SpotOn! Flexo User Guide

Part 1 - Client/Server Setup

This section details setting up the server and managing users.

* This only applies to the Client/Server version of SpotOn! Flexo. If you have purchased a Stand-Alone version to you can upgrade to a Client/Server version to add multiple users.

Part 2 - Settings

This tutorial reviews the settings, tolerances, and color libraries required to begin using SpotOn! Flexo.

Part 3 - Jobs

This section reviews how to create and edit a job.

Part 4 - Measuring

This part describes how to input color measurements.

Part 5 - Main Screen

This part provides an overview of the main screen and details on the what the color icons represent.

Part 6 - Additional Charts

This section reviews the remaining charts on the main screen.

Part 7 - Graphs & Reports

This is where we review the trending graph and reporting function.

For more information, contact All Printing Resources at 1-800-445-4017 or email spotonflexo@teamflexo.com

SpotOn! Server Application:

Launch the SpotOn! Admin application [icon] on the computer where you installed the SpotOn! Server. Here you can Start and Stop the server by clicking on the icon. SpotOn! Flexo includes two users (Clients) and additional users can be purchased and added at any time.
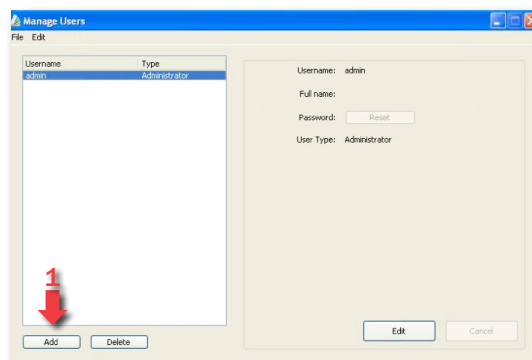1. Click this icon to Start or Stop the server.
2. Click on Manage Users to edit the user list, passwords, and privileges.

Managing Users:

SpotOn! Flexo installs with a default Administrator with the User Name of "admin" and the Password "admin".
1. To create a new User click the Add button.

Enter a Username. You can also enter an optional Full Name if different than the Username. Enter a password and determine User Type.

"Operator" can only create jobs and take measurements.

"Administrator" has full access to jobs, as well as SpotOn! Flexo settings, Tolerances, Spot Libraries, and Field Presets.
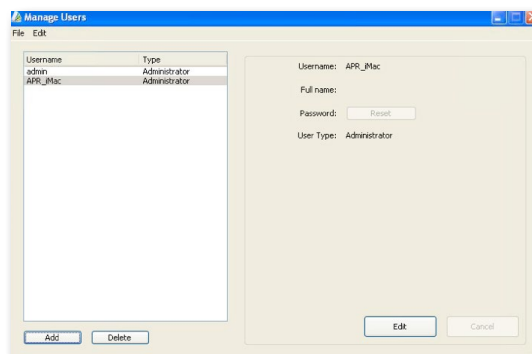
Click on Create User to complete the New User.
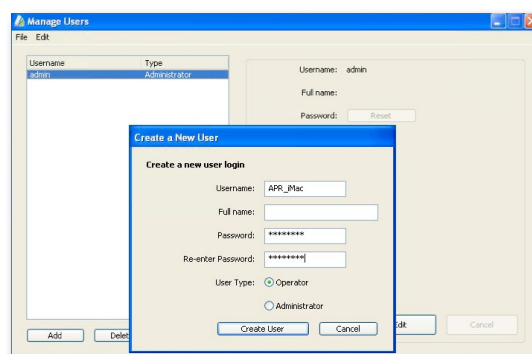
A new user has now been created.

The SpotOn! Server runs as a background service, so once you have completed adding or editing users you can close the SpotOn! Server Administrator application. If you need to access it again you can do so by relaunching the application.


From a licensed Client application, launch the SpotOn! Flexo application . To log into the server you will need to enter the server location. This is the IP address of the computer where the SpotOn! Server application was installed followed by ":13707". This extension serves as the port location for SpotOn! Flexo clients to locate the SpotOn! Server.

If you are running the SpotOn! Server and SpotOn! Flexo application on the same computer, you can use the location "localhost:13707".

Enter the Username and Password to log in to the server.

As a reminder, SpotOn! Flexo has a default Username and Password of "admin"
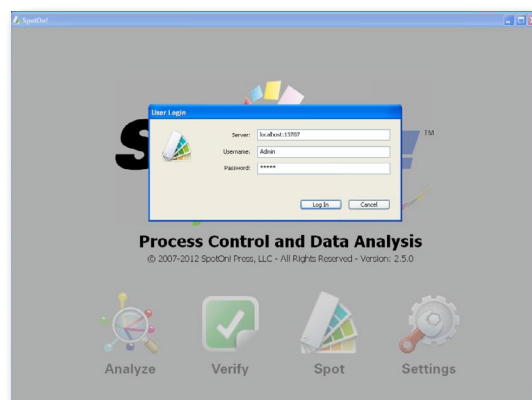
In this section you will learn how to manage all the settings.

