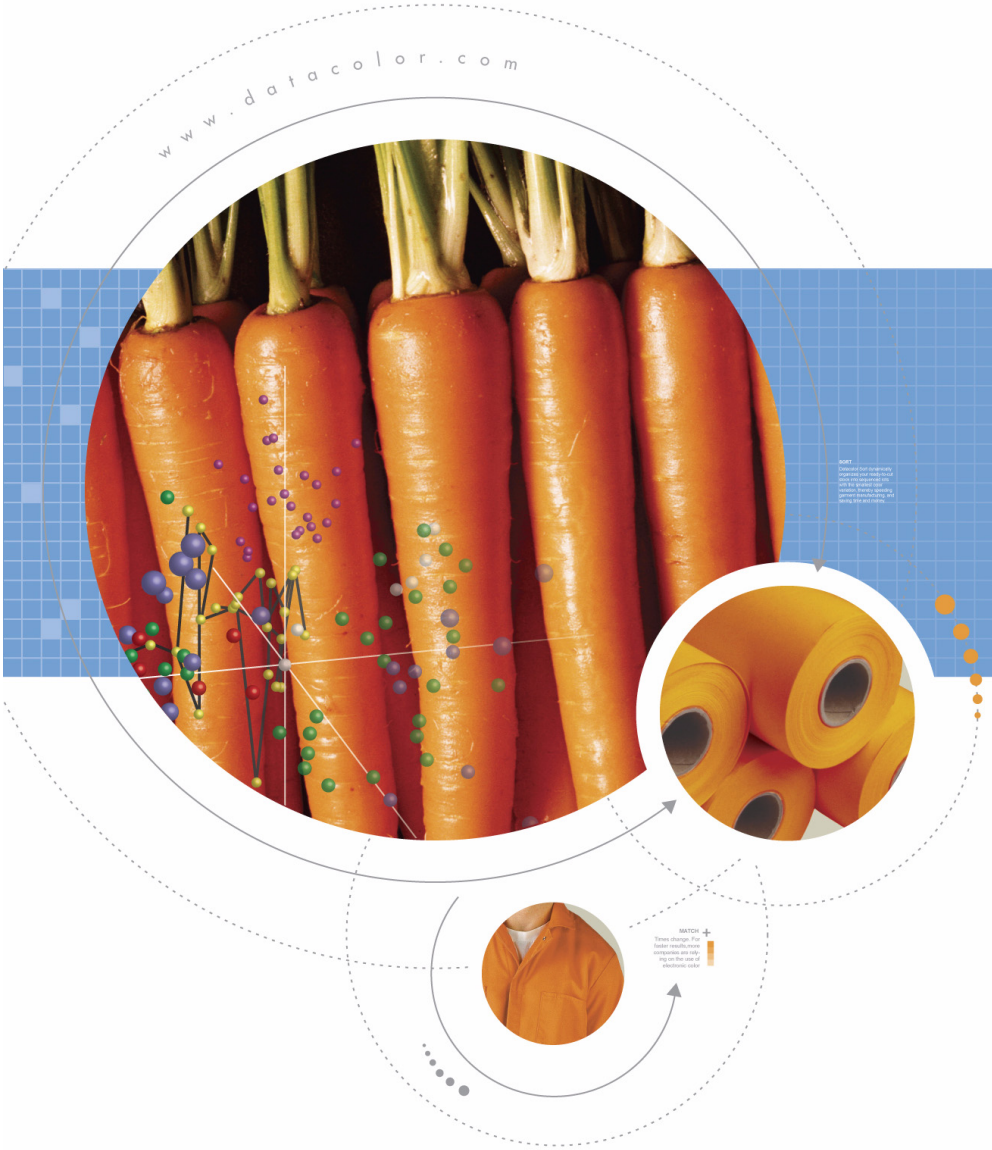
datacolor

SORT™

www.datacolor.com



USER'S GUIDE

datacolor

SPECTRUM™

family of solutions

Preface

Datacolor SORT TM	User' Guide	english
	Version 1.0	February 2005

All efforts have been made to ensure the accuracy of this Guide. However, should any errors be detected, Datacolor would greatly appreciate being informed of them. Changes are periodically made to the information and will be incorporated in new editions of the guide.

Datacolor reserves the right to make improvements and/or changes in the product(s) and/or program(s) described in this guide at any time.

Trademarks

Throughout this manual, trademarks are used. Rather than place a trademark symbol at every occurrence of a trademark name, we state here that we are using the names in an editorial fashing with no intention of infringement the trademark.

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About

About this Guide

Who Should Use this Guide?

This is the Datacolor SORT User's Guide. It is to be read by users of the Datacolor SORT system, who need to know how to begin using the programs. Once you are familiar with Datacolor SORT, this guide provides a reference to help you carry out specific tasks using the system. This guide assumes you are familiar with Microsoft Windows.

How to Use This Guide

This guide is divided into the following main chapters:

	Preface	Edition, copyright and trademarks, important addresses.
	Contents	Table of contents.
1	**About**	Information about this guide.
2	**Installation**	Installation description for Datacolor SORT.
3	**Configuration and Administration**	Configuration and administration of Datacolor SORT.
4	**Using Datacolor SORT**	This chapter provides you with the basic information you need to start and use the system. A step by step description shows you the specification of the basic data and the calculation and correction of recipes.
5	**Maintenance and Error Handling**	Maintenance of the spectrophotometer, the database and error handling.
6	**Windows and Dialog Boxes**	Description of the windows and dialog boxes with their parameters. In *Chapter 2 Installation*, *Chapter 3 Configuration and Administration* and *Chapter 4 Using Datacolor SORT*, some dialog boxes are described in connection with their use.
7	**Index**	The index should help you to find the descriptions you need.

2

Installation

Supported Operating Systems

Workstations

Windows XP Professional

Windows 2000 Professional

Windows NT 4.0, service pack 4 or higher

Windows 98 ***Not recommended!***

Server

Windows XP Server

Windows NT Server, service pack 4 or higher

Windows 2003 Server

Installing Datacolor SORT

	Action	Result
1	Insert the Datacolor SORT compact disc into the CD-ROM drive. If the installation does not start automatically, select **Run** on the Windows start menu, type **<drive ID>:\setup** (**<drive ID>:** is the identification of the CD-ROM drive, e.g., **D:**.) in the "Open" field of the "Run" dialog box, and click **OK**.	The installation program starts automatically.
2	Follow the advice of the installation program.	

Note

After installation, the software runs in the demonstration mode and must be validated. Refer to *New Installations on page 2-4*.

Updating Datacolor SORT

For the installation of an upgrade, refer to the installation description of the update and to *Installing Datacolor SORT on page 2-2*.

Caution!

- ***The database is upgraded by the update program. But, it is strictly recommended to back up the database before updating. Otherwise, for some versions of the program the database could be deleted and lost.***

Note

- If an old DCIMatch, SmartSort, CentersideQC or Fibramix program is updated to one of the new Spectrum Textile software products, the old software is removed during the installation of the new Spectrum Textile products like Datacolor MATCH, Datacolor SORT.
- If the software security key is not accepted after updating the software runs in the demonstration mode and must be validated. Refer to *Existing Installation on page 2-5*.

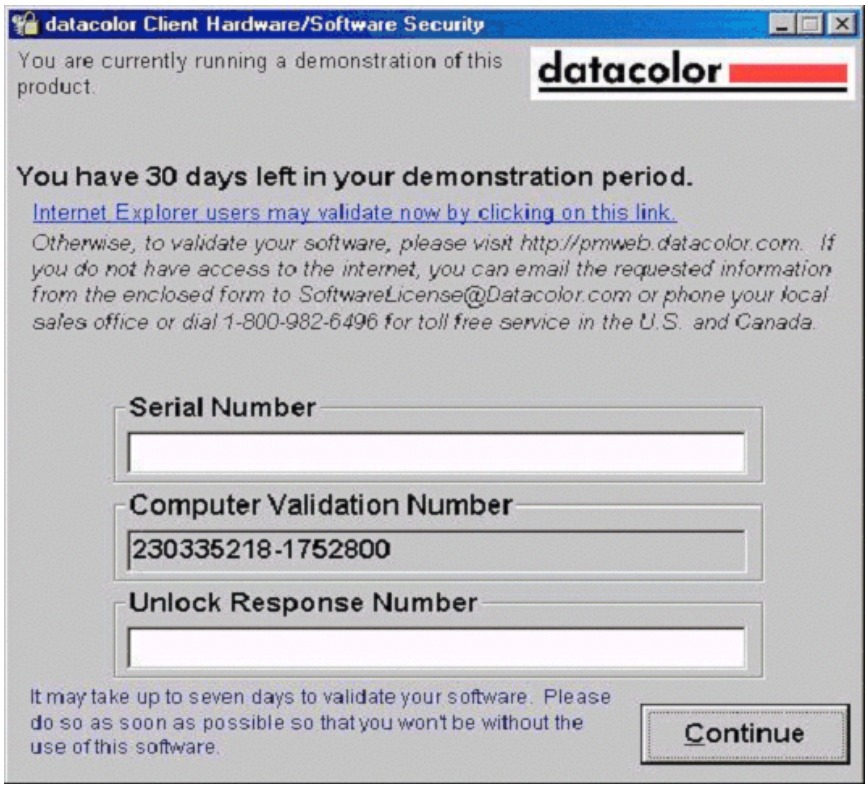
Datacolor Security System

A new Software/Hardware security system replaces the old software protection provided by the green parallel port security key.

New Installations

New purchases receive a sticker containing their serial number. This is typically found on the corner of the jewel case.

The software can be installed normally. After installation and if the software is running for the first time, the following dialog box appears:



From the date of the first use, you have 30 days to validate the software. (Any attempt to change this system date will immediately end the demonstration period.)

1 During this period, press the **Continue** button to start the software in demonstration mode. It is possible that not all features will be available while in the demonstration mode.

The users should validate their software as soon as possible, as it may take up to seven days to do so.

2 Visit http://pmweb.datacolor.com, call the local sales office, the Lawrenceville or Dietlikon call centers or mail the necessary information to Datacolor (SoftwareLicense@Datacolor.com) using the validation instruction sheet provided with the software.

Existing Installation

If you already have one of the following Datacolor software packages:

Datacolor SORT, MatchExpress, or Datacolor Process, that run using a green software security key and receive an upgrade due to an upgrade purchase or a software maintenance agreement that does not require re-licensing, your software will run as before. Continue to use the green software security key.

