select the specific color that you want to add to the User Color library.

4. Click **Library Management** to open the shortcut menu. Choose **Add to User Library**. The **Enter Text** dialog box appears.

5. In the **Name** box, type a name for the color.

6. Click **OK** to add the selected color to the User Color library.

Adding Colors to the Scanned Color library

You can use your scanning instrument to add new colors to the Colors library. The Scanned Color library includes colors recognized by the scanning instrument. Each color in the library is assigned "Ink Color #" as the color name, where # is the sequence number of the color (for example, the third color on a color bar is named Ink Color 3).

To scan colors for the Scanned Color library.

1. Place the color bar that you want to scan on the track of the scanning instrument.

2. From the **Library** menu, choose **Colors** to open the **Select Color** dialog box.

3. From the **Library** list, select **Scanned Color Library**. The library can only include colors from a single scan (you cannot add colors from several different scans to the library). If there are no existing colors in the library, the instrument will automatically start to scan the color bar.

   If the library already contains colors, you have to manually initiate the scan. Click **Library Management**, then choose **Re-scan** to start the measurement. The new colors identified from the scan will overwrite any existing colors in the Scanned Color library.

Renaming Colors in the User Color Library

If necessary, you can rename a color in the User Color library.

NOTE: If you rename a color, you will not affect existing Jobs which use the color.

To rename a color:

1. From the **Library** menu, choose **Colors** to open the **Select Color** dialog box.

2. From the **Library** list, select **User Color Library**.

3. All colors in the User Color library appear in the list area. Select the color that you want to rename.

4. Click **Library Management** to open the shortcut menu. Choose **Rename**, and the **Enter Text** dialog box appears.

5. In the **Name** box, type a new name for the selected color.

6. Click **OK** to rename the selected color.

Removing Colors from the User Color Library

If necessary, you can remove unwanted colors from the User Color library. However, once you remove a color, you cannot retrieve the color again.

NOTE: If you remove a color, you will not affect existing Jobs which use the removed color.

To remove a color:

1. From the **Library** menu, choose **Colors** to open the **Select Color** dialog box.

2. From the **Library** list, select **User Color Library**.

3. All of colors in the User Color library appear in the list area. Select the color that you want to remove.

4. Click **Library Management** to open the shortcut menu. Choose **Remove** to delete the selected color.

Importing Colors into the User Color Library

You can import color files with a *.clr extension into the User Color library.

To import colors:

1. From the **Library** menu, choose **Colors** to open the **Select Color** dialog box.

2. From the **Library** list, select **User Color Library**.

3. Click **Library Management** to open the shortcut menu. Choose **Import**. The **Import Color** dialog box appears.

4. From the **Save In** list, select the drive or folder that contains the color file you want to import.

5. The contents of the selected drive or folder appear in the folders list (only color files are displayed). To begin the import process, double-click the appropriate file, or select the file and click **Open**.

Searching for a Color Name

The Search for Color function allows you to search the User Color library for a specific color name.

To search for a color:

1. From the **Library** menu, choose **Colors** to open the **Select Color** dialog box.

2. From the **Library** list, select the **User Color Library**.

3. Click **Library Management** to open the shortcut menu. Choose **Search for Color**, and the **Find Color** dialog box appears.

4. In the text box, type the color name you want to find. Click **OK** to begin the search.

5.   The system searches the current color library for the color name. If it finds a matching color, it automatically selects the color. If no matching color is found, the system displays the message "No match found."

Selecting Ink Colors

Throughout the software, you can use ink indicators to define the inks used in presses, color bars, and spot measurements, as well as the associated targets and tolerances.

The ink indicators represent the actual ink color used in a specific key, color bar, or spot measurement location. Wherever ink indicators appear, you can use the **Select Color** dialog box to determine the color of the actual ink.

To select an ink color from the Select Color dialog box:

1.   Double-click in the ink indicator position you want to edit. The **Select Color** dialog box appears. (Where applicable, you can also click the **Select Color** button to open the dialog box.)

    NOTE: You select ink colors by using a drag-and-drop function, so you cannot select colors if the dialog box overlaps the indicators. If the dialog boxes overlap, move the **Select Color** dialog box by clicking the title bar, holding down the left mouse button, and dragging the dialog box to the new location.

2.   From the **Library** list on the **Select Color** dialog box, select the color library which contains the color you want to use.

3.   All available colors appear in the list area. Select the color you want to use, hold down the left mouse button, and drag the color to the appropriate ink indicator position.

4.   When the paint brush icon appears over the ink indicator, release the mouse button. The system "drops" the color onto the selected ink indicator.

THE TAGS LIBRARY

Tags help you identify jobs or sheets and allow you to associate jobs or sheets with a specific group. You can perform tag management through the **Tags** dialog box, which allows you to add, modify, and delete tags and user tag groups. From the **Library** menu, choose **Tags** to open the **Tags** dialog box.

The **Tags** dialog box organizes tags by category and group. There are two categories of tags, as follows:

•   Job Tags consist of several predefined groups that are used on **Identification** dialog box in the Job Setup wizard. These groups are provided with the system—you cannot add new Job Tag groups or remove existing Job Tag groups. Within these groups, however, you can add, modify, or delete individual tags.

•   User Tags consist of groups and tags defined by the user. You can assign these tags to individual sheets within a job, and then use these tags to filter specific sheets for analysis when using the Statistical Process Control software. You can add, modify, and delete User Tags and User Tag groups.

There are three different types of tags available:

•   Normal tags are User Tags that you can only assign to the current sheet. Normal tags are not stored in groups.

•   Floating tags are User Tags that, once assigned to a specific sheet, are automatically assigned to all following sheets. You can discontinue the Floating tag by manually removing it from the last sheet scanned. Floating tags are not stored in groups.

•   Group tags are the only type of tags which can be stored in groups. All Job tags are group tags. Only one tag within a group can be assigned to a specific sheet. For example, if you create a "Shift" group which contains the tags "Shift 1", "Shift 2", and "Shift 3", only one of the shift tags

can be assigned to any specific sheet. Like Floating tags, Group tags are assigned to all following sheets until manually removed.

Use the following guidelines when you create and edit tags:

- You cannot modify or delete Job Tag or User Tag category names.

- You cannot modify or delete Job Tag group names.

- You can only modify or delete a user-defined group name if the group does not contain individual group tags.

- Any newly created group appears under the User Tags category.

- A tag name can be up to 25 characters long.

- You can only assign Job tags during Job Setup (on the **Job Setup - Identification** dialog box). To assign sheet tags, click the **Tags** button on the Control pane. The **Add or Remove Tags** dialog box appears, and you can change the tag assignments of the current sheet.

Creating and Editing Tags

1. From the **Library** menu, choose **Tags** to open the **Tags** dialog box.

2. Click **Add** to open the **New Tag** dialog box.

   NOTE: To edit an existing tag, select the tag that you want to edit from the list area, then click **Modify**. You can then edit any of the tag information using the steps below.

3. In the **Tag Name** box, type the tag name.

4. Identify what type of tag you want to create by selecting the appropriate option: **Normal**, **Floating**, or **Group**.

5. If this is a Group tag, you must identify the group to use for the tag. From the **Select Group** list, select the group that you want to use.

6. Click **OK**.

Creating and Editing User Tag Groups

1. From the **Library** menu, choose **Tags** to open the **Tags** dialog box.

2. Click **Add** to open the **New Tag** dialog box.

   NOTE: To edit an existing User Tag group, select the group that you want to edit from the list area, then click **Modify**. You can then edit any of the tag information using the steps below.

3. Select the **Group Name** check box to indicate that this is a User Tag group.

4. In the **Tag Name** box, type the name for this group.

5. Click **OK**.

Deleting a Tag or User Tag Group

NOTE: Deleting a tag does not affect previous jobs or sheets which use the selected tag.

1. From the **Library** menu, choose **Tags** to open the **Tags** dialog box.

2. From the list area, select the tag or User Tag group that you want to delete.

3. Click **Delete**. A confirmation message asks you to verify the deletion. Click **Yes** to confirm the deletion.

NOTE: You cannot delete groups that already contain tags.

Add or Remove Tags dialog box

Use the **Add or Remove Tags** dialog box to attach a User Tag to the current sheet. To open the dialog box, click the **Tags** button on the Control Pane (you can also open the dialog box by choosing **Tags** from the **Sheet** submenu on the **Tools** menu).

To add or remove tags from the current sheet:

1. All available tags that are not currently assigned to the sheet appear in the **Available Tags** list. To assign a tag to the current sheet, select the tag in the **Available Tags** list, then click **Add** to move the tag to the **Current Tags** list.

2. All tags that are assigned to the sheet appear in the **Current Tags** list. To remove a tag from the current sheet, select the tag in the **Current Tags** list, then click **Remove** to return the tag to the **Available Tags** list.

3. Click **OK** to assign the selected tags to the current sheet.

THE TARGET AND TOLERANCE LIBRARIES

Target and Tolerance libraries allow you to store frequently used ink data (values and tolerances) for specific patches on a color bar. When you set up a new job, you can use this data for the job's patch targets and tolerances.

You create and edit target and tolerance data through the **Target** and **Tolerance Library Managers**. While these appear as two separate commands on the **Library** menu, you can create and edit both items from either Library Manager. The targets and tolerances correspond on a one-to-one basis; for each target that you create, the system automatically creates the associated tolerance (and, likewise, for each tolerance that you create, the system automatically creates the associated target). The system provides default tolerance values, so you can create a target without necessarily editing the tolerance information. However, if you create a tolerance, you must define the target values.

The system identifies targets and tolerances by the ink names used (e.g., Cyan, Cyan/Magenta/Yellow, etc.). During Job Setup, you can choose to use targets and tolerance values from the libraries as the target and tolerance values for the job. The system selects values by matching ink names in the Target and Tolerance libraries with ink names defined in the job. If an match is found, the system copies those values to the job.

Creating and Editing Shop Targets

1. From the **Library** menu, choose **Target** to open the **Target Library Manager**.

2. Click **Create** to open the **Create Library Entry** dialog box, where you define the type of patch for which you want to create targets. Select the patch type you want to use: **Ink**, **Overprint**, **Gray Balance**, or **Spot Measurement**.

   NOTE: To edit an existing target, select the target that you want to edit from the **Names** list on the **Target Library Manager**, and then click **Edit**. You can edit any of the target information using the steps below.

3. Click **OK** to open the **Target** tab on the **Shop Target and Tolerance** dialog box.

4. Once the **Target** tab is displayed, you can define the target values. As a default, only the **Density** target value is activated. If you want to define all possible target values, select the **Let me change all targets** check box to enable all target values applicable to the patch type. You can then either automatically generate the target values or manually define the target values, as follows:

   - To automatically generate target values, you can either measure colors or select colors from one of the color libraries. You must repeat the measurement or selection process for each ink required for this patch type (Ink and Spot Measurement patch types require one ink; Overprint patch types require two inks; and Gray Balance patch types require three inks). The target values are then automatically generated based on the measured or selected ink colors.

- To manually enter target values, type the target value in each target box. The actual target types available depends on the patch type for which you are creating a target.

5. Type or edit the ink names in each required **Ink #** box. The number of inks required depends on the patch type for which you are creating the target.