1. Click on the Settings icon on the startup screen.

General Settings:

1. This is an optional selection where you can set a password to protect the settings you create.
2. Shows whether software is licensed or trial. This is also where software is activated once purchased from spotonflexo.com
3. This is where you choose how you want the software to display density, either absolute or relative.
4. Set company name and logo to be displayed on reports.
5. Choose a Data Source: Server or Local
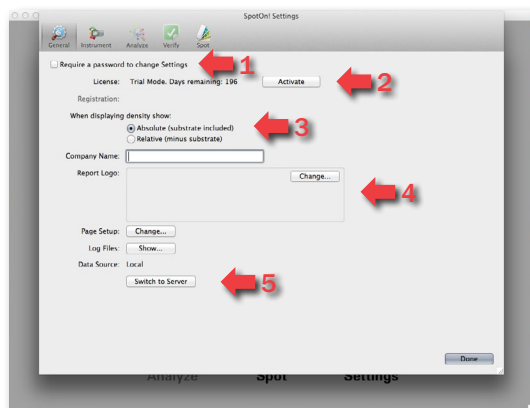
Instruments:

1. Select the instrument to be used from the pull-down menu.

Note: an instrument can only be connected to one software application at a time. If the instrument does not show up:

    -Make sure all other applications are closed
    -Make sure the instrument connection is correct
    -Clicking on Calibrate will sometimes link the instrument
   -Choose None from the pull down menu, close the settings section and open it again. Select instrument to be used.
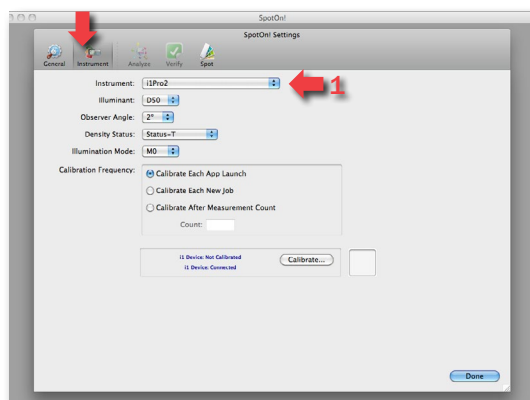
Spot Settings - Tolerance Sets:

Tolerance sets is where you determine the warning and failure points for your measured spot colors.

1. Click on the Spot Tab at the top.
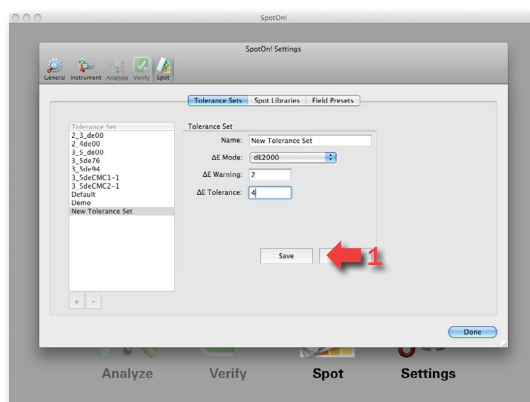2. To create a new tolerance set, click on the plus sign.
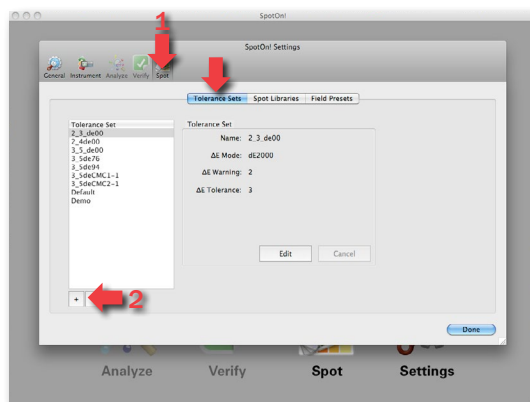
1. Choose a name for the tolerance set. It is recommended that the tolerance set be named in a way which is easy to identify later, such as based on the delta E settings.
2. Choose which delta E equation you wish to use (FTA suggests delta E 2000).
3. Enter a delta E to represent a warning level.
4. Enter a delta E tolerance value to represent a failure level.
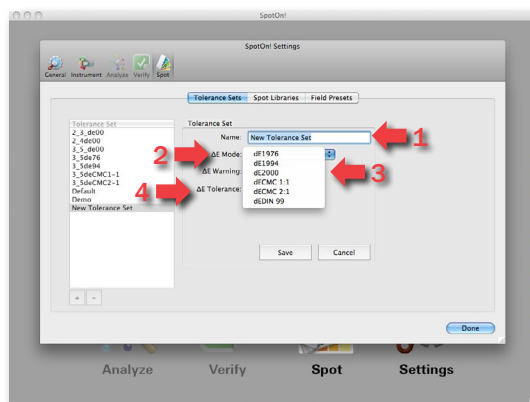
Using these settings the software will give a warning that the colors are at or beyond 2 delta E color match to reference color based on delta E 2000, and will consider any color beyond a 4 delta E a failure.