What Happens if the Software Security Key Stops Working?

If the software security key fails to work for any reason, the software will be converted to the fourteen days demonstration period. The user then has two options:

- First, check the software security key and make sure that it is still properly attached to the system. If not, reattach it and the software should run normally.
- If it is attached and still fails to respond, the software security key may have failed. Use one of the methods listed in the *New Installations* section to contact Datacolor for validating the software using the software security component.

What Happens if the User Changes Computers?

If the user needs to change computers, the software will need to be re-validated. Simply follow one of the procedures listed in the *New Installations* section to contact Datacolor with an explanation of why you need to re-validate your software. The validations will be tracked in the Datacolor network to detect any abnormalities and protect the value of your software purchase.

Note

In this case, the website will not directly validating the user's software, but an email will be generated for a validation request.

Upgrading Your Purchase

Some software packages offer the ability to upgrade the user's purchase level. Using the software security model, it is now easier for users to upgrade their purchase if they want a higher level of software or a new feature module. Simply contact your sales representative to make the purchase. You will be issued a new serial number and a new validation number for your computer. That enables you to run the new features.

Removing Datacolor SORT

	Action	Result
1	On the Windows desktop, double-click the **My Computer** icon.	The "My Computer" dialog box appears.
2	Double-click **Control Panel**	The "Add/Remove Programs Properties" are opened.
3	Double-click **Add/Remove Programs**.	The "Add/Remove Programs Properties" are opened.
4	Select "Datacolor SORT", click **Add/Remove**, and confirm the removing.	Datacolor SORT is removed.
5	If Sybase is not used again (,e.g., for Datacolor Process,) it can also be removed.	

3

Configuration and Administration

User Administration

Specifying, Modifying and Deleting User's Data

Note

Only the user "DCI" can specify and modify user's data.

	Action	Result
1	On the **Tools** menu, select **User Manager** - **User Administration**.	The "User Administration" dialog box appears.
2	In the "User's List," select a user, and click:	
	Add to specify a new user;	**Add:** The "Add a New User" dialog box appears. Insert name and password, and click **OK**.
	Remove to delete of a user's data.	**Remove:** The user data is removed after confirmation.
	Rename to rename a user;	**Rename:** The "Rename a User" dialog box appears. Specify the new name, and click **OK**.
3	If finished, click **Close**.	The "User Administration" dialog box is closed.

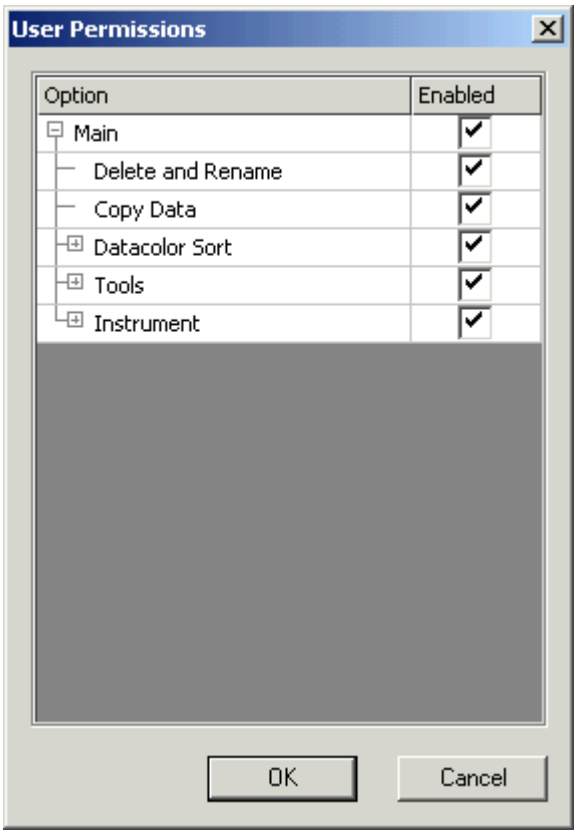
Changing the Password

Note

The user „DCI" cannot be deleted and has all access rights. These rights cannot be modified.

	Action	Result
1	On the **Tools** menu, select **User Manager** - **Change Password**.	The "Change Password" dialog box appears.
2	Insert the old and new password, and confirm the new one.	
3	Click **OK**.	The password is changed.

Access Rights

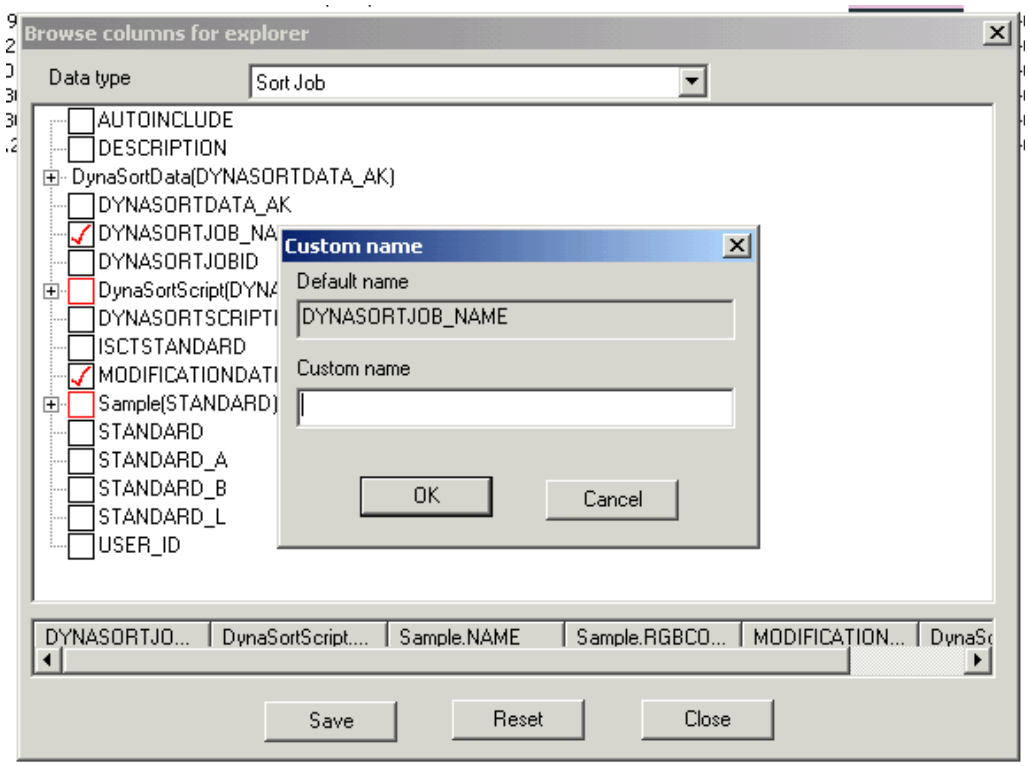


	Action	Result
1	On the context-sensitive menu, select **User Manager** - **User Administration**.	The “User Administration” dialog box appears.
2	Select the requested user and click **Permissions**.	The “User Permissions” dialog box appears.
3	Set the permissions and click **OK**.	The “User Permissions” dialog box closes.
4	In the “User Administration” dialog box, click **Close**.	The “User Administration” dialog box closes.

Note

The setting of a user right is valid for all attached rights at lower levels.

Browser Customizing



You can select the table columns to be displayed as follows:

	Action	Result
1	On the context-sensitive menu, select **User's Browser Definition**.	The "Browse Columns for Explorer" dialog box appears.
2	Select the data type (table).	The related data tree is displayed.
3	Check the boxes, the table columns have to be displayed.	In the footer of the dialog box, the checked table column titles are displayed.
4	Click **Save**.	The settings for the selected table are saved.
5	Repeat steps 3 and 4 to display other table columns. Repeat steps 2 to 4 to alter the display of other tables.	
6	Click **Close** to close the "Browse Columns for Explorer" dialog box.	

Note

The **Reset** button deselects all table columns except the object name. It is used if the performance of displaying is not acceptable.

You can alter the column titles of the tables as follows:

	Action	Result
1	On the context-sensitive menu, select **User's Browser Definition**.	The "Browse Columns for Explorer" dialog box appears.
2	Select the data type.	The related data tree is displayed and the checked table column titles are displayed in the footer of the dialog box.
3	A double-click in a table column title opens the "Custom Name" dialog box.	Refer to the figure on the previous page.
4	Specify the custom name, and click **OK**.	The table column title is altered.
5	Repeat steps 3 and 4 to alter other table column titles.	
6	Click **Save**.	
7	Click **Close** to close the "Browse Columns for Explorer" dialog box.	

Using the mouse, you can change the sequence of the table columns by drag and drop.

You can alter the position of column titles by drag and drop:

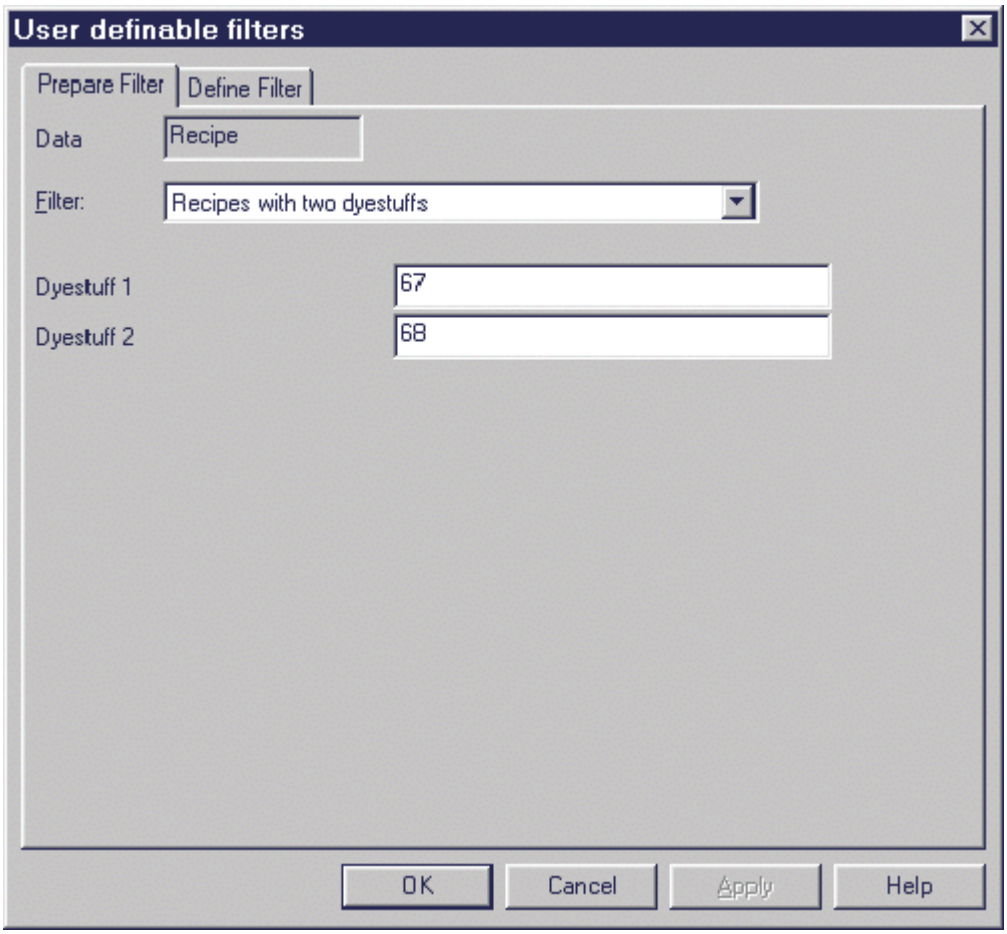
Browse Filters

It is possible to specify customized filters (queries) for selecting data from the database. Customized filters can be ordered from Datacolor. Please contact your Datacolor distributor for more information.

Note

- The integrated tool for customizing filters needs advanced know-how of both the database and SQL.
- Filters are language dependant. They can only be specified and used with applications that have the same application language.

Using Browse Filters



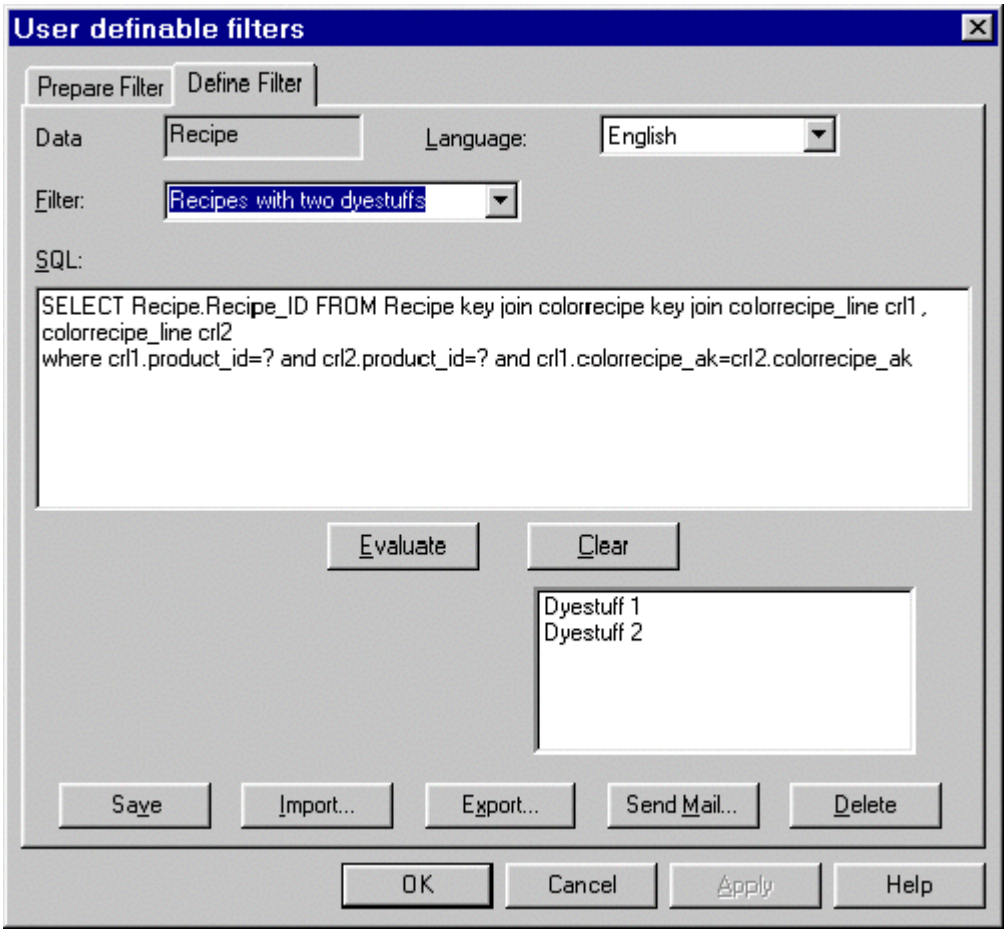
	Action	Result
1	On the context-sensitive menu of the requested list window, click **Filter**.	The "User Definable Filters" dialog box appears.
2	In the „Prepare Filter" tab, select the filter, type the identification(s) of the objects in the fields, and click **OK**.	The selected objects are displayed in the list window.

Disabling Browse Filters

	Action	Result
1	On the context-sensitive menu of the requested list window, click **Reset Filter**.	

Exporting and Sending Browse Filters

A filter definition can be exported to a file or be attached to an e-mail.



	Action	Result
1	In the „Define Filter“ tab of the “User Definable Filters” dialog box,	
	• click **Export** to export the filter definition to a file.	The „Save as“ dialog box appears. The file can be saved with the extension „.dmf“.
	• click **Send Mail** to mail the filter definition.	The e-mail form appears and the filter definition file is attached.

Importing Browse Filters

	Action	Result
1	In the „Define Filter“ tab of the “User Definable Filters” dialog box, click **Import**.	The „Open“ dialog box appears. The file with the extension „.dmf“ can be opened and imported.

Importing Browse Filters directly from the E-mail

	Action	Result
1	On the **File** menu of the overview window, click **Scan Mail**.	All attached files with the extension „.dmf“ are searched und displayed in the „Loading Filters from Mail“ dialog box.
2	Select the requested files, and click **Load**.	The selected files are imported.

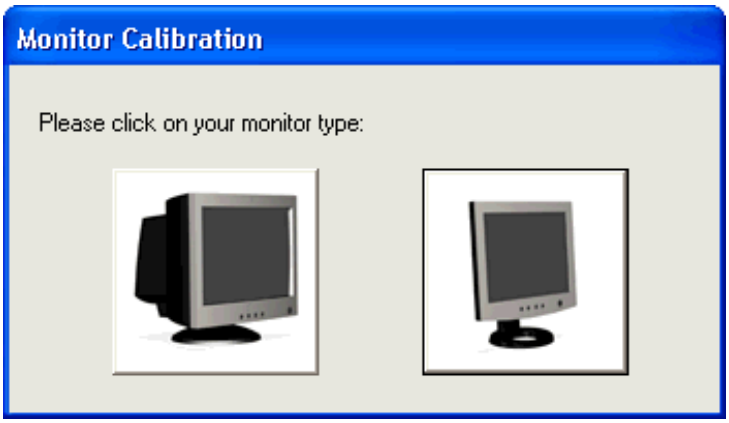
Calibrating the Monitors Using Datacolor SPYDER2

Note

This function is enabled if the Datacolor SPYDER2 is connected to the USB port.

This function is used to perform the monitor calibration for adjusting the color of the monitor. After calibrating the monitor, all color patches displayed on the screen are more similar to the color of the measured sample. A calibrated monitor enables you to judge and compare colors more correctly before dyeing.

	Action	Result
1	In the „Tools“ menu, select **Calibrate Monitor**.	The assistant for monitor calibration appears.



2	Follow the advises on the screen.	

Import and Export

Datacolor SORT supports the import/export of samples and colorant sets with different file formats:

- Sample Import/Export with Datamatch format (*.EXP, *.EXQ files)
- Sample Import/Export with Datacolor Envision or Datacolor Tools (*.QTX files)
- Sample Import/Export with Datacolor SORT (*.XML files)
- Colorant Set Import/Export with Datacolor SORT (*.XML files).

The XML files may become very big (a file with 120 samples is about 370KB). You can compress them drastically (24 KB) using WinZip.

Note

Internet Explorer Version 5.01 Sp2 or higher must be installed to run the Import/Export of XML files.

Exporting Data

Export function for color samples.

	Action	Result
1	On the **Tools** menu, select **Export**.	The "Export" dialog box appears. Refer to *Export Dialog Box on page 6-45*.
2	Select the data type and the format.	***Attention: Datamatch, Datacolor Tools or Datacolor Envision cannot import XML files.***
3	Specify path and file name of the export file or use the browse function, and click **Export**.	

Importing Data

	Action	Result
1	On the **Tools** menu, select **Import**.	The “Import” dialog box appears.
2	Specify path and file name of the import file or use the browse function.	Refer to *Import Dialog Box on page 6-44*. Refer to *Importing Colorant Sets on page 3-12* for importing colorant sets.
3	Click **OK**.	If the corresponding options are set, all or the existing samples are prompted. You can **Save**, **Save with Prefix**, or **Skip** them.