   The target (and associated tolerance) is identified by the names of the inks used for this specific patch. For example, if you create a target for a Gray Balance patch type and enter ink names of Cyan, Magenta, and Yellow, that target is identified as Cyan/Magenta/Yellow. If you automatically generated target values by selecting ink colors from the color libraries, the library names of the selected inks are used by default. You can edit these names, if necessary.

6. Select a filter to apply to this target. If you automatically generated target values, the system selects the appropriate filter for use with this target. However, you can select a different filter, if necessary, from the **Filters** list (you can select from Visual, Cyan, Magenta, or Yellow filters).

7. For Ink and Spot Measurement patch types only, select the **Add this Color to User Color Library** check box if you want to use these target values to define a new color in the User Color Library. The color is saved in the User Color Library by the ink name.

8. When you are satisfied with your target settings, you can either select the **Tolerance** tab and adjust the tolerance settings, or you can click **OK** to save the target information and return to the Target Library Manager.

Creating and Editing Shop Tolerances

NOTE: When you create a tolerance, you must also be sure to set the associated target values.

1. From the **Library** menu, choose **Tolerance** to open the **Tolerance Library Manager**.

2. Click **Create** to open the **Create Library Entry** dialog box, where you define the type of patch for which you want to create tolerances. Select the patch type you want to use: **Ink**, **Overprint**, **Gray Balance**, or **Spot Measurement**.

   NOTE: To edit an existing tolerance, select the tolerance that you want to edit from the **Names** list on the **Tolerance Library Manager**, and then click **Edit**. You can edit any of the tolerance information using the steps below.

3. Click **OK** to open the **Tolerance** tab on the **Shop Target and Tolerance** dialog box.

4. Type the ink names in each required **Ink #** box. The number of ink names required depends on the patch type for which you are creating the tolerance: Ink and Spot Measurement patch types require one ink; Overprint patch types require two inks; and Gray Balance patch types require three inks.

   The tolerance (and associated target) is identified by the names of the inks used for this specific patch. For example, if you create a tolerance for a Gray Balance patch type and enter ink names of Cyan, Magenta, and Yellow, that tolerance is identified as Cyan/Magenta/Yellow.

5. The ATD software allows you to define the tolerance settings for three different tolerance widths. Select the width that you want to edit from the options at the bottom right corner of the dialog box: **Narrow**, **Medium**, or **Wide**.

6. As a default, only the **Density** box is activated. If you want to define all possible tolerance values, select the **Let me change all tolerances** check box (located at the bottom right corner) to enable all tolerance values applicable for the patch type. You can further refine which tolerances are used by selecting or clearing the appropriate check boxes to enable or disable the corresponding tolerance type.

7. The system automatically generates tolerance values based on the tolerance width selected. Two values are required for each type of tolerance; the first value represents the Action limit, and the second value represents the Control limit. You can edit any of the default values.

To edit the tolerance values, type the new tolerance value in each appropriate tolerance box. Only those tolerance types appropriate for the current patch type will be available for editing.

Remember that you must manually enable the available tolerance types by selecting the appropriate check box.

8. If you want to edit the tolerance values for more than one tolerance width, repeat steps 6–7 for each tolerance width.

9. Once you are satisfied with your tolerance settings, you can either select the **Target** tab and define the associated target values, or click **OK** to save the changes and return to the **Tolerance Library Manager**.

Working with Projects and Jobs

Each press run that you measure and evaluate is organized within the software as an individual job. A job consists of a specific and unique press, sheet setup, color bar setup, and target/tolerance setup. To help keep your jobs organized, you create projects. A project is a collection of individual jobs.

For example, you may be printing a catalog for one of your customers. If the same press, sheet size, color bar, and related settings are used to print the entire catalog, you can use one job for the entire project. However, if any of these settings are different for parts of the catalog, you can create separate jobs within one project.

By maintaining job and project information, you can easily re-print jobs using the same settings and parameters, and you can use existing job information to create new jobs.

When you first start up the Software, there are no jobs saved in your database. The first time you start the software, the **Select Job** dialog box appears. This dialog box provides you with four options: **Create a New Job**, **Open an Existing Job**, **Import Job**, and **Exit Application**. You can also access these and other job and project maintenance functions from the **Job** menu.

NOTE: Many of the dialogs used for job and project maintenance functions feature a **Refresh** button. When you click this button, the Software re-reads all the projects and jobs in the current directory. If you have rearranged or moved files, click **Refresh** to update the directory contents

CREATING PROJECTS

1. From the **Job** menu, choose **Project Maintenance**, then choose **Create**. The **Project Create** dialog box appears.

2. In the **Project** box, type your new project name.

3. The project is stored in the **Current Directory**. If you want to save the project to a different location, click the **Browse** button (**…**). You can then select a different folder location from the **Select Directory** dialog box.

4. Click **OK** to save the new project.

DELETING PROJECTS

When you delete a project, all of the jobs associated with that project are also deleted from the database. Remember, ATD cannot recover deleted projects or jobs.

To delete a project:

1. From the **Job** menu, choose **Project Maintenance**, then choose **Delete**. The **Project Delete** dialog box appears.

2. From the **Project** list, select the project that you want to delete. All jobs associated with the selected project appear in the **Job** list. You can review this list to make sure that you want to delete this project.

   NOTE: The system only lists projects from the **Current Directory** location. If you want to delete a project that is stored in a different directory location, click the **Browse** button (**…**). You can then select a different folder location from the **Select Directory** dialog box.

3. Click **OK**. A confirmation message asks if you want to delete the selected project. Click **Yes** to delete the project (and all associated jobs), or click **No** to cancel the procedure.

RENAMING PROJECTS

1. From the **Job** menu, choose **Project Maintenance**, then choose **Rename**. The **Project Rename** dialog appears.

2. From the **Existing Project to be Renamed** list, select the project that you want to rename.

   NOTE: The system only lists projects from the **Current Directory** location. If you want to rename a project that is stored in a different directory location, click the **Browse** button (**…**). You can then select a different folder location from the **Select Directory** dialog box.

3. In the **Project's New Name** box, type the new name for the project.

4. Click **OK**.

CREATING A NEW JOB

When you need to define a new press run, you must create a new job. You may also need to create a project within which to group the new job.

To create a new Project and Job:

1. From the **Job** menu, choose **New**. The **Job New** dialog box appears. (You can also open this dialog box by clicking **Create a New Job** on the **Select Job** dialog box)

2. If you want to create the job in an existing project, select the project that you want to use from the **Project** list. If you want to create a new project, type a new project name in the **Project** box.

3. In **Job** box, type a name for the job.

4. The job will be saved in the directory shown in the **Current Directory** field. If you want to save the job to a different location, click the **Browse** button (**…**). You can then select a different folder location from the **Select Directory** dialog box.

5. Click **OK** to save the job information and automatically start the Job Setup wizard for the job.

You can also use the based-on function to create a new job based on an existing job.

CREATING A JOB BASED ON AN EXISTING JOB

At the bottom of the **Job New** dialog box, you can click the **Based On** check box to activate the **Based Job Directory**. This feature allows you to use the parameters of an existing job as the basis for your new job.

To create a new job based on an existing job:

1. From the **Job** menu, choose **New**. The **Job New** dialog box appears. (You can also open this dialog box by clicking **Create a New Job** on the **Select Job** dialog box)

2. If you want to create the job in an existing project, select the project that you want to use from the **Project** list. If you want to create a new project, type a new project name in the **Project** box.

3. In **Job** box, type a name for the job.

4. The job will be saved in the directory shown in the **Current Directory** field. If you want to save the job to a different location, click the **Browse** button (**…**). You can then select a different folder location from the **Select Directory** dialog box.

5. Select the **Based On** check box.

6. From the **Project** list, select the project that you want to use.

   NOTE: The system only lists projects from the **Based Job Directory** location. If you want to select a project that is stored in a different directory location, click the **Browse** button (**…**). You can then select a different folder location from the **Select Directory** dialog box.

7. From the **Job** list, select the job that you want to use as the basis for your new job.

8. Click **OK** to save the new job.

Your new job automatically uses the settings from the based-on job that you selected.

OPENING EXISTING JOBS

1. From the **Job** menu, choose **Open**. The **Job Open** dialog box appears. (You can also open this dialog box by clicking **Open an Existing Job** on the **Select Job** dialog box).

2. From the **Project** list, select the project that contains the job you want to open.

   NOTE: The system only lists projects from the **Current Directory** location. If you want to use a project that is stored in a different directory location, click the **Browse** button (**…**). You can then select a different folder location from the **Select Directory** dialog box.

3. From the **Job** list, select the job that you want to open.

4. Click **OK** to open the selected job.

COPYING JOBS

Use the Copy function to copy the active job.

1. From the **Job** menu, choose **Job Maintenance**, then choose **Copy**. The **Job Copy** dialog box appears. The current project and job information appear at the top of the dialog box.

2. If you want to copy the job to an existing project, select the project that you want to use from the **Project** list. If you want to copy the job to a new project, type a new project name in the **Project** box.

   NOTE: The system only lists projects from the **Current Directory** location. If you want to use a project that is stored in a different directory location, click the **Browse** button (**…**). You can then select a different folder location from the **Select Directory** dialog box.

3. In the **Job** box, type a new name for the job. If you want to overwrite an existing job with the copied job, select the job that you want to overwrite from the **Job** list.

4. Click **OK** to complete the copy procedure. If you are overwriting an existing job, a confirmation message will appear. Click **Yes** to verify the copy procedure.

DELETING JOBS

Use the Delete function to delete the current job. Remember, ATD cannot recover deleted jobs.

1. From the **Job** menu, choose **Job Maintenance**, then choose **Delete**.

2. A confirmation message asks you to verify the deletion. Click **Yes** to delete or **No** to cancel.

3. After the deletion is complete, the **Select Job** dialog box will appear. You can then create a new job, open an existing job, or import a job.

MOVING JOBS

Use the Move function to move the current job to a different project.

To move a job:

1. From the **Job** menu, choose **Job Maintenance**, then choose **Move**. The **Job Move** dialog appears. The current project and job information appear at the top of the dialog box.

2. If you want to move the job to an existing project, select the project that you want to use from the **Project** list. If you want to move the job to a new project, type a new project name in the **Project** box.

   NOTE: The system only lists projects from the **Current Directory** location. If you want to use a project that is stored in a different directory location, click the **Browse** button (**…**). You can then select a different folder location from the **Select Directory** dialog box.

3. In the **Job** box, type a name for the job. If you want to overwrite an existing, select the job that you want to overwrite from the **Job** list.

4. Click **OK** to complete the move procedure. If you are overwriting an existing job, a confirmation message will appear. Click **Yes** to verify the move procedure.

RENAMING JOBS

Use the Rename function to rename the current job.

To rename the currently active job:

1. From the **Job** menu, choose **Job Maintenance**, then choose **Rename**. The **Rename Job** dialog appears.

2. In the **Job Name** box, type a new name for the job.

3. Click **OK**.

IMPORTING JOBS

Use the Import function to import jobs from other ATD systems, or to retrieve jobs that you exported to a different directory location.