1. Once you have entered the tolerances click save to store this tolerance set for future use.


For more information, contact All Printing Resources at 1-800-445-4017 or email spotonflexo@teamflexo.com

Spot On! flexo

**Spot Settings - Spot Libraries:**

The Spot Libraries tab is where you create spot color libraries which are used as reference colors on press. You can create multiple libraries, such as customer or job specific.

1. Click on the Spot Libraries Tab.
2. To create a new library, click on the plus sign. You will then be asked to name the library. Select the library to which you wish to add colors.
3. You can import .mif files generated from ink formulation software.
4. You can also add colors using a spectropho-tometer or by inputting *lab* numbers.
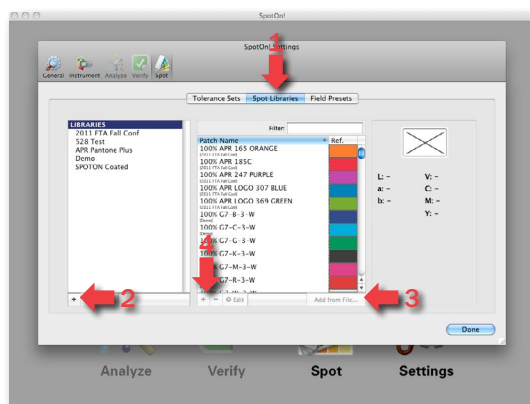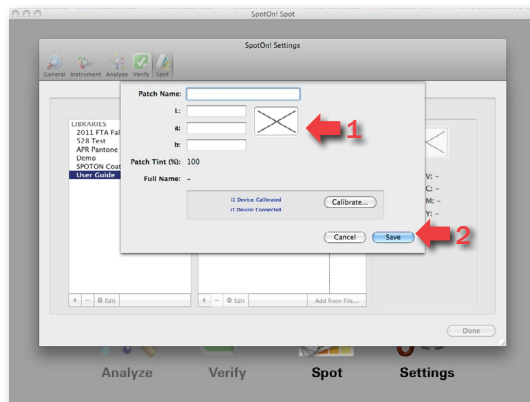
You can use your spectrophotometer to measure an approved ink sample or customer supplied color swatch.

1. The software will detect your spectrophotom-eter. Calibrate here if necessary.
2. Once measured the *lab* numbers will auto populate. You can then name the color swatch for future use.
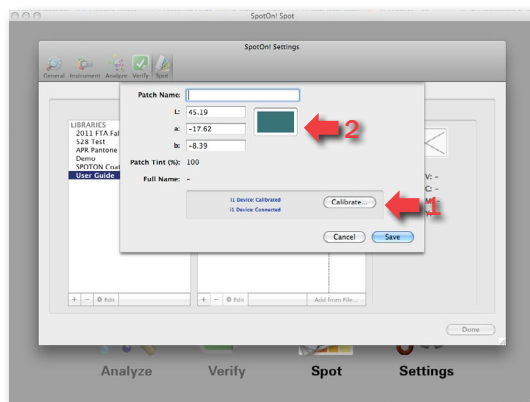
1. Here you can input the *lab* numbers manually if available.
2. Be sure to save your sample when finished.

For more information, contact All Printing Resources at 1-800-445-4017 or email spotonflexo@teamflexo.com

Spot Settings - Field Presets:

This is searchable metadata you can attach to your jobs. There is a selection of categories to choose from, and from there you can create personalized presets.

Note: you need to have the device field populated to create a new job. This can be done here or in the New Job set up. The device can be a User, Press, or Location but it is used to differentiate one set of measurements from another.

For example the same job running on two different presses.
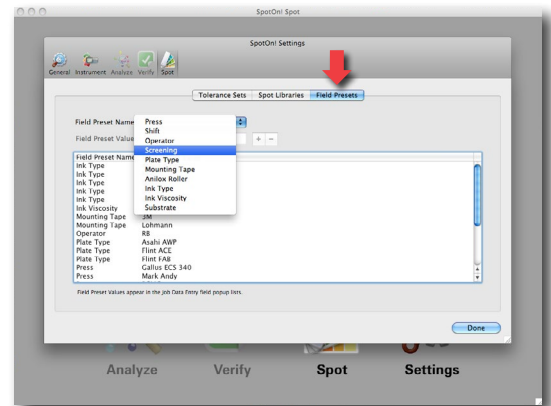
In this section you will learn how to create jobs in SpotOn! Flexo.