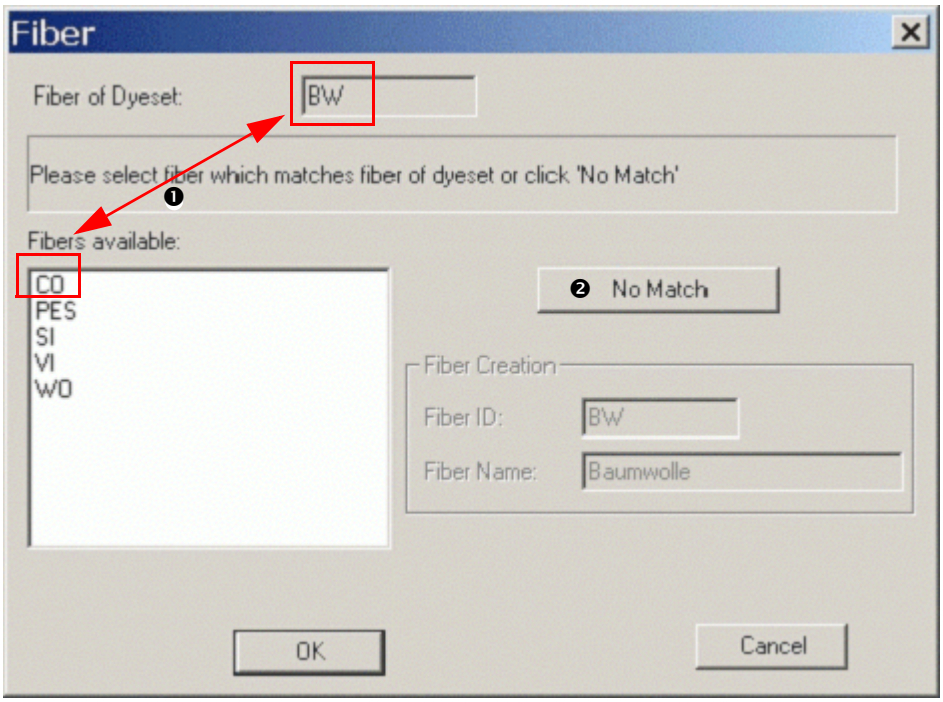
Note

- Samples are not imported if either the name or the spectral data is the same as data that already exits in the database.
- The import function compares the spectral data when the sample name already exists. A new sample is only created if the spectral data is different. E.g., if sample „Blue 4711" is already in the database, the imported sample, which has the same name but different spectral data, is imported as „Blue 4711 - 001".
- Samples imported from EXP files are always stored in the database. If the sample name already exists, a new sample is created with an extension in the name, e.g. sample „Blue 4711" is saved as „Blue 4711-0“.

Importing Colorant Sets

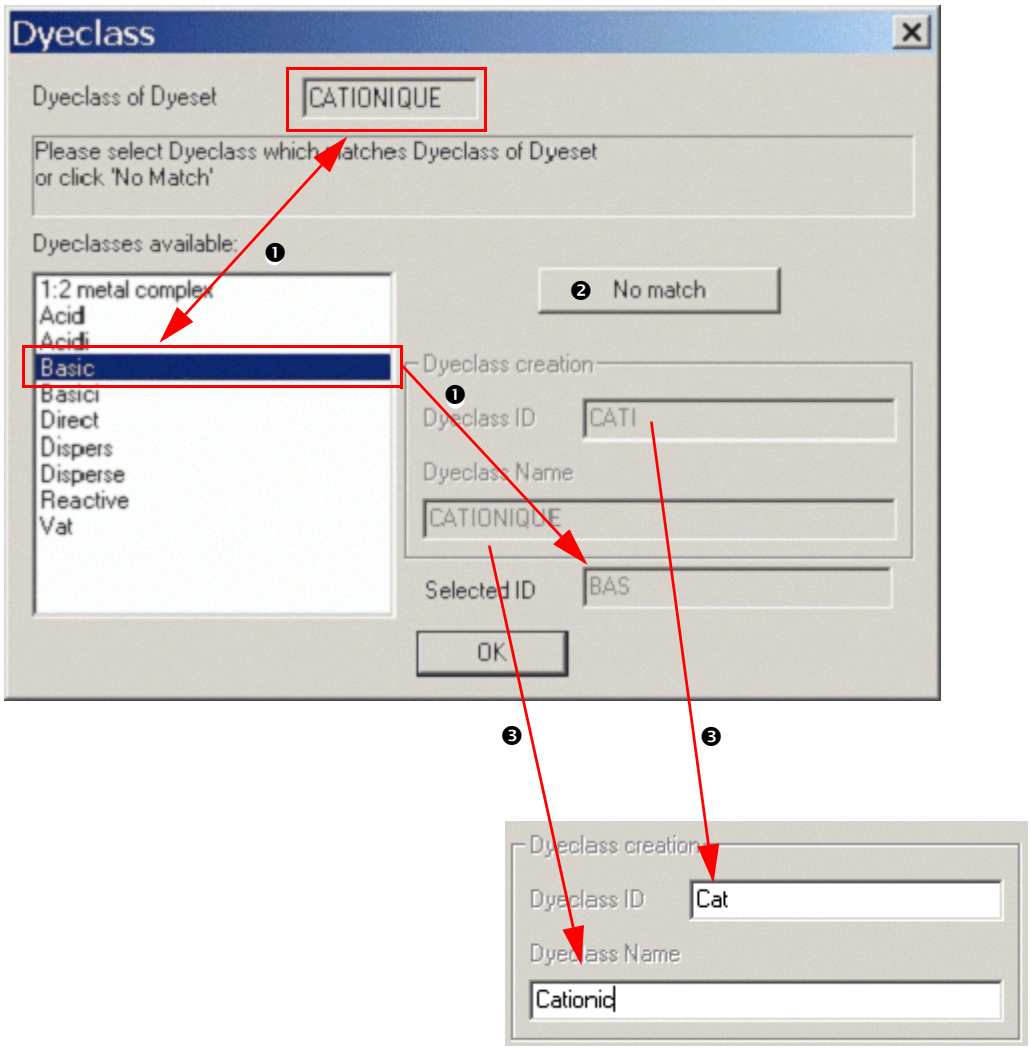
Note

- If you import a colorant set that already exists, the program updates the new data. Calibration data is always updated. ***Dyestuff prices are not imported.***
- If the fiber of the colorant set does not exist in the database, a dialog opens where you can select an equivalent from your database.
  ❶ This is to avoid creating the same fibers in different languages (e.g. Co, Bw, etc).
- If there is no fiber in the database that matches the fiber of the colorant set, click **No Match** ❷. A new fiber is then created.
- Click **OK** to start the import.

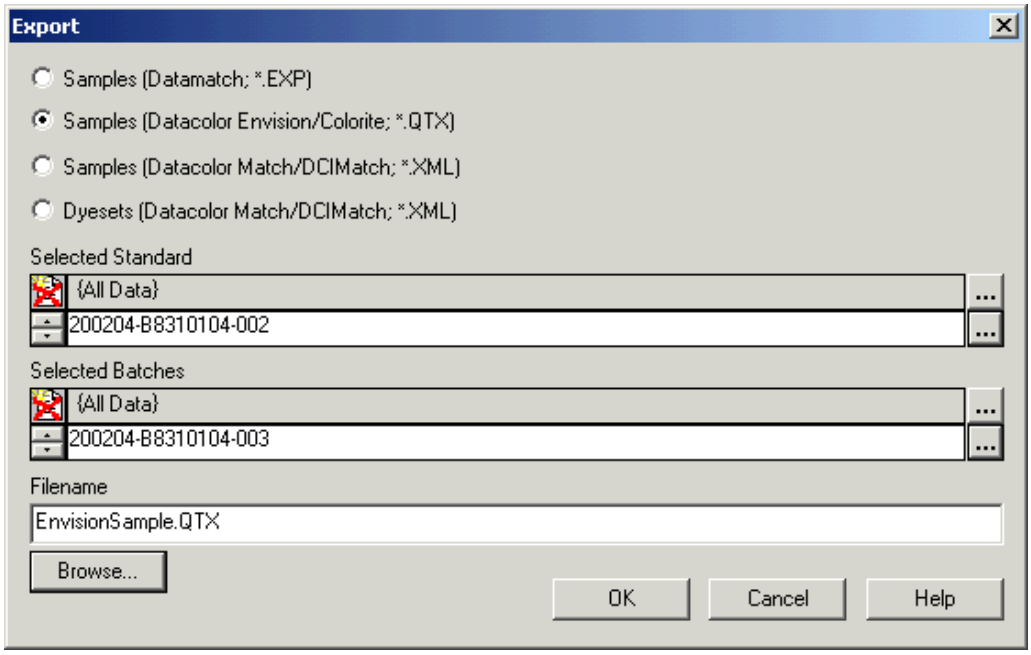


Note

- The dye class is treated in the same way as the fiber.
- If the dye class of the colorant set does not exist in the database, a dialog opens where you can select an equivalent dye class from your database.
  ❶ This is to avoid creating the same dye classes in different languages (e.g. Dispersion, Disperse, or Cationique and Basic etc).
  If there is no dye class in the database that matches the dye class of the colorant set, click **No Match** ❷. A new dye class is then created.
- ❸ You can modify the dye class ID and name before you start the import.
- Click **OK** to start the import.



Importing and Exporting Samples as QTX Files



Datacolor SORT can export/import samples to/from QTX files. A file always contains a standard and its batch(es). It is not possible to select more than one standard. In this case, you must specify multiple export files.

Note

If you select only batches, the dialog box closes when you click „OK". No samples are then exported.

Backing Up Using Datacolor SORT

The backup function saves the database to the selected target drive and folder.

	Action	Result
1	On the "Tools" menu, select **Backup**.	The "Backup" dialog box appears.
2	Specify target drive and path (or use the browse button), and click **OK**.	The contents of the database are saved.

Caution

Before the backup is made all databases are validated. This may take up to several minutes depending on the size of the databases. If there is a problem with one of the databases, a message is displayed and the backup is not made. An old backup must be restored in this case.

Backing Up Using Sybase Utilities

The backup utility is used to store running databases, database files, transaction logs, and write files.

You can access the backup utility ...

- using Sybase Central, or,
- using the system command line to call the **dbbackup** utility. This utility can be used for specifying batch or command files.

The backup utility copies the database file and the transaction log of a single database.

Backing Up Using Sybase Central

Backing Up A Running Database

	Action	Result
1	Start **Sybase Central**.	
2	Connect the database.	
3	Right-click the database and select **Backup** on the context-sensitive menu.	
4	Follow the instructions of the wizard.	

Backing Up A Database File or A Running Database

	Action	Result
1	Start **Sybase Central**.	
2	Open the „Utilities“ folder in the left panel.	
3	Double-click the **Backup Database** in the right panel.	
4	Follow the instructions of the wizard.	