To import a job:

1. From the **Job** menu, choose **Import**. The **Import Job** dialog box appears. (You can also open this dialog box by clicking **Import Job** on the **Select Job** dialog box).

2. From the **Look in** list, select the drive or folder which contains the job you want to import.

3. The contents of the selected drive or folder appear in the list area (only files of the appropriate type are displayed). To begin the import process, select the file that you want to import, then click **Open**.

The imported job becomes the current job in the application. You can view job data and edit the job information as you would any other existing job.

EXPORTING JOBS

Use the Export function to save jobs to a different directory location. Exported data can then be restored to the database using the Import function.

To export a job:

1. The current job will be exported. Make sure you have the correct job selected before continuing.

2. From the **Job** menu, choose **Export**. The **Export Job** dialog box appears.

3. From the **Save in** list, select the drive or folder to which you want to export the job.

4. In the **File Name** box, type a name to use for the exported job (the current job name is used by default).

5. Click **Save**.

SENDING JOBS VIA E-MAIL

The Send function allows you to send a job via e-mail if MAPI e-mail support is present. The job file is sent as an e-mail attachment through the resident mail host.

To send a job via e-mail:

1. The current job will be sent. Make sure you have the correct job selected before continuing.

2. From the **Job** menu, choose **Send**. The system first backs up the current job to a temp file.

3. After backing up the file, the ATD system automatically creates a new e-mail message with the current job file included as an attachment. You can enter in the appropriate a-mail address and message information.

Refer to your e-mail application documentation for additional information.

CREATING JOB EXTRACT FILES

You can extract job data in four different formats:

- **X-Tract.** This file format provides job information helpful in pre-press operations. The X-Tract file is used to prepare a color profile of a press. This helps in the creation of film separations which match the press. The X-Tract file is broken down into three different parts: the File Header, the Density Table, and the Spectral Table. The File Header identifies the job and provides other information relevant to the density and spectral data in the file. The Density Table provides densitometric information about the attributes used in the job. The Spectral Table provides reflectance information about the attributes used in the job.

- **Scan Density File (SDF).** This format provides densitometric information about the current job. The SDF is broken down into two parts: the File Header and the Density Table. The File Header identifies the job and provides other information relevant to the density data in the file. The Density Table provides densitometric information about each patch on the color bar.

- **Print Data Analysis (PDA).** This format allows you to exchange press densitometric data between "on-board" scanning systems and a print data analysis (PDA) program. The Print Data Exchange File Format function generates the file format-a cross platform, device-independent file specification-used for this data exchange. You set up the parameters for this type of file on the **File Formats** tab of the Options dialog box.

To create a job extract file:

1. The current job will be extracted. Make sure you have the correct job selected before continuing.

2. From the **Job** menu, choose **Extract Files**, then choose the specific type of file that you want to create. The **Extract File** dialog box appears.

2. From the **Save in** list, select the drive or folder to which you want to extract the current job.

3. In the **File name** box, type the file name you want to use for the job data.

4. Make sure that the proper file type is selected in the **Save as type** list.

4. Click **Save** to extract the current job into the selected format.

JOB STATUS DIALOG BOX

This dialog box allows you to quickly evaluate how your job is performing, sheet-by-sheet. To open the dialog box, click the **Status** button on the Control pane (you can also open the dialog box by choosing **Status** from the **Sheet** submenu on the **Tools** menu). The dialog box lists any Action Limit or Control Limit failures on the current sheet. The system identifies each limit failure by the ink name, patch type, and associated key numbers.

Setting Up Your Job

A job consists of press, sheet, color bar, ink, and target and tolerance information. You use the Job Setup wizard to define these parameters for a new job, or to edit the parameters for an existing job. The wizard walks you through all of the steps necessary to set up your job.

To set up your Job:

1. Start the Job Setup wizard. When you create a new Job, the system automatically starts the Job Setup wizard for the job. You can manually start the wizard by choosing **Setup** from the **Job** menu.

   NOTE: If you are working on a master workstation and this function is unavailable, it may be restricted. If you know the correct password, you can check the settings on the **Restrictions** tab of the **Options** dialog box.

2. On the **Job Setup - Press** dialog box, select the press and inks that you want to use on the Job. Click **Next** to continue.

3. On the **Job Setup - Color Bars** dialog box, assign a color bar to each sheet edge that you are using on the Job. Click **Next** to continue.

4. On the **Job Setup - Summary** dialog box, you can access additional dialog boxes where you can define the targets and tolerances for the Job and enter identifying information for the Job.

5. When you complete the setup process, click **Finish** to complete the setup process without recognizing the Job, or click **Finish and Recognize** to automatically start the Recognition wizard for this Job.

NOTE: If you are editing an existing Job, the software will prompt you to either overwrite the existing Job data with the new data, or to save the new data under a new Job name. On the **Job Changed** dialog box, click **Overwrite** if you want to overwrite the current Job with the new data (all existing sheets will be deleted when you overwrite the Job); click **Save As** to save the new data as a new Job.

After you complete the Job Setup wizard, you can use the **Job Properties** dialog box to review the job data.

PRESS DIALOG BOX

Use the **Job Setup - Press** dialog box to select the specific press that you want to use, select or measure the inks used on the press, and define sheet information.

To set up the press information:

1. Click **Select Press** to open the **Select from Library** dialog box, where you can select the press that you want to use on the job. From the **Names** list, select the press that you want to use, then click **Select**. The name of the selected press appears in the **Press** box, and a diagram of the selected press appears below the **Press** box.

2. To turn specific press keys on or off, click **Manage Keys**. The **Manage Keys** dialog box appears, and you can enable or disable specific keys on the selected press.

3. Using the ink indicators on the press diagram, select the inks that you want to use on the press. You select the inks from one of the color libraries.

   NOTE: To remove an ink from the press, select the ink indicator that you want to remove, then click **Remove Ink**. You can also remove an ink by dragging it off the Press diagram and dropping it onto the Trash Can icon.

4. Under **Sheet Information**, define the sheet that you are using on the job:

- In the **Width** box, type the width of the sheet that you are using for this job, or use the arrow buttons to select the appropriate width.

- The Color swatch represents the sheet color. If you want to define a different color for your sheet, you can select a color from one of the color libraries.

- Define the location of the sheet on the press. If you center your sheet on the press, select **Centered**. If you do not center the sheet, select **Left edge on key**. If you select this option, you must also enter the key number corresponding to the left edge of the sheet. Type the key number in the appropriate box, or use the arrow buttons to select the key number.

5. When you are satisfied with your press settings, click **Next** to continue to the next step in the wizard: Job Setup - Color Bars.

Manage Keys dialog box

Use the **Manage Keys** dialog box to enable or disable specific keys on the current press. To open the dialog box, click **Manage Keys** on the **Press** dialog box of the Job Setup wizard, or choose **Manage Keys** from the **Keys** submenu on the **Tools** menu.

To turn keys on and off:

1. All of the inks used on the press appear as individual options on the right side of the dialog box. To turn keys on or off for a specific ink, select the option button for the ink that you want to use. To turn keys on or off for all inks, select the **Press (all inks)** option.

2. All of the keys on the current press appear in the **Key Status** list. To turn a specific key on, select the check box for that key; to turn a key off, clear the check box for that key.

3. When you finish making your key selections, click **OK** to save the settings and close the dialog box.

COLOR BARS DIALOG BOX

At this step in the Job Setup wizard, you must select the color bars that you want to use on the job.

To set up color bars:

1. The sheet edges (Gripper/Front, Trailing/Front, Trailing/Back, Gripper/Back) are represented with location tabs at the top of the dialog box. The default color bar is automatically assigned to the first tab location. Use the **Add**, **Delete**, **Change**, and **Location** buttons to add color bars to a sheet edge, remove color bars, change color bars, and move color bars to a different location. You can assign up to eight different color bars to each sheet edge.

2. Use the check boxes below the location tabs to further define individual color bars:

- Select the **Flopped on sheet** check box if the current color bar repeat (the color bar selected on the current location tab) is reversed on your sheet.

- Select the **Off during makeready** check box if the current color bar is not used during the makeready phase.

3. When you finish setting up all of the color bar information, click **Next** to continue to the next step: Job Setup - Summary.

Adding Color Bars to a Sheet Edge

1. On the **Job Setup - Color Bars** dialog box, select the location tab to which you want to add a color bar. For example, if you want to add a color bar to the Gripper/Front edge, select the **Gripper/Front** tab.

2. Click **Add**. The **Select From Library** dialog box appears.

3. From the **Names** list, select the color bar you want to use.

SETTING UP YOUR JOB

4. Click **Select**. The system adds the color bar to the current location.

Removing Color Bars from a Sheet Edge

1. On the **Job Setup - Color Bars** dialog box, select the location tab which contains the color bar you want to remove. For example, if you want to remove a color bar from the Gripper/Front edge, select the **Gripper/Front** tab.

2. All of the color bars assigned to the current location appear in the list area below the tab. Select the color bar that you want to remove.

3. Click **Delete**.

Changing Color Bars on a Sheet Edge

1. On the **Job Setup - Color Bars** dialog box, select the location tab which contains the color bar you want to change. For example, if you want to change a color bar on the Gripper/Front edge, select the **Gripper/Front** tab.

2. All of the color bars assigned to the current location appear in the list area below the tab. Select the color bar that you want to change.

3. Click **Change**. The **Select From Library** dialog box appears.

4. From the **Names** list, select the color bar that you want to use.

5. Click **Select**. The new color bar replaces the previous color bar on the current location.

Moving a Color Bar to a Different Sheet Edge

1. On the **Job Setup - Color Bars** dialog box, select the appropriate location tab based on the sheet edge you want to use. For example, if you want to move a color bar that is currently located on the Gripper/Front edge, select the **Gripper/Front** tab.

2. All of the color bars assigned to the current location appear in the list area below the tab. Select the color bar that you want to move.

3. Click **Move**. The **Colorbar Location** dialog box appears.

4. Under **New Location**, select the location to which you want to move the color bar.

5. Click **OK**. The system removes the color bar from the previous location and moves it to the newly selected location.

SUMMARY DIALOG BOX

The **Job Setup - Summary** dialog box displays a summary of the ink target values and provides access to advanced job setup functions: Targets and Tolerances and Identification.

To finalize your job setup:

1. Define the targets and tolerances to use for the job. Click **Targets and Tolerances** to open the **Job Setup - Targets and Tolerances** dialog box, where you can set up specific target and tolerance values for the job.

2. Enter the necessary data to identify the job. Click **Identification** to open the **Job Setup - Identification** dialog box, where you can enter job-specific information and assign Job tags.

4. When you have set up all of the advanced job functions, you can click **Finish** to save the job data without proceeding to the Recognition wizard, or you can click **Finish and Recognize** to automatically advance to the Recognition wizard.

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TARGETS AND TOLERANCES DIALOG BOX

The **Job Setup - Targets and Tolerances** dialog box is organized into several different areas. Use the different options to either manually define target and tolerance values or use values from the Target and Tolerance libraries; to determine the tolerance width used on the job, to select the types of tolerances to use on the job, and to set up tolerance factors.

To set up the target and tolerance information:

1. Determine how you want to define target and tolerance values:

   - If you want to manually define the target and tolerance values for a specific patch type, use the buttons under **Set Targets and Tolerances for**.