1. Click on the Spot Icon on the startup screen. This will take you to the Job List

Job List:

1. Here is where you can view jobs that have already been created and are ready to be measured, or review jobs which have already been measured.
2. To create a new job click on Job New.
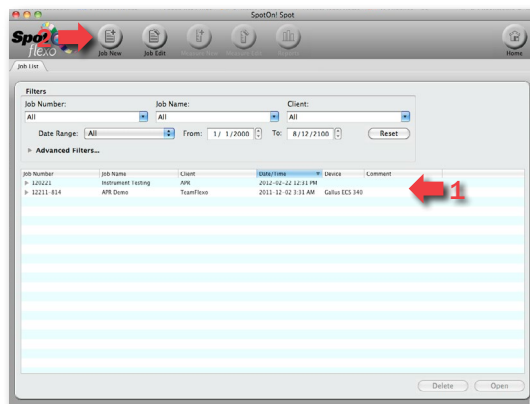
Job New:

This Job Wizard will aid you in creating a new job. The Date and time will be automatically populated.
1. Three things are necessary for creating a new job: a Spot Library, a Tolerance Set, and a device. Those are covered in the settings tutorial.
2. Fill in all the fields with the job information.
3. Click Next to continue.
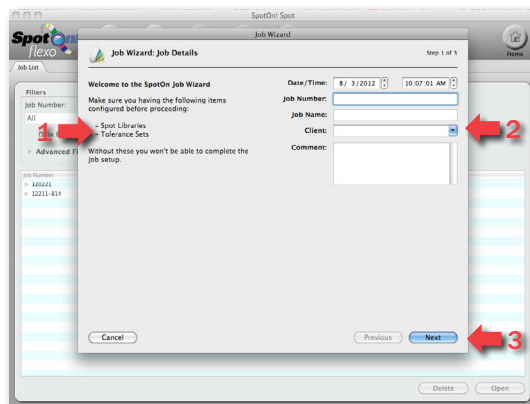
1. Here you can select from various presets, which creates searchable metadata about the job. Creating the presets is covered in the settings tutorial.

2. Color specific settings can be changed as you take measurements. For example, if you find you need to change your anilox roller to achieve your desired color, you can modify this data at that time.
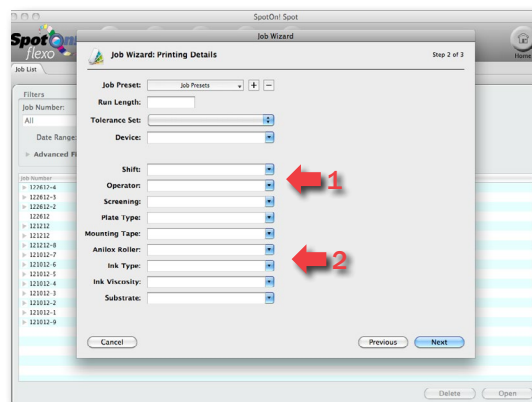
1. This is where you select the Tolerance Set you wish to use.

2. Enter a Device Name. You need to have both a Tolerance Set and Device name to continue.

3. Click next to continue.
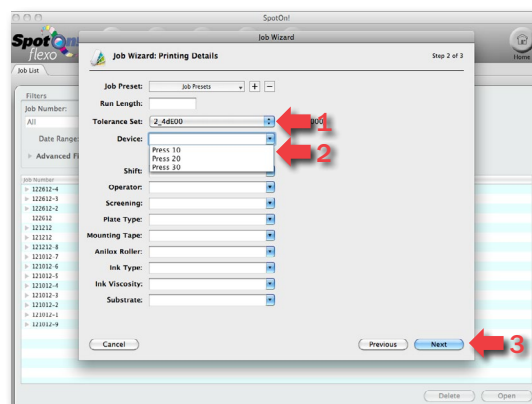
1. Select which library you wish to view. You can add colors from multiple libraries by switching between them.

2. To add a color to a job, select the color you need (you can select multiple colors using the Command key on a Mac, or the Control key on a PC) and click Add to Job.

3. You can also add colors by selecting them and dragging them to the Job Patch List.

![SpotOn! flexo logo]
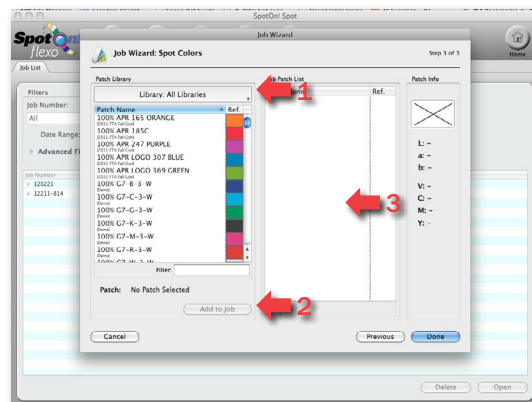
1. The filter field will allow you to search within the color library you have selected.