The dbbackup Command

Syntax

Dbbackup [switches] *path*

Switches

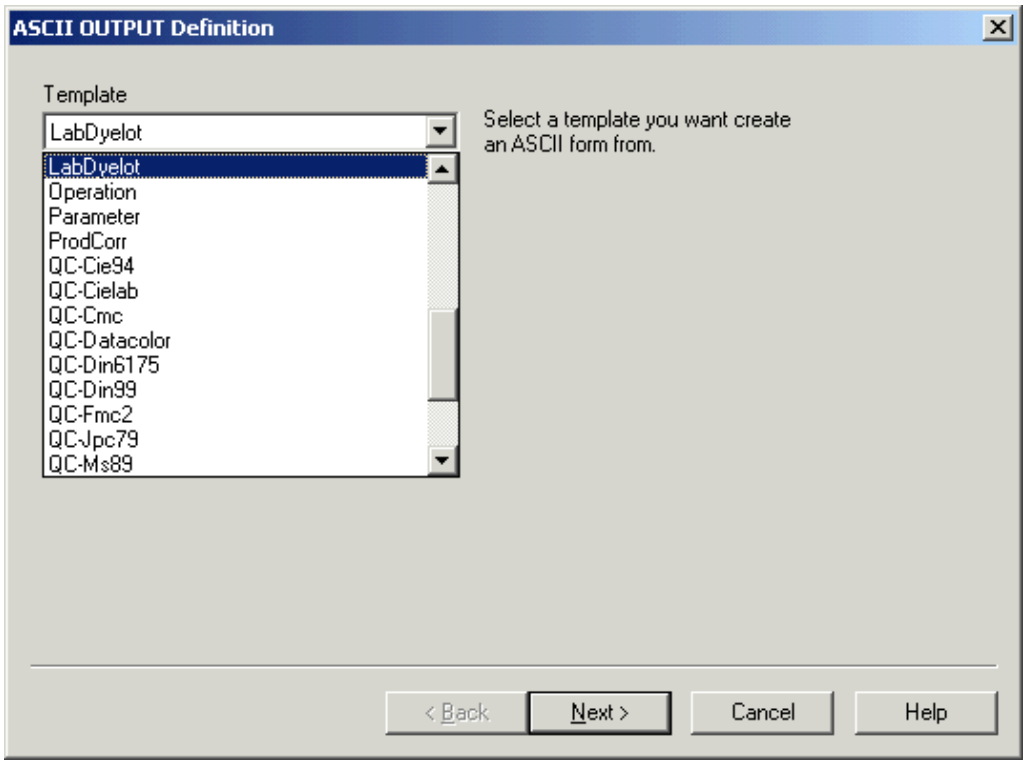
Switch	Description
-c „keyword=value“	Database connection parameters. If the connection parameters are not specified, the parameters of the SQLCONNECT environment variable will be used (if they are set). Parameters: eng=*engine* dbn=*database name* uid=*user ID* The user must have DBA authority or REMOTE DBA authority. pwd=*password*
-d	Only stores the main database file.
-l *file name*	Stores the transaction log file to a file with the specified name.
-n	***The switch is only active, if the switch -r is set.*** Changes the name of the transaction log file to the following format: yymmddnn.log yy year mm month dd day nn number in the range of 00 to 99.
-o *file name*	Creates a file for the log output.
-q	Quiet mode: Messages are not printed.
-r	Rename and start a new transaction log.
-t	Only stores the transaction log.
-w	Only stores the write file.
-x	Deletes and restarts the transaction log.
-xo	Deletes and restarts the transaction log without backup.
-y	Replaces files without confirmation.

ASCII Output (Option)

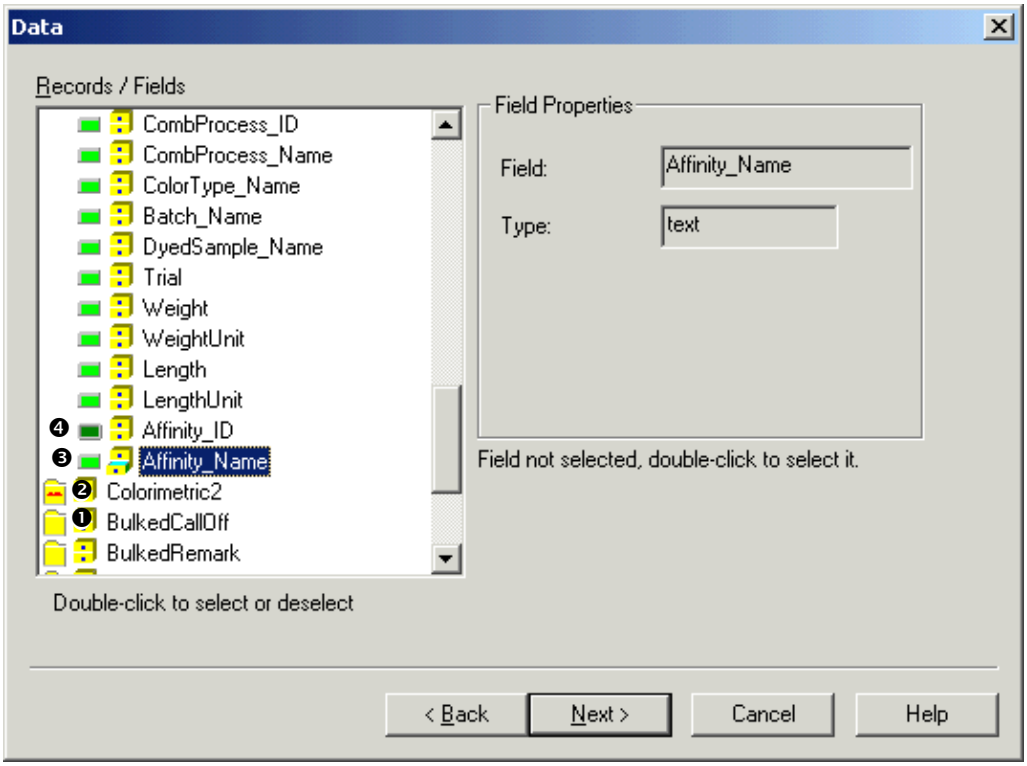
The ASCII output option supports writing data to an ASCII file when you can print data. This option includes specifying, modifying and deleting ASCII forms.

Specifying ASCII Forms

	Action	Result
1	On submenu „ASCII Forms“ of the “Tools” menu, select **New**.	The “ASCII Output Definition” dialog box appears.



2	Select a template from the list, and click **Next**.	The „Data“ dialog box appears.



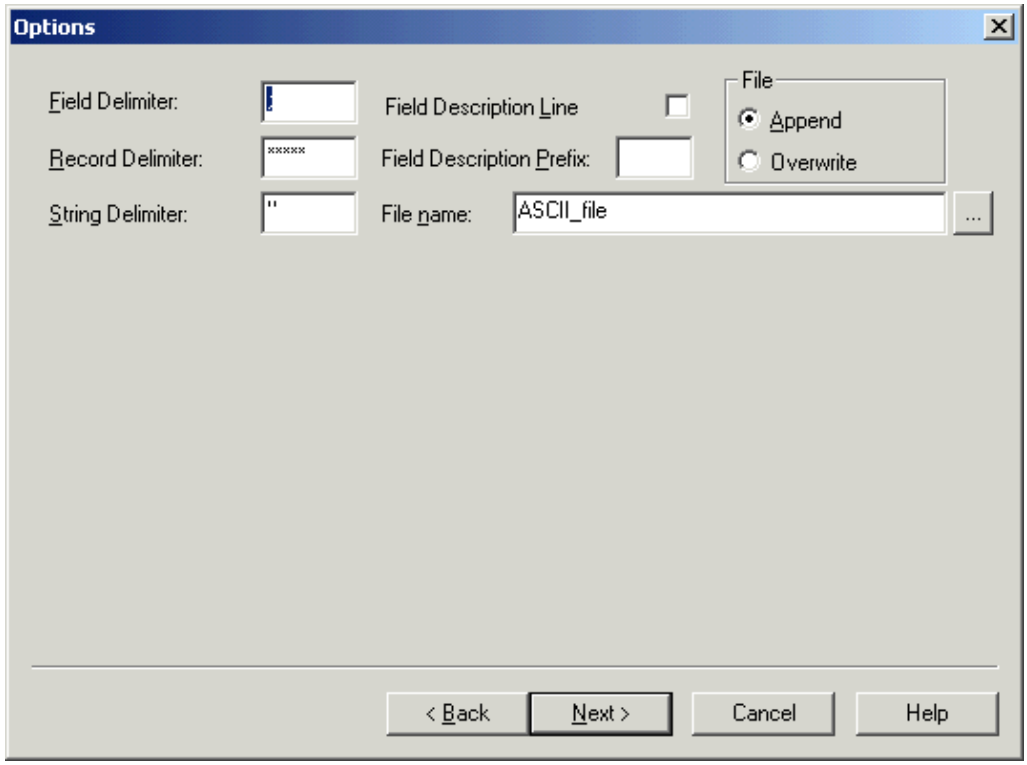
❶ Folder without selected fields. Click the folder to open or to close it.

❷ Folder with selected fields (signed by red dots). Click the folder to open or close it.

❸ Non-selected field with opened properties. Double-click the icon to select the field. Click the icon to close the field properties.

❹ Selected field with closed properties. Double-click the icon to deselect the field. Click the icon to open the field properties.

3	Select the fields to be written to the ASCII file.	The corresponding field properties are displayed. The number of decimal digits can be altered for all fields of type „double“.
4	Click **Next.**	The „Options“ dialog box appears.



Field Delimiter	If necessary, change the field delimiter.
Record Delimiter	If necessary, change the record delimiter.
String Delimiter	If necessary, change the string delimiter.
Field Description Line	Check the box if a field description line is required.
Field Description Prefix	If necessary, type a field description prefix.
File Name	***Type the path and the file name.***
File	Select „Append“ if the new records should be added to an existing file, or, select „Overwrite“ if the existing file should be overwritten.

5	Click **Next.**	The „ASCII Form Name“ dialog box appears.
6	Type the name of the form, and click **Finish**.	

ASCII Output of Basic Data

	Action	Result
1	In the corresponding list window, select the object that should be printed to an ASCII file.	
2	On the basic data menu, click **ASCII**.	The file is saved to the place specified in the ASCII form.

Example: ASCII output of an affinity

```
@"ID","Name","FiberGroup"
"55PES/45CV WASH","55PES/45CV washed 70° C","PES/VI"
@"Fiber","Part"
"Polyester",55.00
@"Fiber","Part"
"Viscose",45.00
@"QualityID","QualityName"
"55PES/45CV LICL","55PES/45CV Libero Classic"
*****
@"ID","Name","FiberGroup"
"CO3","C04200 (BASF) gebl.BW-RENFORC","CO"
@"Fiber","Part"
"Cotton",100.00
@"QualityID","QualityName"
"S4","C04200 (BASF) gebl.BW-RENFORC"
```

Specifying Print Forms Using the Pager

The pager is used to specify print forms. A set of forms is delivered by Datacolor. The user can modify these forms or specify new ones.