   - If you want to values from the Target and Tolerance libraries as the target and tolerance values for the job, use the buttons under **Reset values to**. Click **Shop Targets** to reset *all* job targets to the values from corresponding targets in the Target library; click **Shop Tolerances** to reset all job tolerances to the values from corresponding tolerances in the Tolerance library. The library target and tolerance values are only used if an ink or ink combination used in the job matches up identically to the name of a target or tolerance library item.

2. Select the tolerance width that you want to use as the basis for evaluating measurement data. Under Tolerance width, select the width for the job: **Narrow**, **Medium**, or **Wide**.

3 Determine what types of tolerances you want to use for the job:

   - If you only want the system to use Density target and tolerance information during the makeready phase, select the **Only watch only density during makeready** check box.

   - If you want to enable all tolerances (or enable specific types of tolerances) during the makeready phase, click **Enable all Tolerances**. This opens the **Enable all Computations** dialog box, where you can enable or disable specific tolerance types for each patch type.

4. If necessary, edit the tolerance factors. These factors are used to generate default values for medium and wide tolerances. For example, if the medium tolerance factor is set at 2.0, then the medium tolerance values will be twice the narrow tolerance values. If a narrow tolerance Action *limit* is set at 2.0, and the medium tolerance *factor* is set at 2.0, then the corresponding medium tolerance Action limit = 4.0. To change the tolerance factors, click **Set Factors**. This opens the **Set Factors** dialog box. Enter the medium and wide factors in the appropriate fields, then click **OK** to set the new factors.

5. When you finish setting up the target and tolerance information, you can either click **Back** to return to the **Job Setup - Summary** dialog box, or you can click **Finish** to exit the Job Setup wizard.

Manually Defining Target and Tolerance values

1. Under **Set Targets and Tolerances for**, click the button corresponding to the patch type you want to edit. For example, if you want to set target and tolerance values for inks used on Gray Balance patch types, click **Gray Balance**. This opens the **Job Targets and Tolerances** dialog box.

2. Use the **Target** and **Tolerance** tabs to manually define the values for the job.

3. When you are satisfied with your settings, click **OK** to return to **the Job Setup - Targets and Tolerances** dialog box.

Job Targets and Tolerances dialog box

Use the **Job Targets and Tolerances** dialog box to define target and tolerance values for each ink and patch type used on the job. Use the **Targets** tab to set the target values, and the **Tolerances** tab to set the tolerance values. To open the dialog box, click the appropriate button under **Set targets and tolerances for** on the **Job Setup - Targets and Tolerances** dialog box .

To set up target values for the selected patch type:

1. Select the **Targets** tab on the **Job Targets and Tolerances** dialog box.

2. As a default, only the **Density** target box is activated. Select the **Let me change all targets** check box if you want to edit all applicable target values for this patch type.

   NOTE: If you selected the **Only watch density during makeready** check box on the **Defaults** tab of the **Options** dialog box, you can only edit the Density target values.

3. Each ink or ink combination associated with this patch type appears in the **Ink** list. Select the ink or ink combination that you want to edit.

4. Type the target value in each of the available target type boxes.

   As an alternative, you can click **Set to Shop Target** to use target values from an identical item in the Target library. The Set to Shop Target function differs from the Shop Target function on the **Job Setup - Targets and Tolerances** dialog box, as it allows you to use shop target values for one specific ink or ink combination, rather than updating target values for all inks.

5. To change the filter used to read the target values for the current ink, you can select a different filter from the **Filter** list.

6. If you edit any values for a specific ink (including setting the values to the shop target), a check mark appears next to that ink. You can click **Reset from Ink** to restore the target values to the original settings.

7. Repeat steps 3–6 for any other inks or ink combinations. When you finish setting up the targets, you can either click **OK** to return to the **Job Setup - Targets and Tolerances** dialog box, or you can select the **Tolerances** tab to edit tolerance values for this patch type.

To set up tolerance values for the selected patch type:

1. Select the **Tolerance** tab on the **Job Targets and Tolerances** dialog box.

2. As a default, only the **Density** tolerance boxes are activated. Select the **Let me change all tolerances** check box if you want to edit all applicable tolerance types.

   NOTE: If you selected the **Only watch density during makeready** check box on the **Defaults** tab of the **Options** dialog box, you can only edit the Density tolerance values.

3. Under **Width**, you can select from Narrow, Medium, and Wide options. The selected option determines which tolerance values are displayed. Therefore, you should select the appropriate tolerance width (the width values that you want to edit) before changing the tolerance values for each item. This setting only indicates which tolerance values are displayed and can be edited; it does not determine which tolerance width is currently in use for the job. That is determined under **Tolerance Width** on the **Job Setup - Targets and Tolerances** dialog box.

4. Each ink or ink combination associated with this patch type appears in the **Ink** list. Select the ink or ink combination that you want to edit.

5. To enable a specific tolerance for the selected ink, select the check box next the tolerance value box.

6. You can manually edit the Action and Control tolerance values based on the selected tolerance width; select the tolerance value box that you want to edit, then type the new tolerance value.

   As an alternative, you can click **Set to Shop Tolerance** to use the tolerances from an identical item in the Tolerance library. The Set to Shop Tolerance function differs from the Shop Tolerance function on the **Job Setup - Targets and Tolerances** dialog box, as it allows you to use shop tolerances for one specific ink or ink combination, rather than updating tolerance values for all inks.

7. Repeat steps 4–6 for any other inks or ink combinations. If you make any changes to the tolerance, a check mark appears next to that ink in the list area. When you finish setting up the tolerances,

you can either click **OK** to return to the **Job Setup - Targets and Tolerances** dialog box, or you can select the **Targets** tab to edit target values for this patch type.

Enable All Computations dialog box

Use the **Enable All Computations** dialog box to enable or disable specific tolerance types for each patch type. The dialog box includes columns for each patch type, and rows for each tolerance type.

To enable a tolerance for a specific patch type, select the appropriate check box. For example, to enable the Hue Error tolerance for a Solid patch type, select the **Hue Error** check box in the **Solid** column.

NOTE: If you selected the **Only watch density during makeready** check box on the **Defaults** tab of the **Options** dialog box, you can only use the Density tolerance type during the makeready phase of the job.

When you finish setting up the tolerance information, click **OK** to save the new settings.

IDENTIFICATION DIALOG BOX

Use this dialog box to assign comments and tags to the job.

To enter job identification information:

1. In the **Comments** box, type any special notes or comments regarding this job.

2. Select the **Use Dynamic Auto-Tracking** check box if you want to system to verify the location of each color before measuring.

   NOTE: This check box does not appear if you have a battery-operated scanning head.

3. From the **Status** list, select the status to use for calculating and displaying density information.

4. The **Absolute** and **Minus Paper** options indicate the type of information used to calculate density data. Select **Absolute** to include the substrate (paper) data in the density calculations. Select **Minus Paper** if you do not want to include the substrate data in density calculations.

5. Under **Job Tags**, you can assign tags to the job. You can either enter new Job tags or select from a list of existing Job tags (where applicable). Type the tag text directly in the list box below the tag type name, or select an existing tag from the list. Available tag types include:

   - **Paper Type** - Use to describe the type of paper used in the job.

   - **Basis Weight** - Use to describe the weight of the paper used in the job.

   - **Fountain pH** - Use to describe press fountain pH level.

   - **Fountain Supplier** - Use to identify the press fountain supplier.

   - **Blanket Type** - Use to describe the press blanket type.

   - **Blanket Supplier** - Use to identify the press blanket supplier.

   - **Ink Type** - Use to describe the press ink type.

   - **Ink Supplier** - Use to identify the ink supplier.

   - **Plate Type** - Use to describe the type of press plate.

   - **Plate Supplier** - Use to describe the plate supplier.

   - **Film Ruling** - Use to describe the type of film ruling.

   - **Film Supplier** - Use to describe the film supplier

7. When you finish entering the identification information, click **Finish** to complete the Job Setup wizard, or click **Back** to return to the **Job Setup - Summary** dialog box.

JOB PROPERTIES DIALOG BOX

Use the **Job Properties** dialog box to review the setup information for the current job. To open the dialog box, choose **Properties** from the **Job** menu.

The **Job Properties** dialog box includes four tabs which correspond to similar dialog boxes in the Job Setup wizard:

- The **Press** tab displays information from the **Job Setup - Press** dialog box.

- The **Color Bar**s tab displays information from the **Job Setup - Color Bars** dialog box.

- The **Identification** tab displays information from the **Job Setup - Identification** dialog box.

- The **Targets and Tolerances** tab displays information from the **Job Setup - Targets and Tolerances** dialog box.

While you can use these tabs to view the job parameters, you can only make minor changes through this dialog box. To edit your job, use the Job Setup wizard.

Recognizing Your Job

After you create and set up a job, you must recognize the job to ensure that the job information is correct. You must also re-recognize a job whenever you change job information that affects the color bar (such as ink colors, repeat patterns, or press type).

The ATD software incorporates an automated color bar recognition system: the Recognition wizard. The wizard locates each color bar used on the job, and attempts to verify the recognized color bar data with the color bar data that you defined during job setup. It then reports any discrepancies that exist between the measured color bar and the color bar defined for the job. Each step in the recognition process is displayed as a unique dialog box, with instructions to guide you through the procedure.

You can start the Recognition wizard in several ways:

- You can run the Recognition wizard directly from the Job Setup wizard. After you set up all necessary job data, click **Finish and Recognize** on the **Job Setup - Summary** dialog box.

- If available, click **Recognize** on the Control Pane. (The **Recognize** button is only available if the current job has not yet been recognized.)

- Press the button on your scanning instrument.

- From the **Instrument** menu, choose **Recognize**. This is the only way to initiate a re-recognition of a job. Before performing a re-recognition, the system asks you to confirm that you want to perform a new recognition. If you choose to re-recognize the job, you will lose all existing sheets associated with the job.

Each step in the recognition process appears as a unique dialog box, with instructions to guide you through the procedure. The wizard progresses slightly differently depending on whether or not you are using the Auto-Advance function. In addition, the wizard may progress differently based on your selections in the initial dialog boxes.

The Recognition wizard consists of the following dialog boxes:

- **Select Recognition Type** dialog box
  If you are not using the Auto-Advance function, this dialog box appears as the first step in the wizard. Use this dialog box to select the type of recognition that you want to perform

- **Find Color Bars** dialog box
  If you are using the Auto-Advance function, this dialog box appears as the first step in the wizard. If you are not using Auto-Advance, this dialog box only appears if you chose to find, scan, and recognize each color bar. At this step in the wizard, you can edit the color bar information before performing the actual recognition.

- **Select Color Bars** dialog box
  This dialog box only appears if you chose to select specific color bars for recognition. Here you select which color bars you want to recognize.

- **Scan and Recognize** dialog box
  At this step, you can review the color bar as scanned by the instrument, and make any corrections necessary before accepting the recognition data.

- **Reposition Sheet** dialog box
  If you have color bars on more than one edge of the sheet, this dialog box will prompt you to reposition the sheet so that the instrument can read the next edge.