2. Once you have added all the colors to be used in this job click done. Your job will now appear in the Job List.
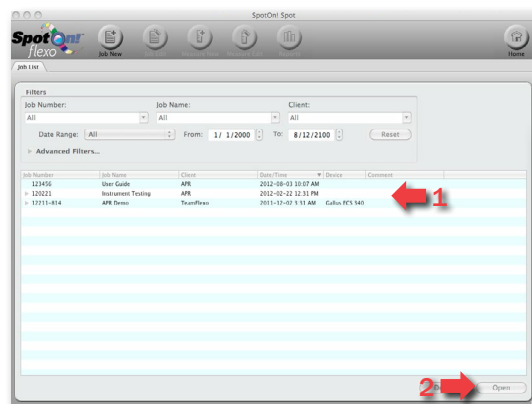
![SpotOn! flexo logo]
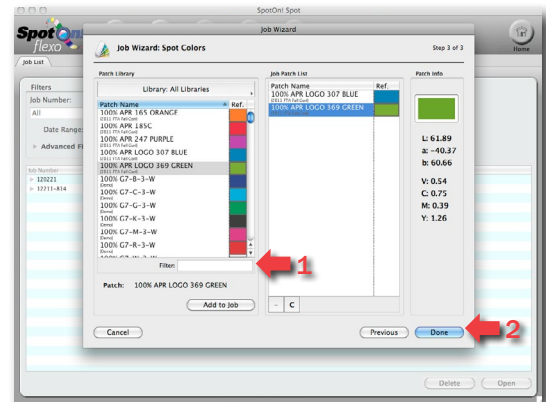
This section will explain how to take measurements for jobs.

1. Click on the Spot icon on the startup page to view your job list.

1. Here is the list of jobs that have been created. If you need to create a job, view the Jobs tutorial.
2. Select the job you wish to measure and either click open, or just double click on the job.

You will see that there are currently no measurements for this job.

1. In order to begin taking measurements, click on the Measure New icon.

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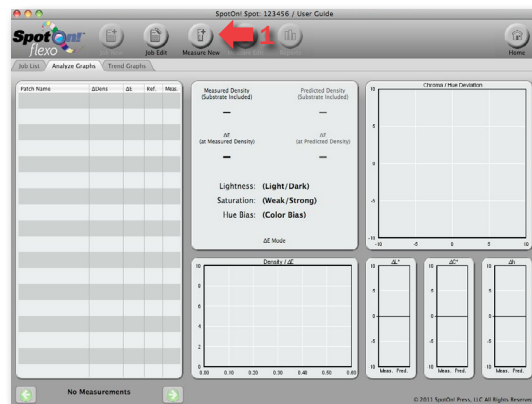
1. Select if this is a Makeready or production measurement.
2. First use your instrument to measure the substrate or white point. This may be used as a reference.
3. Proceed with measuring all of the colors for the job.
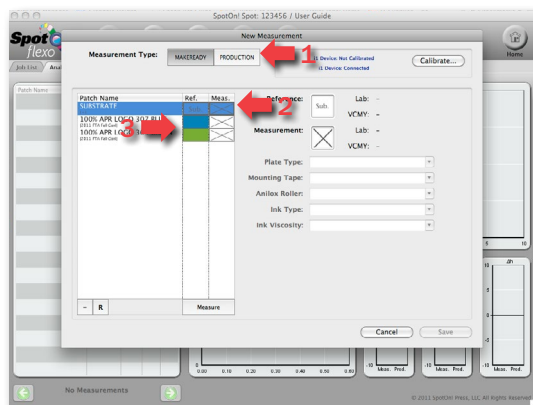
1. The software will create an approximation of the color you measured for quick reference. If you accidentally measure the wrong color you can simply click on the color you need and take another measurement.
2. Here you can see the *CIELab Ch* and CMYK values for both the reference color and the measured color.
3. You can modify some of the color specific metadata here for future reference.
4. Once you have all of you measurements completed, click save.
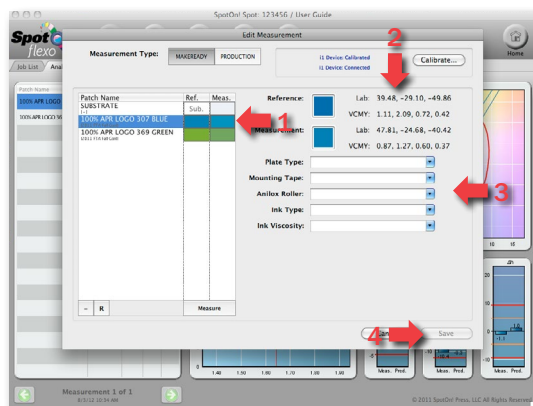
The software will now populate the main screen with information we will cover in the next tutorial.