Starting the Pager

1. On the Windows start menu or the desktop, click the Pager icon.
   The “Pager” window appears.

Specifying A New Print Form

Refer to *Pager Window on page 6-46* for more information about the parameters.

	Action	Result
1	In the toolbar or on the “File” menu, select **New**.	The “Template Identification” dialog box appears.
2	Select “Application”, “Option” (object type), “Language”, and “Version”, and click **OK**.	An empty form appears containing all sections available for the selected option.
3	Click the section to be specified.	
	Inactivate an unused section: On the **Edit** menu, select **Hide Current Section**, or select the requested section on the “Sections” menu.	The check mark is removed and the section is not used in the current print form.
	Specifying a text field: 1. In the toolbar, select the text tool. 2. Draw and place the requested text field. 3. In the toolbar, select “Toggle Properties.” 4. Specify the text and change the other parameters if requested.	The “Properties” box appears.
	Specifying a database field: 1. In the toolbar, select “Toggle Properties.” 2. Select and place the requested database field. The parameters of the fields can be altered using the “Properties” box.	The “Fields” list box opens displaying all available fields. A text field for the description and a field for the data is displayed.

4	***Draw rectangles and ellipses:*** 1. In the toolbar, select the rectangles or ellipses tool. 2. Draw and place the graph. The parameters of the graph can be altered using the "Properties" box. ***Enter a bitmap graph:*** 1. In the toolbar, select the "Bitmap" tool and click the selected section. 2. Search and select the graph (supported are *.bmp, *.pcx, *.jpg graph), and click **Open**. 3. Place the graph. The parameters of the graph can be altered using the "Properties" box. ***Specifying date/time, page number or form (file) name:*** 1. In the toolbar, select the requested tool and place the field. ***Remove all field from the current section:*** 1. In the toolbar, select the requested tool and place the field. ***Deleting a field:*** 1. Select the field and press **Ctrl** + **Del**.	The "Open" box appears.
5	In the toolbar or on the "File" menu, select **Save (As)**.	The "Form Name" dialog box appears.
6	Specify a form name, and click **OK**.	The new print form is created.

Modifying A Print Form

Refer to *Pager Window on page 6-46* for more information about the parameters.

	Action	Result
1	In the toolbar or on the “File” menu, select **Open**.	The “Template Identification” dialog box appears.
2	Select “Application”, “Option” (object type), “Language”, and “Version”, and click **OK**.	The selected form appears.
3	Alter the form as requested. Refer to *Specifying A New Print Form on page 3-21*.	
4	In the toolbar or on the “File” menu, select **Save**, and click **OK**.	The print form is altered.

Deleting or Renaming A Print Form

	Action	Result
1	In the toolbar or on the “File” menu, select **Delete/Rename**.	The “Form Maintenance” dialog box appears.
2	Select the requested form.	
3	***Renaming:*** Click the form name, alter the name, and press **ENTER**.	The name is altered.
	Deleting: Select **Delete**, and confirm the deletion.	The selected print form is deleted.

Importing Print Forms

	Action	Result
1	On the "File" menu, select **Import**.	The "Open" dialog box appears.
2	Search and select the form to be imported, and click **Open**.	The selected file is imported.

Exporting Print Forms

	Action	Result
1	On the "File" menu, select **Export**.	The "Form Maintenance" dialog box appears.
2	Select the form to be exported and click **Export**.	The "Save as" dialog box appears.
3	Select the path, specify a file name, and click **Save**.	The selected form is exported.

4

Using Datacolor SORT

Basics

Starting Datacolor SORT

1 On the Windows start menu or the desktop, click the Datacolor SORT icon.
The SORT Job List window appears.

Data Handling

Browse and Selecting

Using the object tree

All objects are displayed in a structured list on the left of the "Explorer" window.

Opening and closing structure levels:

\+ A + sign indicates that there are hidden subordinate folders and/or objects. Click the **+** sign to open the next structure level.

\- Click the **-** sign to close all subordinate structure levels.

Selection of objects:

	Action	Result/Notes
1	Select the requested object folder using the left mouse button.	The object folder data is displayed in the corresponding view.

Context-sensitive menu:

New Folder	Adds a new subfolder to the selected folder. *Type a meaningful name.*
Delete	Deletes the selected folder (only if the folder is empty).
New Root Folder	Adds a new root folder. *Type a meaningful name.*
Rename	Is used to rename the selected folder.
Data Type in this Folder	Opens the „Data in Folder" dialog box used for searching data types and the corresponding data in the selected folder. Refer to *Data in Folder Dialog Box on page 6-7*.
Find in Folder	Opens the „Find <data type> in Folder" dialog box used for searching data records with a determined name or part of the name. The <data type> of the opened list window is used. Refer to *Find in Folder Dialog Box on page 6-8*.

Searching data types and the corresponding data in the selected folder

Refer to *Data in Folder Dialog Box on page 6-7*.

Searching objects of a determined data type

	Action	Result/Notes
1	On the context sensitive menu, select **Find in Folder**.	The „Find <data type> in Folder“ dialog box is displayed. The data type of the opened list window is selected.
2	Type the name (or a part of the name) of the searched data records, select the search restrictions, and click **Search**.	Refer to *Find in Folder Dialog Box on page 6-8*. The corresponding data is displayed.
3	Select one or more of the items in the „Search Result“ box and right-click to display, print, or to make an ASCII output of the data.	

Note

The number of data records to be displayed is limited to 1000. A message is displayed, if the limit is exceeded

Using the list windows

A mouse double-click in an object opens a window, dialog box, or property sheet, that is used to alter or delete the corresponding object data. Refer also to *General table functions on page 4-5*.

Field-specific functions

Switch between selection and input mode (1)

Click to switch between selection and input mode.

Selection mode

Input mode

The input mode is locked.

Data selection step by step (2)

The upper partial button selects the values step by step in descending order (previous), the lower partial button in ascending order (next).

Browse buttons (3, 4)

The upper browse button (3) opens the "Directory" dialog box used for folder selection. The lower browse button (4) opens a list or search box to select data corresponding to the field.

Selection aids for fields and table column headers

The following selection aids are implemented for input fields with a link to another object (drop-down combo boxes or fields with a browse button):

Typed characters are used for search criteria. In front of the field, they are displayed in red and into disappointed brackets. The following wildcards are available:

% (percent)	Replaces an undefined number of characters. ***% is set per default at the end of the search string.***	
_ (underscore)	Replaces any single character.	
[ ]	The characters (or a range of characters) between the square brackets are to be included in the data found.	
Examples:	**[or]**	Displays only names that contain the characters **o** or **r**.
	[b-h]	Displays only names that contain the characters of the range **b** to **h**.
[^]	The characters (or a range of characters) between the square brackets are not to be included in the data found.	

If you scroll using search criteria, only the corresponding objects are displayed.

General table functions

Selecting columns for sorting and filtering:

Click the column title to be selected. The column is marked with sorting sign and arrow.

Data is sorted using two criterias:

1st priority has the column you have clicked in;

2nd priority always has the object name (if it is selected in „User's Browser Definition".).

Changing the order:

Click the column title of the selected column for changing the order between ascending and descending.

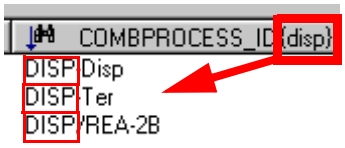
A selection filter can be defined for each column:

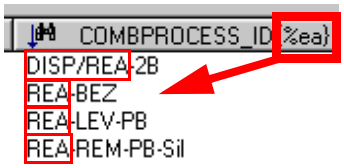
1 If necessary, select the column title field.

2 Type the characters to be used as selection criteria. A binocular sign is displayed and the data is selected according to the criteria.

- The wildcard % can be used.
- The selection criteria can be changed as long as the column is selected.
- Use **Backspace** to remove the character on the left of the cursor.
- Use **Shift** + **Backspace** to remove the entire selection criteria.

Examples:

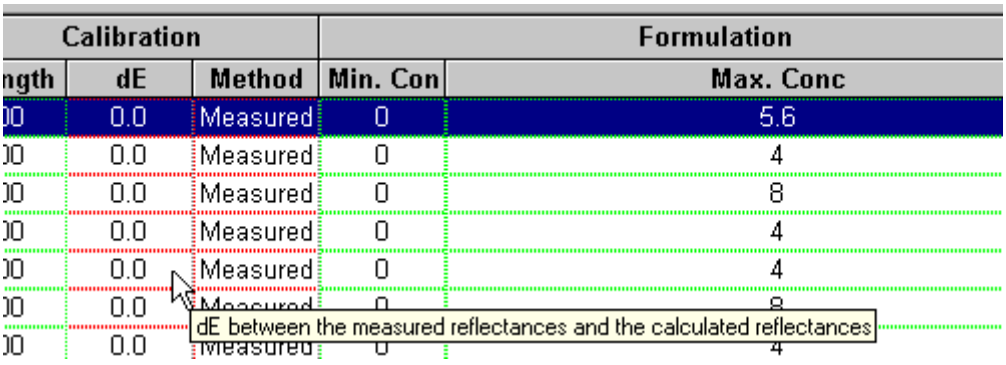




The names of the table columns can be altered using the "User's Browser Definition" function of the "Tools" menu. Refer to chapter *Browser Customizing on page 3-4*.

Tool tips

In many places tool tips are implemented: Setting the cursor to this place, a context-sensitive information appears (refer to figure below).



Opening context-sensitive menus

Context-sensitive menus are available in different windows, dialog boxes, and fields (Refer to the corresponding descriptions.). For opening, set the mouse cursor into the corresponding field or table column and click the right button.