- **Final Results** dialog box
  After all color bars on all sheet edges have been recognized, this dialog box displays a summary of the recognition information.

SELECT RECOGNITION TYPE DIALOG BOX

If you are not using the Auto-Advance function, you can select how you want to recognize the color bars. Two recognition types are available: you can find, scan, and recognize each color bar on the sheet, or you can select specific color bars to scan and recognize.

To select the recognition type:

1. Under **Types of Recognition**, select how you want to recognize data. Select **Find, Scan, and Recognize each color bar** if you want the system to automatically locate, scan, and recognize *every* color bar on the sheet. Select **Scan and Recognize selected color bars** if you want to select specific color bars for re-recognition.

   NOTE: The **Scan and Recognize…** option is only available if you are performing a re-recognition of a previously recognized job.

2. Click **Next** to continue. If you selected the **Find, Scan, and Recognize…** option, the **Find Color Bars** dialog box appears. If you selected the **Scan and Recognize…** option, the **Select Color Bars** dialog box appears.

SELECT COLOR BARS DIALOG BOX

This dialog box appears if you chose to scan and recognize selected color bars. Here you select the specific color bars you want to re-recognize. Since this option is only available for jobs which have already been recognized, the system does not need to find the color bars.

All color bars on the first edge appear in the list area. Select each color bar that you want to re-recognize. Click **Next** to continue to the next step: the **Scan and Recognize** dialog box.

FIND COLOR BARS DIALOG BOX

If you are using the Auto-Advance function, this dialog box appears as the first step in the wizard. It also appears if you chose to find, scan, and recognize all of the color bars on the job. Here you can select and prepare each color bar for recognition.

NOTE: The **Find Color Bars** dialog box appears for each edge of the sheet that contains color bars. If your job includes color bars on more than one edge of the sheet, the system will return to this dialog box after you have located, scanned, and recognized the color bars on each edge.

The first time the **Find Color Bars** dialog box appears, the scanning instrument locates all color bars on the current sheet edge. The system displays a message informing you that scanning is in process as the scanning instrument measures the current edge. After this initial scan has been successfully completed, the system displays the color bar information in the list area of the dialog box.

To find color bars:

1. If necessary, click **Find Color Bars** to re-scan the current edge.

2. From the list area, select the color bar that you want to recognize.

3. If you want to edit the color bar setup, click **Edit Color Bars on this Edge**. You can then modify the color bar repeat using the **Job Setup - Color Bars** dialog box.

4. If the color bar you want to recognize is not displayed in the list area, you may need to manually define specific location of the color bar on the current sheet edge. Click **Specify Position** to set the X and Y values on the **Recognition Wizard - Specify Position** dialog box.

5. If the instrument is not accurately reading the color bar, you may want to adjust the default offset positions from the sheet edges. These values represent the distance the scanning head covers before reading the color bar data. Under **Options**, type the correct values or use the arrow buttons to select the values.

6.   When you are ready to recognize the selected color bar, click **Next**. The system automatically scans and recognizes the color bar, then displays the recognition information in the **Scan and Recognize** dialog box.

> **NOTE:** The system recognizes each color bar individually. If there are multiple color bars on this sheet edge, the system will return to this dialog box after the first color bar has been recognized. You can then recognize the next color bar on the current sheet edge.

SPECIFY COLOR BAR POSITION DIALOG BOX

If you cannot identify the current color bar in the list on the **Find Color Bars** dialog box, you can use the **Specify Color Bar Position** dialog box to manually define the starting and ending location of the current color bar.

You specify the color bar position by entering the offset positions of the color bar. In the **X** and **Y** boxes for the left and right edges, type the correct value, or use the arrow buttons to select the value.

Once you have entered the correct values, click **Next** to move to the next step: Scan and Recognize.

SCAN AND RECOGNIZE DIALOG BOX

After the software recognizes the current color bar, it displays the color bar data in the **Scan and Recognize** dialog box. You can adjust the color bar parameters if necessary, and when you are satisfied with the results, you can accept the recognition data

To review, adjust, and accept color bar information:

1.   Identify any errors in the recognition. Under **Recognition Statistics**, the system displays the percentage of the color bar which was actually recognized, the number of patches in the color bar, and the number of "duds".

> **NOTE:** A dud refers to any patch type which should include useful information (including patches defined as unused or as paper patches), but which was not recognized as a valid patch during the scan.

A visual representation of the color bar is displayed in the center of the dialog box. You can move the display to the next dud patch by clicking **Next Dud**. (If there are no duds, the **Next Dud** button is unavailable). Any patch which is identified as a dud is not used in subsequent scans. If it is not recognized now, you cannot use that patch data for later analysis when measuring sheets for the job.

2.   If the library color bar and the recognized color bar are not properly aligned, click **Adjust Repeats**. You can then re-align the color bars on the **Adjust Repeats** dialog box.

3.   If any of the patch information is incorrect, click **Adjust Patches**. You can then edit the patch data on the **Adjust Patches** dialog box.

4.   If you want to edit ink information or change some of the press settings, click **Job Setup**. This opens the Job Setup wizard; while you cannot edit all of the job setup information, you can add, remove, or change inks; reorder inks in the press or color bar; change the sheet color; and change the width of keys on the press. If any you change any of the color bar data, you must re-scan the color bars.

5.   If you changed the color bar data and need to re- recognize the updated color bar information, use the **Scan** and **Recognize** buttons. Click **Scan** to re-scan the sheet edge and re-recognize the color bar; click **Recognize** to perform a new recognition.

6.   When you are satisfied with the color bar data, click **Next** to accept the recognition and continue. The next step depends on your individual job:

- If this is the last (or only) color bar in the job, the recognition process is complete. The **Final Results** dialog box appears.

- If there are additional color bars on the current edge, the **Find Color Bars** dialog box appears. You must repeat the scan and recognition process for each color bar on the current edge.

- If all color bars on the current sheet edge have been recognized and there are color bars located on other edges of the sheet, the **Reposition Sheet** dialog box appears. You are then prompted to reposition the sheet so the color bars on the next edge can be scanned and recognized.

Adjust Repeats dialog box

Use the **Adjust Repeats** dialog box to edit the repeat (the sequence of patches) of the current color bar. The dialog box displays two color bar repeats. The repeat as set up in the Color Bar library appears first, and the repeat as it was identified on the last recognition appears below it.

To align the color bars, use the scroll bars to properly match up the repeat sequence. You can then "lock" the alignment into place by selecting corresponding patches in each color bar. If necessary, you can click **Reverse** to reverse the order of the Library color bar repeat.

When you have properly aligned the color bars, click **OK**.

Adjust Patches dialog box

Use the **Adjust Patches** dialog box to individually change patch assignments on the current color bar. The color bar name and comments, as entered during job setup, appear at the top of the dialog box. A diagram of the recognized color bar appears at the bottom of the dialog box. Use the horizontal scroll bar to move through diagram, or click **Next Dud** to move to the next dud in the color bar repeat.

To edit a specific patch on the color bar:

1. On the color bar display, select the patch that you want to edit.

2. If you want to change the patch type or inks, select the **Show Patch Editor** check box. The **Edit Patch** dialog box appears, and you can edit the patch type, inks, and related patch information.

3. To change the key assignment for a specific patch, select the patch, then enter the appropriate key number in the **Key** box.

4. To change a patch to a "not used" patch type, select the patch, then select the **Not Used** check box.

5. When you finish making changes, click **OK** to save the new patch settings.

REPOSITION SHEET DIALOG BOX

This step only appears if the job includes color bars on more than one sheet edge. After all of the color bars on the first edge have been recognized, the **Reposition Sheet** dialog box prompts you to move the sheet so the color bars on the next edge can be recognized.

After you correctly position the sheet, click **Next** to continue. The **Find Color Bars** dialog box appears.

FINAL RESULTS DIALOG BOX

After the recognition process is complete (the system has successfully recognized each color bar used on the job, or each color bar that you selected for re-recognition), the **Final Results** dialog box appears. This dialog box lists the name of the color bars, the total number of patches on each color bar, the number of duds, and the final recognition percentage.

If you want to use these recognition scans to create the first sheet of the job, select the **Use initial scan(s) as the first sheet in the job** check box. The system will automatically create a sheet based on the recognition scans. Click **Finish** to complete the recognition process. You can then use the Measurement wizard to start measuring sheets for the job.

Measuring Your Job

The Measurement wizard walks you through each step required to add the sheet data to the job. It prompts you to measure each color bar defined on the sheet. Each step in the measurement process appears as a unique dialog box, with instructions to guide you through the procedure.

To measure a sheet:

1. From the **Instrument** menu, choose **Scanning**, then choose **Measure**. This starts the Measurement wizard. (You can also click **Measure** on the Control Pane to start the wizard).

2. The system measures the first color bar on the current sheet edge and displays the measurement data on the **Measure Color Bars** dialog box. After you accept the measured data, the process is repeated for each color bar on the current sheet edge.

3. If the job includes color bars on more than one edge of the sheet, the **Reposition Sheet** dialog box appears. After you correctly position the sheet, the **Measure Color Bars** dialog box appears for the first color bar on the new sheet edge.

MEASURE COLOR BAR DIALOG BOX

Once started, the Measurement wizard automatically measures the first color bar on the current sheet edge, then displays the color bar data in this dialog box.

If necessary, you can click **Measure** to re-measure the color bar. If you want the system to verify the location of the color bar before measuring, select the **Use Dynamic Auto-Tracking on this measurement** check box.

NOTE: This check box does not appear if you have a battery-operated scanning head.

A diagram of the measured color bar appears in the center of the dialog box. You can use the horizontal scroll bar to move through the diagram, or you can click **Next Dud** to move to the next dud patch. (If there are no duds, the **Next Dud** button is unavailable).

When you are satisfied with the current measurement, click **Next** or **Finish**, as applicable:

- If there are additional color bars on the current edge, click **Next** to repeat the measurement process. Continue until all color bars on the current edge are measured.

- If you have measured all the color bars on the current sheet edge, but need to measure color bars on a different edge of the sheet, click **Next** to open the **Reposition Sheet** dialog box.

- If this is the last (or only) color bar, the measurement process is complete. Click **Finish** to exit the wizard. You can view the sheet data in the current job window, and print a report of the data if necessary.

NOTE: If you are using the Auto-Advance function, the software will automatically close the wizard at this point.

REPOSITION SHEET DIALOG BOX

This step only appears if the job includes color bars on more than one sheet edge After all the color bars on the first sheet edge have been measured, the **Reposition Sheet** dialog box prompts you to move the sheet so the color bars on the next edge can be recognized.

After you correctly position the sheet, click **Next** to return to the **Measure Color Bars** dialog box.

Retargeting Your Job

Use the Retarget function to specify new target values for the job. The effect of retargeting is based on the setting of the **Retarget All Sheets Whenever Targets change** check box on the **Defaults** tab of the **Options** dialog box. If you select this check box, all sheets on the job are retargeted to the new values. If you do not select this check box, only new sheets (sheets measured after you retarget the job) use the new target values.

NOTE: You cannot retarget a job from a satellite workstation.

You retarget your job using the **Retarget** dialog box. From the **Job** menu, choose **Retarget** to open the dialog box. (You can also click **Retarget** on the Control Pane to open the dialog box). You can use several different methods to retarget your job.