1. You can also take a measurement without creating a job by using the Quick Measure button. After pressing the Quick Measure button just follow the same instructions for measuring a job listed above.
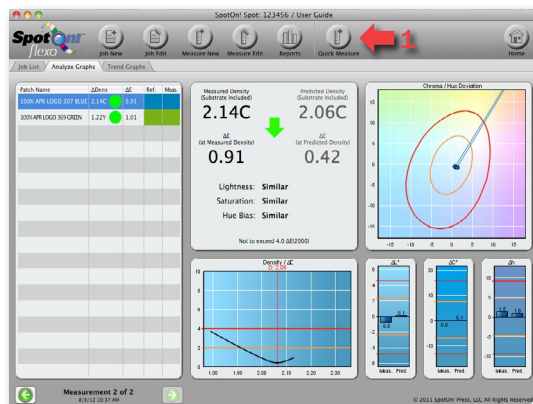
Highlight (click) on a color to populate the charts. The software will give you feedback about the colors you have measured.
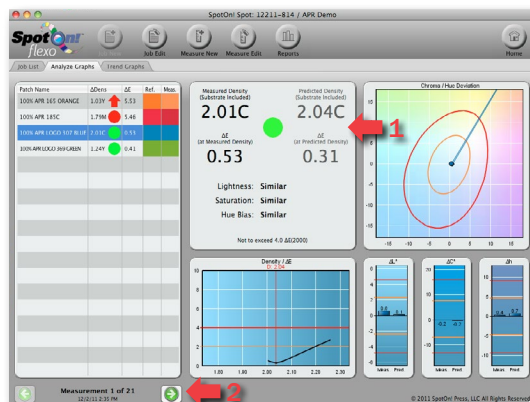
1. Each of the columns is sortable by any of the variables displayed. Simply click on the header.
2. The Up Arrow indicates that this color is out of tolerance, but is achievable with an increase in density. Currently the density is at a 1.00, and has a delta E of 5.53, but by increasing the density of this ink to a 1.37, you can achieve a delta E of a 1.41. This means the ink formulation is acceptable for reaching the desired result, it is just being run at the incorrect strength.

1. The red circle indicates that this ink is out of the predetermined 4 delta E tolerance, and that you cannot achieve an acceptable match with a change in density. This shows that the ink is currently being run at a 1.79 density, and producing a delta E of 5.46. By decreasing density to 1.58 you would be able to get to a 4.29 delta E, but that is the closest you can get without reformulating ink. This instant feedback allows a press operator to save valuable time by eliminating unnecessary trial and error.
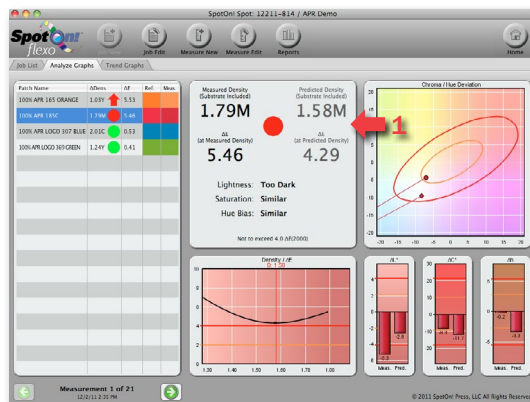
1. The green circle indicates that the color is an acceptable match based on the tolerances you have created. No change is needed, although the software will still suggest a change in density to attain an even better match. As you see here, the density is currently 2.01, with a 0.053 delta E. A slight increase in density would allow you to reach a 0.31 delta E.
2. You can continue scroll through each set of measurements by clicking on the arrows at the bottom of the page.

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On the second measurement you can see that the change in density to the first color has brought it within tolerance. The second color has been reformulated, and now an acceptable match is possible, but a change in density is still required.