Specifying, Modifying and Deleting Objects

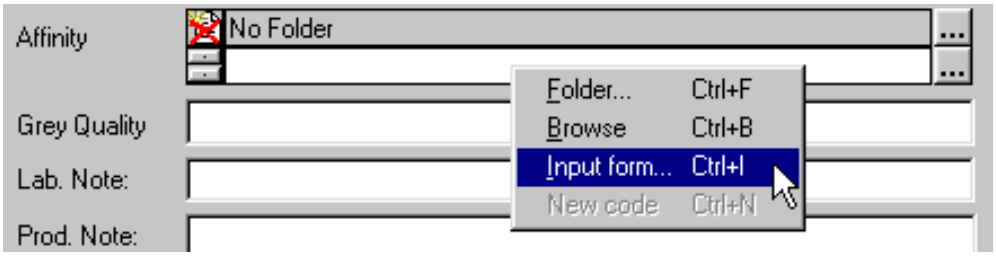
Note

The delete, move, copy, and rename functions are only available for users having the corresponding access rights.

Specify or modify an object, you can specify new objects of another linked object type using the corresponding tab or selection field.

Example: In the "Quality/Style Property Sheet", you can specify a new affinity as follows:

- Use the "Affinity" tab.
- In the "Affinity" field of the "Quality/Style" tab, use the "Input Form" function of the context-sensitive menu.



Opening the input form

	Action	Result/Notes
1	If available, select the corresponding tab, or, right-click the selection field where the new object should be entered.	A context-sensitive menu appears.
2	Select **Input Form**.	The requested tab, box, or window appears.

Specifying objects

	Action	Result/Notes
1	Select a folder, if necessary.	
2	Switch to the input mode.	 The input mode icon appears.
3	Specify the new object name or overwrite the existing name with the new one.	
4	Specify the other data.	**Fields marked with a red * are mandatory.** Refer to the corresponding description in chapter *Windows and Dialog Boxes on page 6-1* for more information about the parameters.
5	Click **Insert**.	The new object is created.

Modifing and Deleting Objects

	Action	Result/Notes
1	Select the object data to be modified or deleted.	Refer to *Browse and Selecting on page 4-2*.
2	***Modifying:*** In the requested fields, change the object data, and click **Save**.	 The input mode icon appears. The object is altered.
3	***Deleting:*** Click **Delete** and confirm the deletion.	The object is deleted.

Note

An object cannot be deleted, if it is linked to other objects. If the system cannot delete an object, all valid links are listed in the “Delete Check” info box.

Calibration and Measurement

Note

- For further details about your spectrometer refer to the manual supplied with your system.
- It is not possible to re-measure color types if they are linked to other tables.

Calibrating Your Spectrophotometer

Your spectrophotometer must always be calibrated after switching on. It is recommended to calibrate at least every eight hours. Different types of spectrophotometers have different settings. This section gives a general description of the calibration.

	Action	Result/Notes
1	Check that your spectrophotometer is switched on.	

Note

Leave the spectrophotometer to warm up for a few minutes. Datacolor recommends that for the greatest accuracy you should wait thirty minutes before calibrating.

2	If you select the **Measure Directly** button missing calibrations are requested automatically. For an intentional calibration, click the **Measure** button and in the opened "Measurement" dialog box, select the "Calibrate" tab. After specifying the parameter values according to your spectrophotometer, click **Calibrate**.	Refer to *Measurement Main Window on page 6-27*.
3	Follow the advice on the screen.	

UV Calibration

Calibration Methods

Note

There are several methods that can be used to calibrate the adjustable UV filter position. Please refer to the whiteness standard you are using to determine the method to be used.

Ganz/Griesser: This procedure uses the Ganz/Griesser calibration method. The light source is filtered to simulate the D65 Illuminant and the Ganz Griesser parameters are used to calculate the filter position. In addition, the target whiteness value is based on 10¼ standard observer data.

CIE using D65/10: The light source is filtered to simulate the D65 illuminant. This is the procedure used to perform a CIE Whiteness evaluation.

ISO Brightness (C): The light source is filtered to simulate Illuminant C. This is the procedure used to perform an ISO Brightness evaluation.

Example using the Ganz/Griesser method

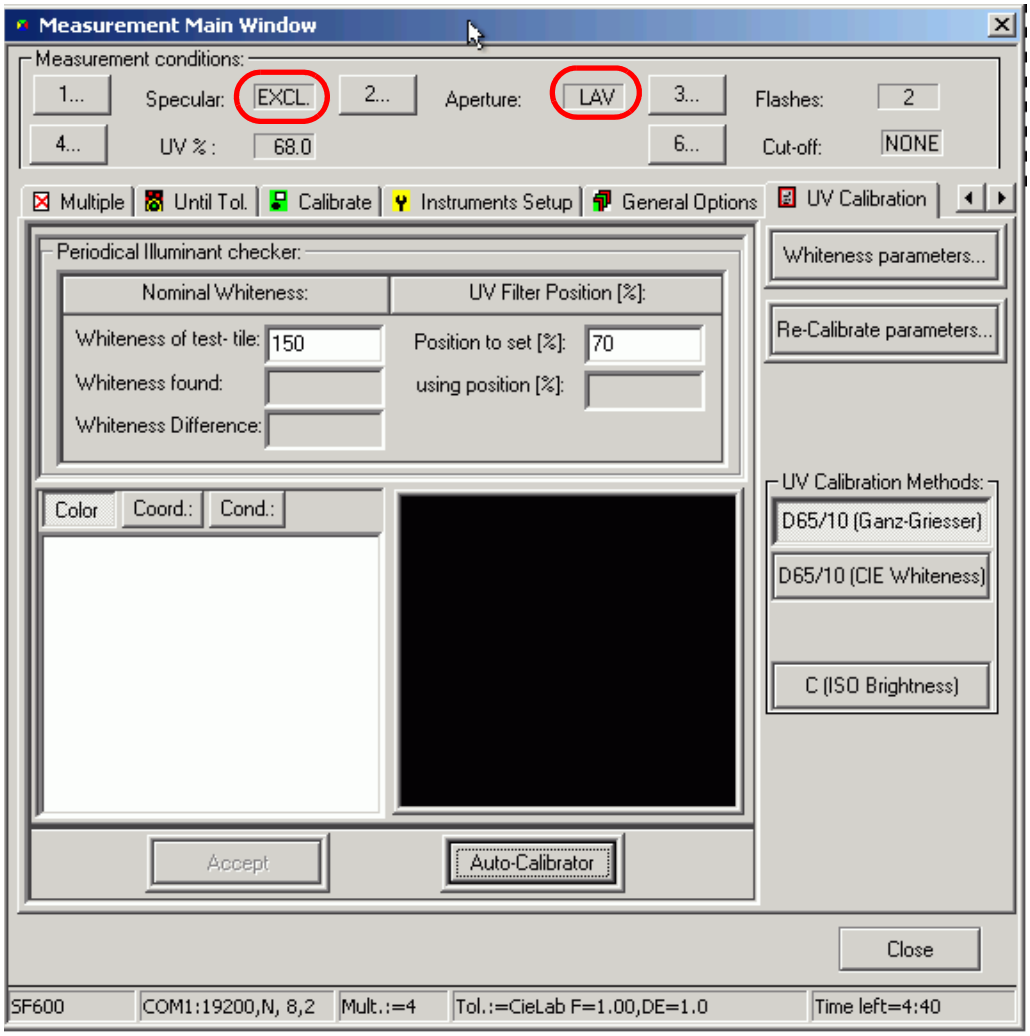
Note

The UV calibration is only available for instruments with the whiteness option.

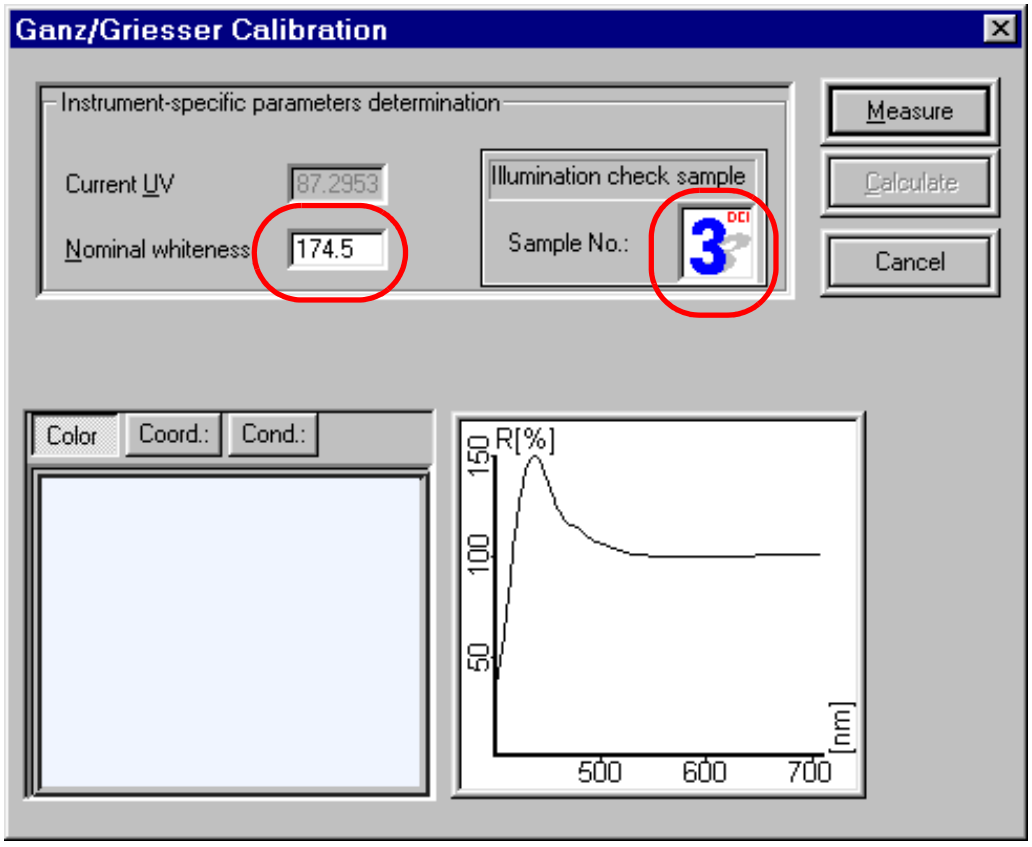
The UV calibration is necessary to ensure a constant UV emission of the bulb.