RETARGETING THE JOB TO THE CURRENT SHEET

1. From the **Job** menu, choose **Retarget**. The **Retarget** dialog box appears.

2. If you want to move the job to the production phase, select the **Enter Production** check box. If you select this check box, the system tags every new sheet as a production sheet.

3. Click **Set Sheet # as OK Sheet**. The system retargets the job using the values from the current sheet.

NOTE: If you use this method of retargeting, an icon will appear next the **Retarget** button on the Control Pane to indicate that the job was retargeted.

You can also use the **Retarget** command on the **Sheet** submenu of the **Tools** menu to retarget the job to the current sheet.

RESETTING THE JOB TO ORIGINAL TARGET VALUES

1. From the **Job** menu, choose **Retarget**. The **Retarget** dialog box appears.

2. If you want to move the job to the makeready phase, select the **Enter Makeready** check box. When this check box is selected, you can also select the **Only watch density during makeready** check box if you only want to use the Density tolerance values during the makeready phase of the job.

3. Click **Reset to Original Targets**. The system restores the job targets to the original target settings.

MANUALLY DEFINING NEW TARGET VALUES

1. From the **Job** menu, choose **Retarget**. The **Retarget** dialog box appears.

2. If you want to move the job to the makeready phase, select the **Enter Makeready** check box. When this check box is selected, you can also select the **Only watch density during makeready** check box if you only want to use the Density tolerance values during the makeready phase of the job.

3. Click **Change Targets**. The **Job Targets** dialog box appears.

4. As a default, only the **Density** target box is activated. Select the **Let me change all targets** check box if you want to edit all applicable target values for this patch type.

NOTE: Depending on the current job phase (makeready vs. production) and the setting of the **Only watch density during makeready** check box, you may not be able to edit all of the target values

5. From the **Inks** list, select the ink or ink combination that you want to edit.

6. Type the new target value in each of the available target type boxes.

   As an alternative, you can click **Set to Shop Target** to use target values from an identical item in the Target library.

7. To change the filter used to read the target values for the current ink, select a different filter from the **Filter** list.

8. If you edit any values for a specific ink (including setting the values to the shop target), a check mark appears next to that ink. You can click **Reset from Ink** to restore the target values to the original settings.

9. Repeat steps 5–8 for any other inks or ink combinations.

11. Click **OK** to use the new target values on the job.

CHANGING THE STATE OF A JOB

1. From the **Job** menu, choose **Retarget**. The **Retarget** dialog box appears.

2. If you want switch the job to the makeready phase, click **Enter Makeready Now**. (This button is only available if the job is currently in the production phase.)

3. If you want to switch the job to the production phase, click **Enter Production Now**. (This button is only available if the job is currently in the makeready phase.)

Retolerancing Your Job

The Retolerance function allows you to specify new tolerance values for the job. The system uses the new tolerance values for all new measurements.

NOTE: You cannot retolerance a job from a satellite workstation.

You retolerance your job using the **Retolerance** dialog box. From the **Job** menu, choose **Retolerance** to open the dialog box. (You can also click **Retolerance** on the Control Pane to open the dialog box.)

MANUALLY DEFINING NEW TOLERANCE VALUES

1. From the **Job** menu, choose **Retolerance**. The **Retolerance** dialog box appears.

2. Under **Tolerance** width, select the tolerance width that you want to use for the job.

3. If you want to move the job to the makeready phase, select the **Enter Makeready** check box. When this check box is selected, you can also select the **Only watch density during makeready** check box if you only want to use the Density tolerance values during the makeready phase of the job.

4. Click **Change Tolerances**. The **Job Tolerances** dialog box appears.

5. As a default, only the **Density** tolerance boxes are activated. Select the **Let me change all tolerances** check box if you want to edit all applicable tolerance types.

   NOTE: Depending on the current job phase (makeready vs. production) and the setting of the **Only watch density during makeready** check box, you may not be able to edit all of the tolerance values

6. Under **Width**, you can select from **Narrow**, **Medium**, and **Wide** options. The selected option determines which tolerance values are displayed. Therefore, you should select the appropriate tolerance width (the width values that you want to edit) before changing the tolerance values for each item. This setting only indicates which tolerance values are displayed and can be edited; it does not determine which tolerance width is currently in use for the job. That is determined under **Tolerance Width** on the **Retolerance** dialog box.

7. From the **Inks** list, select the ink or ink combination that you want edit.

8. To enable a specific tolerance for the selected ink, select the check box next to the tolerance value box.

9. You can manually edit the Action and Control tolerance values based on the selected tolerance width; select the tolerance value box that you want to edit, then type the new tolerance value.

   As an alternative, you can click **Set to Shop Tolerance** to use the tolerances from an identical item in the Tolerance library.

10. Repeat steps 7–9 for any other inks or ink combinations. If you make any changes to the tolerance, a check mark appears next to that ink in the list area.

11. Click **OK** to use the new tolerance values on the job.

ENABLING AND DISABLING TOLERANCE TYPES

1. From the **Job** menu, choose **Retolerance**. The **Retolerance** dialog box appears.

2. Under **Tolerance** width, select the tolerance width that you want to use for the job.

3. Click **Enable All Tolerances**. The **Enable all Computations** dialog box appears, where you can select which tolerance types you want to use.

4. When you finish making your selections, click **OK** to use the new tolerance settings.

Viewing Job Data

Measurement data for each open job is displayed in individual job windows on the ATD desktop. The type of data displayed is based on the current key and sheet selected on the Control pane, and the current view type selected on the job window. Within the individual views, you can customize the job window by adding and removing graphs, changing the sheet range or key range used, and turning specific press keys on or off.

THE VIEW TYPES

There are three different view types, which you can activate by selecting the appropriate tab at the bottom of the job window (or by choosing the desired view from the **View** menu):

- Key Trend View

- Sheet Trend View

- Press Status View

The Trend views allow you to view multiple keys or sheets at one time. Using these views, you can then identify trends in your press run. There are common functions within the Key Trend and Sheet Trend views. These views display the same type of data from two different perspectives. Key view graphs show data for each key on a single sheet, while Sheet view graphs show data for each sheet at a single key location. The graph data exists in a three-dimensional space consisting of an attribute, the time, and location.

Using the Key Trend View

The Key Trend View displays measurement data in a bar graph. One graph is displayed for each ink color used on the job. Within each graph, a single bar is displayed for each key used on the job; each bar represents the actual or difference value of the attribute for the selected sheet at that specific key location. You can use the Sheet slider on the Control Pane to view key trend data for other sheets in the job.

The graph bars are color-coded to indicate status: if the value is within all tolerance limits, it is displayed in green; if it extends outside of the action limits, but is within the control limits, it is displayed in yellow; if it extends outside the control limits, it is displayed in red. If no limits have been defined, the graph bars are displayed in white.

You can view the key trend values by "hovering" over the desired key with your mouse pointer (position the cursor over the key and pause until text appears). A description box displays the key number and either the actual or difference value, as applicable. You can display all key trend values by choosing **Show Key Trend Values** from the **Graph** menu.

You can view either Difference data or Actual data. To change between the two options, choose **Make all Difference** or **Make All Actual** from the **Graph** menu. Data appears differently depending on your selection, as follows:

- When difference values are plotted on the Key Trend graph, the vertical graph bars are plotted either upwards or downwards from the center of the graph (the X-axis). The vertical bars are plotted from the center axis based on the magnitude and direction of difference for a given key. If action and control limits are set for an attribute, horizontal lines show the action and control limits (the graph lines are displayed in yellow and red, respectively).

- When actual values are plotted on the Key Trend graph, the vertical graph bars are plotted upwards from the bottom of the graph (the X-axis). The magnitude of the vertical bar is based on

the actual value of the attribute—not on the difference between it and its target value—for the selected key.

To display more detailed data, you can use the Zoom mode.

Using the Sheet Trend View

The Sheet Trend View plots individual points on the graph to represent each measurement. Each point represents one sheet, and multiple sheet measurements are displayed as a line graph. This line graph shows measurement trends from one sheet to the next. (A maximum of 30 sheets can be displayed on a single graph). The color of the points indicate the status: if a point is within all action and control limits, it is displayed in green; if it exceeds an action limit but is within control limits, it is displayed in yellow; if it exceeds a control limits, it is displayed in red.

You can view either Difference data or Actual data. To change between the two options, choose **Make all Difference** or **Make All Actual** from the **Graph** menu. Data appears differently depending on your selection, as follows:

- When difference attributes are plotted on the Sheet Trend graph, the graph points are plotted either upwards or downwards from the center of the graph (the X-axis). The points are plotted from the center axis based on the magnitude and direction of difference. In addition, horizontal lines above and below the center axis show the high and low action and control limits. (If limits have not been defined for an attribute, no lines are displayed.)

- When actual values are plotted on the Sheet Trend graph, the graph points are plotted upwards from the bottom of the graph (the X-axis). The points represent the actual value of the attribute (not the difference between it and its target value).

To display more detailed data, you can use the Zoom mode.

Using the Press Status View

The Press Status view provides a quick reference to the ink colors and printing units on the press used with the current job. It allows you to quickly determine whether or not the press is working within the tolerances specified.

The Press Status view contains several components:

- **Press Diagram**. The press diagram is a simple graph with custom color codes to indicate the various components. If desired, you can double-click the diagram to display the job Status dialog box.

- **Alert Indicators**. Alert indicators information you of any value that is out of tolerance for a particular printing unit. The alert indicators change colors to indicate the state of the printing unit, as follows:

  White indicates that the printing unit is not used or no appropriate tolerance limits are set.

  Green indicates that all calculated values are within all tolerance limits.

  Yellow indicates that some values exceed action limits, but all values are still within the control limits.

  Red indicates that some values exceed the control limits.

  In addition to the printing unit indicators, two additional alert indicators display the status for Overprint and Gray Balance patch types. These indicators use the same color coding system described above.

- **Ink Indicators**. The ink indicators provide a visual representation of the ink color actually used in each printing unit. These indicators display the color as found on the color bar; no additional data about the colors is provided in this view. If no ink colors are defined, these display in black. If a specific printing unit is not used, that ink color indicator is displayed in white.

- **Press Identification**. The Press Name is displayed at the top of the diagram, and the Press Type is displayed at the bottom of the diagram.

Using the Zoom Mode

The Zoom mode, which can be used with either of the Trend views, enhances the current view to show a single graph and a corresponding data window. This mode provides more detailed data for the current graph. From the **Graph** menu, choose **Zoom** to activate the Zoom mode for the current graph.

In the Zoom mode, you can view either Statistics or Error information. Choose the appropriate option from the bottom of the Zoom window. When you display Statistics data, the specific values of different attributes (such as the actual value of the current key or sheet, average values, minimum and maximum ranges, and difference values) are listed in table form in the data window. The type of values displayed depend on the current view type. When you display Errors data, you can view the details on any keys or sheets that exceed Action or Control limits on the current graph.

CUSTOMIZING VIEWS AND GRAPHS

The commands on the **Graph** menu allow you to manipulate how data is displayed in the current view.