By the third measurement you can see that all of the colors have been adjusted as indicated, and all are within tolerance.
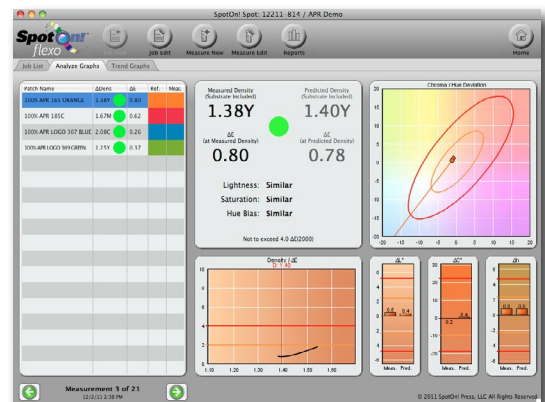
1. At any time you can override the tolerance on a specific color if you wish. This will set a new Delta E fail point for the color selected. Just select the desired color, check the Tolerance Override button on the Edit Measurement page, and enter a new Delta E value below.
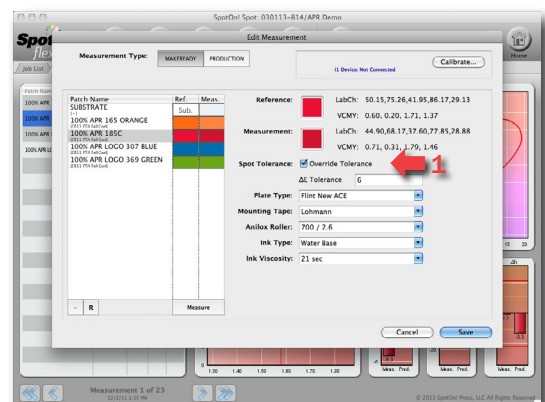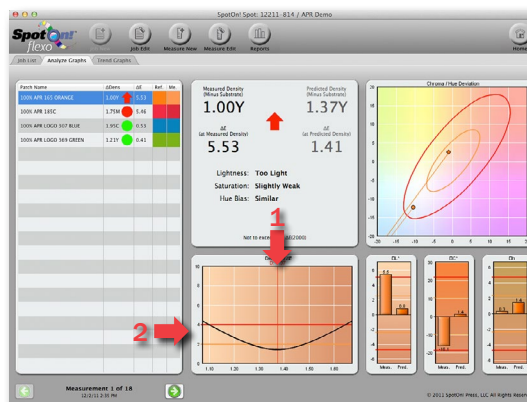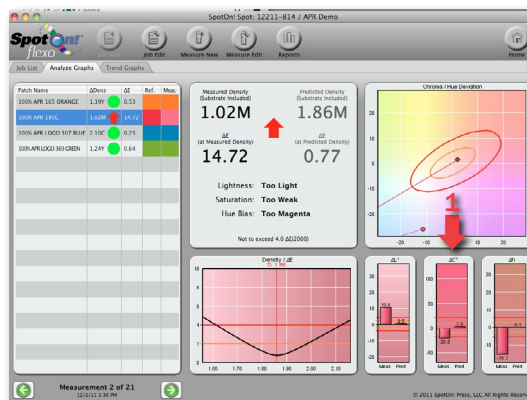
Density delta E Chart:

1. For this particular ink, the optimal density to run it at is 1.37. In the bottom chart you see that the vertical line represents 1.37 density.

2. The two horizontal lines represent the warning and failure points as determined by the tolerance set you have selected for this job.

1. Hovering your mouse over the curved line will allow you to get instant feedback about the density to delta E ratio. This enables you to understand the density range you have to work with to stay within tolerances. The steeper the angle of this line, the narrower the window of density is to stay within tolerance.

2. This window shows the chroma and hue deviation. The red and orange lines illustrate the tolerances, the circle represents the current measurement, and the square represents what the software predicts is attainable with a density change.


1. The final three graphs illustrate the delta L*, the delta C* and the delta H* deviation. The left column shows you where you are with your current measurement, and the right shows where you could be with a correction.
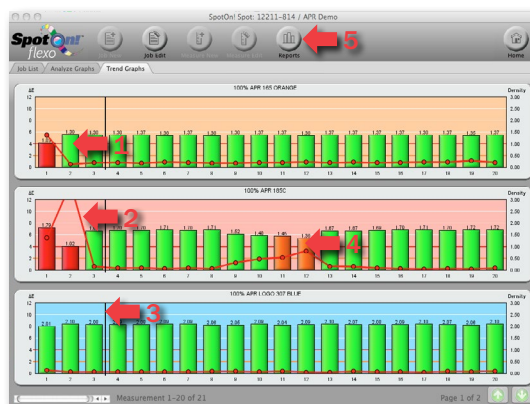

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1. At any point after a measurement you can click on the Trend Graphs tab in order to see a historical review of the measurements you have taken.
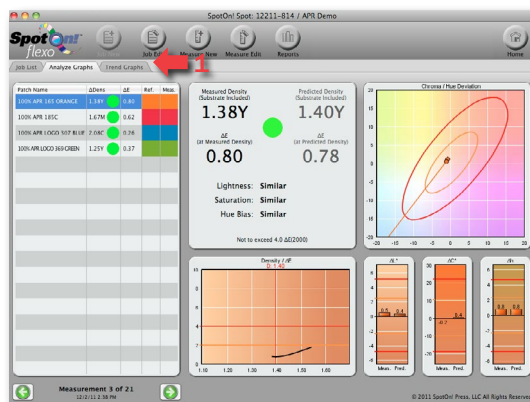
Trend Graphs:

1. The columns represent the density.
2. The red line indicates the delta E.
3. The vertical black line indicates when the measurements switch from makeready to production.
4. In this example there are a few measurements during the makeready that required corrections, but you can also see that the second color started to drift out of tolerance during some of the production measurements. The software provided a warning, allowing for a correction to be made.
5. When you are finished with measurements, you can click on the Reports icon.