When viewing individual graphs within a specific view type, you can select ("activate") a specific graph by clicking the graph label. The active graph is indicated with highlighted label text. It is important to identify the active graph before selecting commands on the **Graph** menu, as some affect an entire view, and others only affect the active graph within the view.

NOTE: Graph commands are not available for the Press Status view.

In addition to using the **Graph** menu, you can also access many of these functions through shortcut keys or toolbar buttons.

Adding a Graph to the Current View

Use the **Add Graph** dialog box to add a graph to the current view. The options available on this dialog box depend on the type of view window you are using and on your job settings. To open the dialog box, choose **Add** from the **Graph** menu.

To add a graph to the current view:

1. From the **Computation Type** list, select the computation type to use for this graph. You can only select computation types that are supported for the current View type and are used on the job.

2. From the **Patch Type** list, select the type of patch data you want to display on this graph. You can only select patch types that are supported by the selected computation type and are used on the job.

3. From the **Inks** list, select the ink (or combination of inks) that you want to display on this graph. You can only select inks that are available for the selected patch type.

4. Select the **Difference** check box if you want the graph to display data based on the difference values. If you want to display actual values, make sure you do not select this check box.

5. Select additional graph information as necessary, based on the calculation type selected:

    - From the **Status** list, select the Density Status to use to generate graph data.

    - From the **Filter** list, select the filter to use for the graph. (This list is not available for Grayness or Hue Error computation types.)

    - Under **Graph Type**, select how you want to use paper data in the in the graph calculations. Select **Absolute** if you want to include the paper (substrate) data in calculations. Select **Relative** if you want paper data subtracted from calculations.

6. When you are satisfied with your graph settings, click **OK** to add the new graph to the current view window.

Adding Multiple Graphs to the Current View

Use the **Add Multiple Graphs** dialog box to add a group of graphs to the current view. From the **Graph** menu, choose **Add Multiple** to open the dialog box.

NOTE: When you use this function, the new graphs replace any previously displayed graphs.

You can either add graphs based on a selected computation type and patch type, or based on a selected ink or ink combination.

To add graphs based on a computation/patch type:

1. Click **Show graphs for a specified computation and patch type**.

2. From the list area on the left side of the dialog box, select the computation type/patch type combination that you want to use to create graphs.

3. Click **OK**. A new graph is created for every ink or ink combination associated with the selected computation/patch type.

To add graphs based on a selected ink:

1. Click **Show graphs for a specified ink or combination of inks**.

2. From the list area on the right side of the dialog box, select the ink or ink combination that you want to use to create graphs.

3. Click **OK**. A new graph is created for every computation/patch type that uses the selected ink.

Changing the Current Graph

Use the **Configure Graph** dialog box to change the setup of the current graph. From the **Graph** menu, choose **Configure** to open the dialog box.

You can then change the graph settings using the same steps used to add a new graph. Click **OK** to update the current graph with the new settings.

Removing Graphs from the Current View

You can remove graphs from the current view in two different ways: you can just remove the current graph, or you can clear all of the graphs from the current view.

To remove the current graph, choose **Remove** from the **Graph** menu.

To remove all of the graphs from the current view, choose **Remove All** from the **Graph** menu. Before clearing the current view, the system asks you to confirm the removal. Click **Yes** to remove all graphs, or **No** to cancel the process.

Moving Through Graphs

From the **Graph** menu, choose **Next** to activate the next graph in the current view window. Choose **Previous** to activate the previous graph.

Selecting the Sheet Range

Use the **Sheet Analysis Range** dialog box to select the range of sheets to use to generate graph data. As a default, the system uses all sheets in the job. All calculated values are based on the specific range of sheets currently in use.

From the **Tool** menu, choose **Sheet**, then choose **Analysis Range** to open the dialog box.

To adjust the sheet analysis range:

1. Select the **Enable Range** check box to activate the **Starting Sheet** and **Ending Sheet** boxes. If you do not select this check box, you cannot set a specific sheet range—the default of ALL sheets will be used.

2. Enter the range of sheets that you want to use. In the **Starting Sheet** box, type the number of first sheet in the range; in the **Ending Sheet** box, type the number of the last sheet in the range. You can also use the arrow buttons to select the sheet numbers.

3. Click **OK** to set the sheet analysis range for the active job.

Moving Through Sheets

You can move through all of the sheets on the current job by using the sheet slider control on the Control Pane, or by using the commands on the **Sheet** submenu of the **Tools** menu:

- Choose **First** to move to the first sheet in the job.

- Choose **Previous** to move to the previous sheet in the job.

- Choose **Next** to move to the next sheet in the job.

- Choose **Last** to move to the last sheet in the job.

- Choose **Last Retargeted** to move to the last sheet that was used to generate target values.

Moving to a Specific Sheet

Use the GoTo Sheet function to move directly to a specific sheet in the job.

To move to a specific sheet:

1. From the **Tools** menu, choose **Sheet**, then choose **Goto**. The **Enter Value** dialog box appears.

2. In the **Sheet Number** box, type the number of the sheet that you want to view, or use the arrow buttons to select the sheet number.

3. Click **OK** to display the selected sheet.

Selecting the Key Range

Use the **Key Viewport** dialog box to select the range of keys to use to generate graph data. As a default, the system uses all keys in the job. All calculated values are based on the specific range of keys currently in use.

From the **Tools** menu, choose **Keys**, then choose **Viewport** to open the dialog box.

To adjust the key viewport:

1. This opens the **Key Viewport** dialog box.

2. Select the **Enable Range** check box to activate the **Starting Key** and **Ending Key** boxes. If you do not select this check box, you cannot select a specific key range—the default of ALL keys will be used.

3. Enter the range of keys that you want to use. In the **Starting Key** box, type the number of the first key in the range; in the **Ending Key** box, type the number of the last key in the range. You can also use the arrow buttons to select the key numbers.

4. Click **OK** to set the key viewport for the active job.

Moving Through Keys

You can move through all of the keys on the current job by using the key slider control on the Control Pane, or by using the commands on the **Key** submenu of the **Tools** menu:

- Choose **First** to move to the first key in the job.

- Choose **Previous** to move to the previous key in the job.

- Choose **Next** to move to the next key in the job.

- Choose **Last** to move to the last key in the job.

Moving to a Specific Key

Use the GoTo Key function to move directly to a specific key in the job.

To move to a specific key:

1. From the **Tools** menu, choose **Key**, then choose **Goto**. The **Enter Value** dialog box appears.

2. In the **Key Number** box, type the number of the key that you want to view, or use the arrow buttons to select the sheet number.

3. Click **OK** to display the selected key.

Turning Keys On and Off

Use the **Manage Keys** dialog box to enable or disable specific keys on the current press. From the **Tools** menu, choose **Keys**, then choose **Manage Keys** to open the dialog box.

To turn keys on and off:

1. All of the inks used on the press appear as individual options on the right side of the dialog box. To turn keys on or off for a specific ink, select the option button for the ink that you want to use. To turn keys on or off for all inks, select the **Press (all inks)** option.

2. All of the keys associated with the selected ink appear in the **Key Status** list. To turn a specific key on, select the check box for that key; to turn a key off, clear the check box for that key.

3. When you finish making your key selections, click **OK** to save the settings and close the dialog box.

NOTE: If you turn keys off, the new settings affect the most recently scanned sheet and all future sheets. If you turn keys on, the new settings only affect future sheets.

Showing Key Trend Values

If you are using the Key Trend view, you can display the actual key values on each bar of the graph. To display key trend values, choose **Show Key Trend Va**lues from the **Graph** menu.

Printing Graph Data

You can print graph data in two different ways: you can either print a graphical representation of the current view window, our you can print a statistical report of the graph data.

To print a graphical representation, choose **Print** from the **Graph** menu.

To print a statistical report, choose **Report** from the **Graph** menu. You can then set up the printing options on a standard Windows Print dialog box.

To print more detailed data, use one of the ATD report formats.

Increasing and Decreasing Vertical Scaling

From the Graph menu, choose **Increase Vertical Scaling** to increase the vertical scaling of the current graph ("zoom out"). Choose **Decrease Vertical Scaling** to decrease the vertical scaling of the current graph ("zoom in").

When you increase the scaling, the range on the Y-axis increments in a 1,2,3, sequence and rages from a maximum of 5 to a minimum of -5.

Displaying Difference or Actual Data

If you want to display difference data (variation from target values) on the current graph, choose **All Difference** from the **Graph** menu. If you want to display the actual values, choose **All Actual** from the **Graph** menu.

Using Full Screen view

Use the full screen view to expand the current view window to the entire screen area (so the Control Pane, tool bar, and menus are no longer displayed). This can be helpful if you want to review the maximum number of graphs at one time. To activate the full screen view, choose **Full Screen** from the **View** menu. You can use the buttons on the small toolbar to change the view options, as follows:

- Click the **Full Screen** button to return to normal view mode.
- Click the **Control Pane** button to display or remove the Control Pane.
- Click the **Toolbar** button to display or remove the standard ATD toolbar.
- Click the **Status Bar** button to display or remove the status bar.

Printing Job Data

The ATD software provides several different types of reports, which you can use to print all different types of job data. The following reports are supported in ATD:

- Custom report
- Job Summary report
- Single Sample Single Attribute report
- Trend Analysis report

NOTE: You can review and print more detailed information using the Statistical Process Control program.

In addition, you can use the Print File Utility to print reports that were originally sent to a file location, rather than to a printer.

USING CUSTOM REPORTS

The Custom Report function uses the Crystal Reports software to generate report data in ATD. The data printed on any custom report is based on the view type (for example, Sheet Trend or Key L*a*b*) in use when the report is selected.

A custom report, as setup through Crystal Reports, contains fields for the current sheet and current patch; when the report is generated in ATD, the software updates these values based on the data in the current view. For more information on creating new custom reports, refer to the Crystal Reports software documentation.

Generating a Custom Report

1. From the **Reports** menu, choose **Custom**. The **Custom Reports** dialog box appears.

2. From the **Report Names** list, select the report you want to generate.

3. Click **OK** to generate the report. If you report was set up to be printed, the standard Windows **Print** dialog box appears, and you can select your print options. If the report was set up to exported to file, a standard Windows dialog box appears where you can select the file location.

Adding or Editing a Custom Report

NOTE: You can only add report files which have already been created in the Crystal Report application. For additional information, refer the Crystal Reports software documentation.

1. From the **Reports** menu, choose **Custom**. The **Custom Reports** dialog box appears.

2. Click **Add** to open the **Add Custom Report** dialog box.

   NOTE: To edit an existing report, select the report you want to edit from the **Report Names** list, and then click **Edit**.

3. In the **Report Path** box, type the path and file name of the report you want to add, or click the **Browse** button (**…**) to select the path and file from a standard Windows **Open** dialog box.

4. In the **Name of Report** box, type a name for this report. The name entered here is used to identify this report in the **Custom Reports** dialog box.

5. Select what sheet data to include on this report:

   - Select **Current Sample** to generate report data for current sheet only.

- Select **All Samples** to generate data for all sheets in the job.

6. Select the destination (print or export) for this report.

- Select **Ask** if you want the system to ask the user for the report destination at the time the report is generated.

- Select **Print to Default Printer** to automatically print the report to the default printer once the report is generated.

- Select **Export to File** to automatically export the report data to a specified file when the report is generated. If you select this option, you must select the file format and export location. From the **Format Type** list, select the format to use for the exported data. In the **Export File Path** box, type the drive and folder path to which you want to export the file or click the **Browse** button (**…**) to select the path from a standard Windows **Save As** dialog box.

7. When you are satisfied with your report settings, click **OK**.

Deleting a Custom Report

1. From the **Reports** menu, choose **Custom**. The **Custom Reports** dialog box appears.

2. From the **Report Names** list, select the report you want to delete.

3. Click **Delete**.

USING THE JOB SUMMARY REPORT

The Job Summary report provides a complete analysis of the entire press run, categorizing defects by ink color. Because this report includes information about the entire job, it may take several seconds to generate. You can output the report to a printer or export the report data to a file.

To create a Job Summary report, choose **Job Summary** from the **Report** menu. The report is automatically generated for the current job. After the report is generated, you can select your output options in the **Print** dialog box.

The Job Summary report is divided into five areas:

- Page Header

- Job Information

- Summary of All Computations and All Inks

- Summary of All Totals

- Ending Percentages

Page Header

The Page Header of the Job Summary report is printed on each page of the report, and contains general information identifying the report. Header information includes:

- the date on which the report was generated.

- the Company Name (as entered on the **General** tab of the **Options** dialog box).

- the page number.

- the name of the report (Job Summary report).

- the name of the project associated with this job.

- the name of the job.

- any comments for the job (as entered on the Identification dialog box during Job Setup).

- the date on which the job was created.

Job Information

The Job Information portion of the Job Summary report lists some of the parameters defined during job setup, as follows:

- **Response**—the density status selected for use with this job.

- **Color Bars**—all color bars used on this job.

- **Location**—each edge of the sheet (for example, Gripper/Front, Trailing/Front) used on the job, and the color bars used at each location.

- **Press Name**—the name of the press used on this job.

- **Press Comments**—any comments associated with this press.

- **Limit Set**—the tolerance width (Narrow, Medium, or Wide) used for this job.

- **Blanket Type/Blanket Supplier/Fountain PH/Fountain Supplier**—any tags of these specific types assigned to the job.

Summary of All Computations and All Inks

This section of the Job Summary report lists summary information for each computation type as it relates to all of the ink colors used on the job. Only computation types and patch types with actual measurement data are included on the report. Information is arranged by ink. Each ink area lists all applicable computation/patch type combinations. The following information is reported for each computation/patch type combination associated with each ink:

- **Total Keys**—the total number of keys.

- **Key Out**—the total number of keys outside of the tolerance limits.

- **Percent Out**—the percent of keys outside of the tolerance limits.

- **Mean Value**—the average density values across all keys.

- **Min Value**—the minimum density value across all keys.

- **Max Value**—the maximum density value across all keys.

- **Range**—the density range value across all keys.

- **Std Dev**—the standard deviation across all keys.

The total values for all computation/patch type combinations appear at the bottom of each ink area.

Summary of All Totals

This section of the Job Summary report lists total values for all inks. The following totals are listed for all ink, overprint, and gray balance patch types:

- **Total Keys**—the total number of keys for each computation type.

- **Keys Out**—the total number of keys outside of the tolerance limits for each computation type.

- **Percent Out**—the percent of keys outside of the tolerance limits for each computation type.

The total values for the entire job appear at the bottom of the Summary area.

Ending Percentages

The Ending Percentages portion of the Job Summary report lists the total number of keys that are within tolerance limits and the total number of keys that are outside of the tolerance limits for the entire job. The total number of sheets appears at the end of the report.

USING THE SINGLE SAMPLE SINGLE ATTRIBUTE REPORT

The Single Sample Single Attribute Report lists all data for an specific computation/patch type combination on a single sheet. Because of this, you need to define your report parameters before the report can be printed.

The Single Sample Single Attribute report is divided into four areas:

- Page Header

- Sample Information

- Key Data

- Statistics

To generate a Single Sample Single Attribute report:

1. From the **Report** menu, choose **Single Sample Single Attribute**. The **Single Sample Single Attribute Report Options** dialog box appears

2. In the **Sample** box, type the number of the sheet for which you want to generate the report data, or use the arrow buttons to select the sheet number.

3. From the **Computation** list, select the computation type for which you want to generate the report data. You can only select computation types supported on the current job.

4. From the **Patch Type** list, select the patch type for which you want to generate the report data. You can only select patch types supported by the selected computation type.

NOTE: To obtain a quick report on the status of a sheet, select the Density computation type and the Solid patch type. This generates a single page report, while all other attribute selections print one page per ink.

5. Once you have selected the report parameters, click **OK** to generate the report. After the report is generated, you can select your output options in the **Print** dialog box.

Page Header

The Page Header is printed on each page of the Single Sample Single Attribute report, and contains general information identifying the report. Header information includes:

- the date on which the report was generated.

- the Company Name (as entered on the Reports tab of the Options dialog box).

- the page number.

- the name of the report (Single Sample Single Attribute report).

Sample Information

This section of the Single Sample Single Attribute report lists describes the type of data included on the report. This data is printed on every page of the report, and includes:

- **Project**—the name of the project associated with this job.

- **Job**—the job name.

- **Sample**—the sheet number selected for this report.

- **Mode**—the computation parameters (Absolute vs. Relative and Status Density) used on this job.

- **Computation**—the computation type selected for this report.

- **Sheet Name**—the label assigned to the sheet (Makeready, Production, or Other).

- **Date**—the date the sheet was measured.

- **Time**—the time the sheet was measured.

Key Data

This section of the Single Sample Single Attribute report lists key data for the selected attribute on the current sheet. The following data is generated for each ink of the appropriate computation/patch type:

- **Key**—the numbers of all keys of the selected type

- **Difference**—the difference between the target attribute and the sheet attribute for the selected ink. If the different is greater than the upper limit, a ">" symbol is displayed. If the difference is less than the lower limit, a "<" symbol is displayed. Up three different symbols may be displayed to indicate the magnitude of the difference.

  NOTE: Difference data is not displayed for density/solid report selections.

- **Target**—the target density value of the attribute for the selected ink.

- **Value (Actual)**—the actual density value of the attribute for the selected ink.

Statistics

This section of the Single Sample Single Attribute report lists statistical data for the selected attribute on the current sheet. The following data is generated for each ink of the appropriate computation/patch type:

- **Ink Name**—the name of the current ink.

- **Printing Unit #**—the number of the printing unit associated with this ink.

- **Filter**—the filter used for the selected link. This data only appears for density/solid report selections.

- **Action Limit**—the action tolerance limit of the attribute for the selected ink.

- **Control Limit**—the control tolerance limit of the attribute for the selected ink.

- **Average**—the average value across all keys.

- **Maximum**—the maximum value across all keys.

- **Range**—the range of values across all keys.

- **Std Dev**—the standard deviation of values all across all keys. This data does not appear for density/solid report selections.

- **Minimum**—the minimum value across all keys.

USING THE TREND ANALYSIS REPORT

The Trend Analysis report tracks the trend of a single selected ink and patch throughout the press run. Because of this, you must define your report parameters before the report can be generated. The information provided in this report allows the press operator to make adjustments based on the documented historical trends.

The Trend Analysis report is divided into five areas:

- Page Header

- Patch Information

- Statistical Information

- Data

- Graph

To generate this report:

1. From the **Report** menu, choose **Trend Analysis**. The **Trend Report Options** dialog box appears.

2. In the **Key** box, type the number of the key that you want to use on the report, or use the arrow buttons to select the desired key number.

3. From the **Computation** list, select the computation type to use on the report. You can only select computation types supported by the current job.

4. From the **Patch Type** list, select the patch type to use on the report. You can only select patch types appropriate supported by the selected computation type.

5. From the **Ink** list, select the ink to use on the report. You can only select inks used by the selected patch type.

6. Once you have selected the report parameters, click **OK** to generate the report. After the report is generated, you can select your output options on the **Print** dialog box.

Page Header

The Page Header is printed on each page of the Trend Analysis report, and contains general information identifying the report. Header information includes:

- the date on which the report was generated.

- the Company Name (as entered on the **General** tab of the **Options** dialog box).

- the page number.

- the name of the report (Trend Analysis report)

Patch Information

This area of the Trend Analysis report includes information about the specific patch being printed, as follows:

- **Project**—the name of the project associated with this job.

- **Computation**—the computation type selected for this report.

- **Key**—the key number selected for this report.

- **Job**—the job name.

- **Patch**—the patch type selected for this report.

- **Mode**—the computation parameters (Absolute vs. Relative and Status Density) defined for this job.

- **Ink**—the ink selected for this report.

- **Control Limit**—the control limit for the selected computation type, patch type, and ink.

Patch information is printed on every page of the report.

Statistical Information

This area of the Trend Analysis report includes information about the current trend, as follows:

- **Average**—the average for all values in the trend.

- **Maximum**—the maximum value in the trend.

- **Range**—the range of values in the trend.

- **Std Dev**—the standard deviation of all values in the trend.

- **Minimum**—the minimum value in the trend

Statistical information is printed on every page of the report.

Data

This section of the Trend Analysis report includes data for the selected patch type across all sheets in the job. The following information is provided for each sheet:

- **Sample**—the sheet numbers associated with the selected patch type.

- **Date**—the date the sheet was measured.

- **Time**—the time the sheet was measured.

- **Type**—the label assigned to the sheet (Makeready, Production, or Other)

- **Target**—the target value for the selected patch type and sheet.

- **Value**—the actual value for the selected patch type and sheet.

- **Difference**—the difference value for the selected patch type and sheet.

Graph

This section of the Trend Analysis report includes a trend graph of difference values for the selected patch type across all sheets in the job. The X-axis of the graph lists the sheet numbers, and the Y-axis lists the difference values.

STATISTICAL PROCESS CONTROL PROGRAM

The **Statistical Analysis** command on the **Reports** menu opens the Statistical Process Control software. This software is designed to work with data generated by the ATD system.

The Statistical Process Control software takes density data from jobs and allows you to view and evaluate the data in more complex ways than those accessible from within ATD. It calculates and displays statistical attributes such as histograms, X-Bar graphs, and Range graphs.

For additional information about the software, refer to the Statistical Process Control Help system.

PRINT FILE UTILITY

The Print File Utility provided with ATD allows you to print report data that was previously exported to a file, rather than sent to an actual printer. This is convenient if you want to generate reports utilizing multiple scanning instruments and print all the reports at one centralized location. Any software report with a *.prn extension can be printed using this function.

To open the **Print File to Printer** dialog box, double-click the Print File icon in the program group.

To print a report file:

1. In the **File to Print** box, type the file name of the report you want to print, or click **Select File** to select the report file from a standard Windows **Open** dialog box.

    NOTE: If the report file is not located in the default Report directory for ATD, you must enter the full path of the file.

2. Select the printer you want to use. If you want to use a local printer, select **Local Printer** and then select the appropriate printer port from the list provided. If you want to use a network printer, select **Network Printer** and then type the printer path in the box provided or click **Select Printer** to choose the printer location.

3. Click **Print** to start printing the selected report.

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