This will generate a PDF report with all of the same data.
1. This also includes any of the metadata you attached to the job.
2. It also includes any metadata related to a specific ink color.
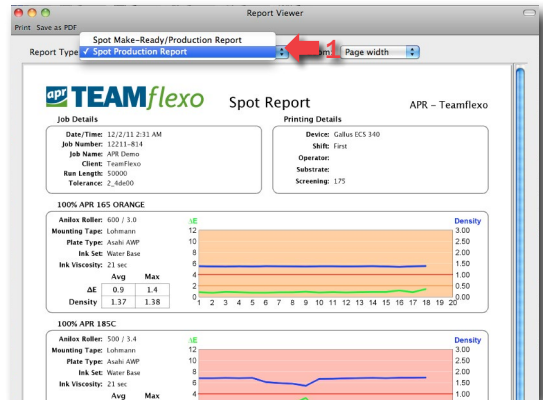3. Again the black line separates makeready from production.
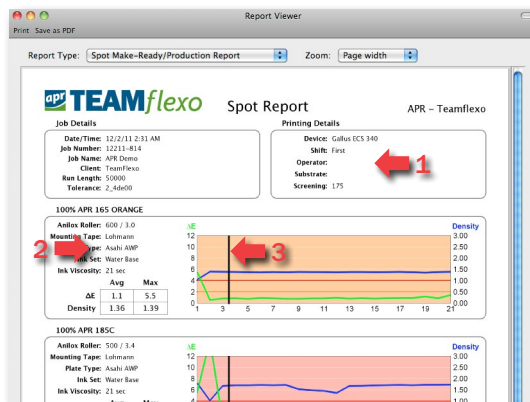
1. You can also generate a report which only displays production measurements by selecting Spot Production Report from the drop-down menu, which would be ideal for providing to a customer.

Troubleshooting:

Can I install the SpotOnServer.exe and the SpotOn.exe on the same PC?
- Yes. SpotOnServer is the server application for SpotOn! Flexo. This is where the common database for all of the reference colors and measurements are stored. SpotOn!.exe is the client application that talks to the SpotOnServer. SpotOn!.exe can be run on the same PC where the SpotOnServer is installed but it does count as one of the two users seats (clients) that ships with SpotOn! Flexo. Additional User seats can be purchased and added at any time.

Does SpotOn! Flexo calibrate my spectrophotometer or is this done separately?
- SpotOn! Flexo supports many popular spectrophotometers. Most of the supported spectrophotometers are calibrated through SpotOn! Flexo. Once you have chosen your spectrophotometer from the pull down list on the Instrument settings, SpotOn! Flexo will alert you if the instrument is connected and if it needs calibration. Simply click on the Calibration button and follow the on screen instructions.

I have my spectrophotometer hooked up to the computer but it is not showing up in SpotOn! Flexo?
- Depending on the type/model of spectrophotometer the drivers may have not been installed or SpotOn! Flexo did not detect the drivers. Try the following steps:
1) Make sure the spectrophotometer is connected to the computer per the manufactures instructions.
2) Select None from the SpotOn! Flexo pull down list on the Instrument tab and close the Settings window. Open the Settings window and choose your model from the Instrument pull down
3) If the instrument is still not connected try clicking the Calibration button, on certain models this forces the drivers for the instrument to connect to SpotOn! Flexo.
4) If none of the above work, close the application, double check the instrument connection with the PC and reboot the PC.

SpotOn! Flexo cannot connect to the SpotOnServer?
- Make sure the SpotOn! Flexo application is licensed.
- Make sure the Username and Password have been created in the SpotOn! Admin application.
- Make sure the Server address is the IP address of the PC where the SpotOn! Server is installed and the address is followed by :13707 (i.e. 192.168.1.215:13707)

When logged into the Server most of the SpotOn! Flexo Settings are grayed out?
- If you are logged into the SpotOn! Server as an Operator the only setting available is Instrument.
- All settings are available only when you are logged in as an Administrator.

When a measurement is saved the Predicted Density and ∆E are blank?
- This occurs when there is no Substrate measurement taken. SpotOn! Flexo's predictive analysis equation requires a white point or substrate reading along with the color reading. You can simply click on Measure Edit, click on Substrate and re-measure the Substrate and save.

When a measurement is saved there is an X in the Meas column and no graph data?
- This occurs when there is no color measurement taken. SpotOn! Flexo's predictive analysis equation requires a white point or substrate reading along with the color reading. You can simply click on Measure Edit, click on the Color and re-measure the Color and save.