Definition of the Ganz/Griesser whiteness parameters

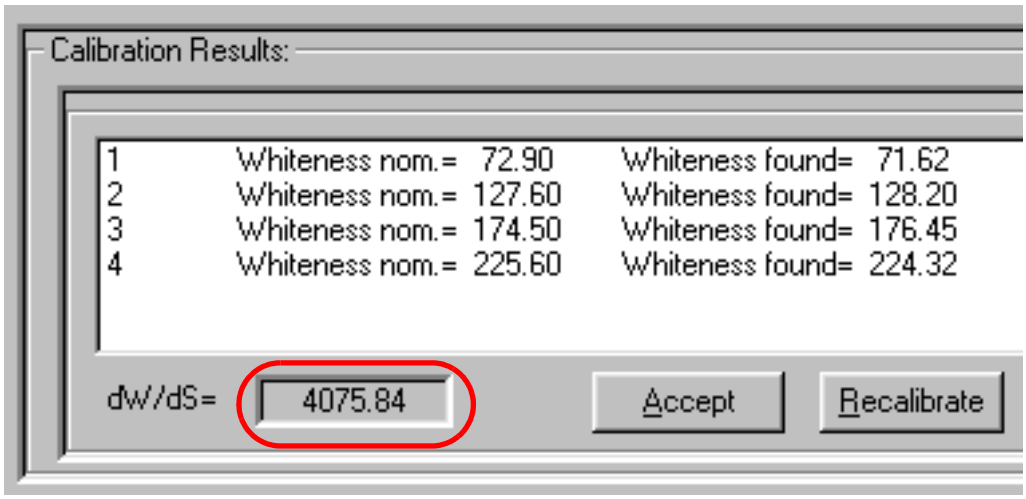
This definition is necessary if a bulb or an other part of the optical illumination system has been replaced.



	Action	Result/Notes
1	In the "Measurement Main Window", select the **UV Calibration** tab.	
2	Select specular **Excl**.	
3	Set aperture **LAV**.	
4	Click **Whiteness Parameters**.	The „Ganz/Griesser Calibration" dialog box appears.

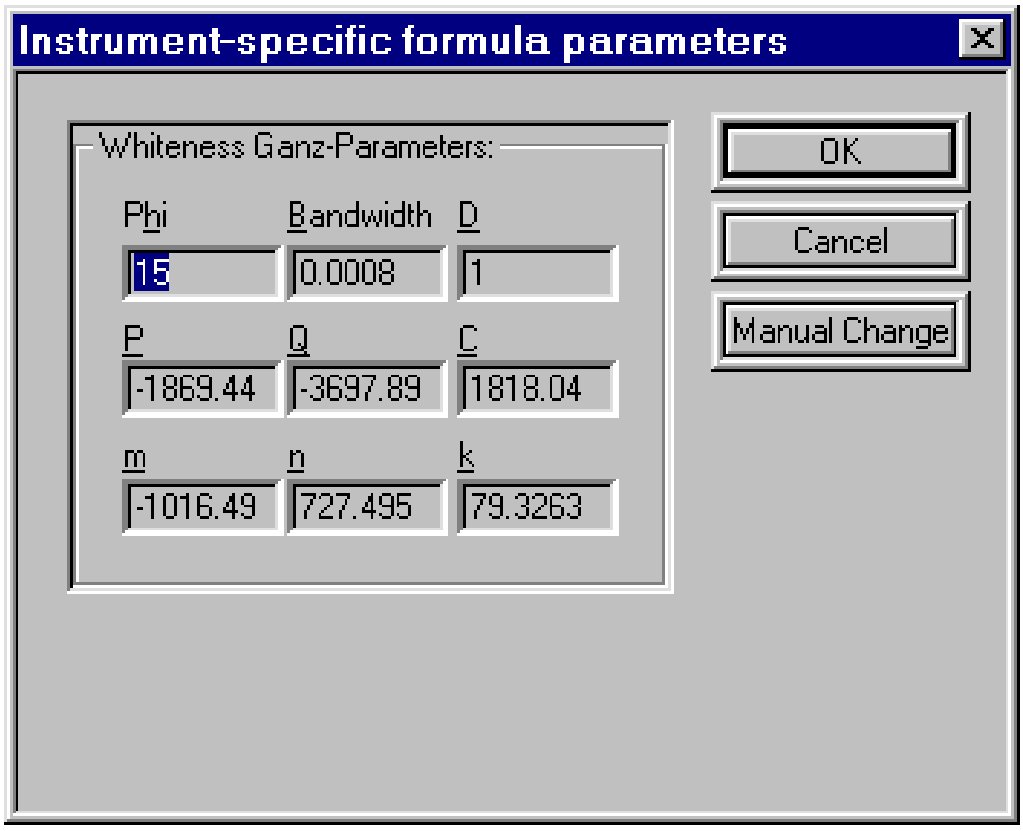


	Action	Result/Notes
5	In the “Ganz/Griesser Calibration” dialog box, specify the “Nominal Whiteness”, and click **Measure**.	
6	Repeat step 5 for all samples of your whiteness scale.	
7	Click **Calculate**.	The calibration results are displayed.



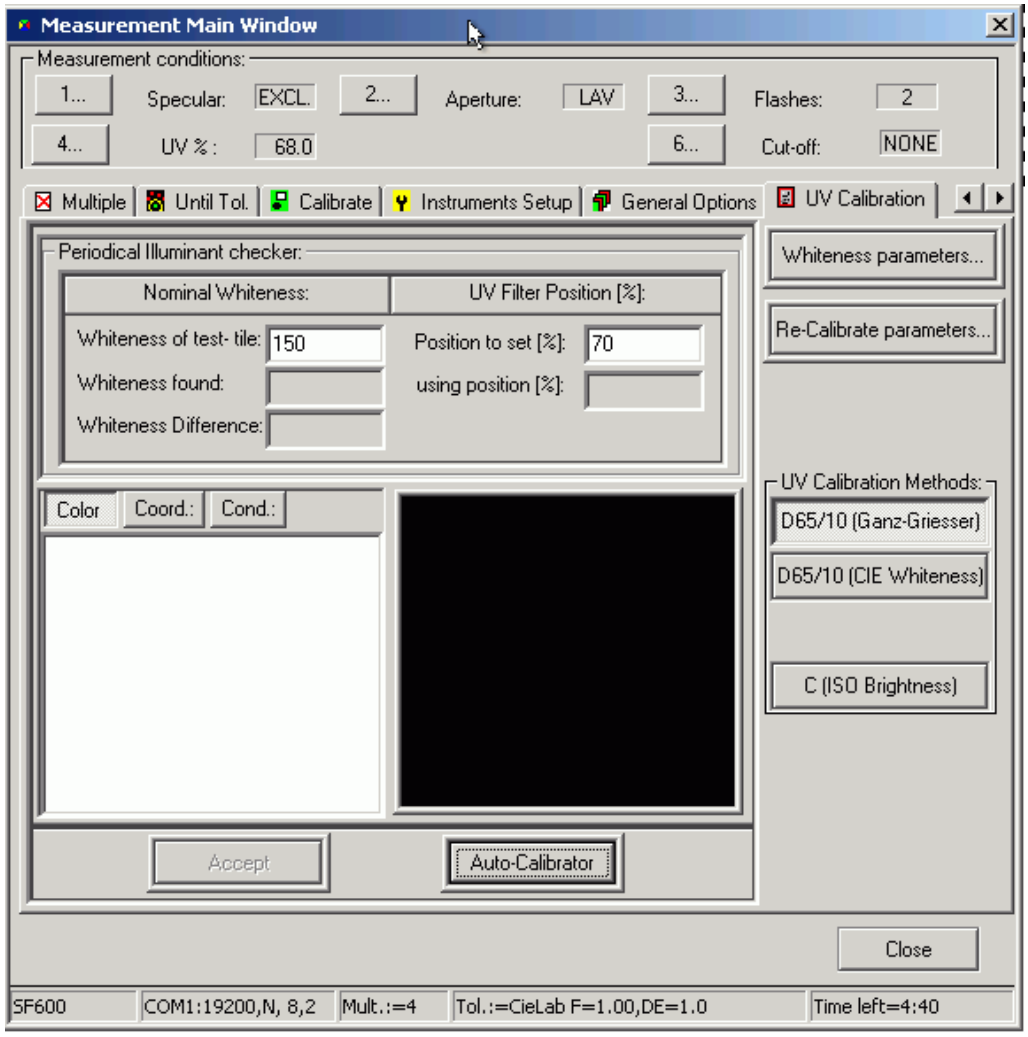
	Action	Result/Notes
8	Re-calibrate until "dW/dS" is 4000 ±10 (You must measure all samples again for each Re-calibration.).	The program optimizes the UV filter position for each re-calibration.  The value of this example is ok.
9	If the value is ok, click **Accept**.	The "Instrument-specific Formula Parameters" dialog box appears.

"Instrument-specific Formula Parameters" dialog box:



Checking the UV part of the bulb

The periodical check of the UV emission of the bulb is done using an „Illuminant Checker“ sample. The Ganz/Griesser whiteness is calculated and the UV filter is adjusted.



	Action	Result/Notes
1	In the “Measurement Main Window”, select the **UV Calibration** tab.	
2	Select the „UV Calibration Method“.	
3	Specify the whiteness of your „Illuminant Checker“ sample in the “Whiteness of Test Tile” field, and click **Auto-Calibrator**.	The whiteness difference is calculated and the UV filter is adjusted automatically (if the instrument supports it).
4	Repeat the “Auto Calibration” until the “Whiteness Difference“ is in the range of 1.5, then click **Accept**.	

Instrument Correlation

There is always some variation in performance between different instruments. This difference becomes a part of each color evaluation if the standard and batch measurements are carried out using different instruments. While the inter-instrument agreement specification for Datacolor instruments is very tight when working with very small acceptability tolerances, small variations in instrument performance may have a significant impact on all the color evaluations. Maestro offers the additional "correlation" feature to reduce these performance differences further.

Correlation allows you to adjust the performance of an instrument in order to match it to another reference or "master" instrument. This adjustment is carried out by the application of "correlation" factors calculated using the results of the spectral test. Using the differences between the master measurement and the current measurement, the program calculates a set of factors that are applied to each measurement, and which reduce the color difference between the two measurements. By generating correlation factors for every instrument used in the supply chain, the measurements made by each unit can be adjusted to simulate the performance of a single master unit. The result of this is that the Pass/Fail decisions will reflect the differences in the samples rather than in the instruments used to measure them. These correlation factors are generated using Maestro. The instrument correlation feature is enabled through the instrument driver module, however, which is accessible using any Datacolor program, including Maestro.

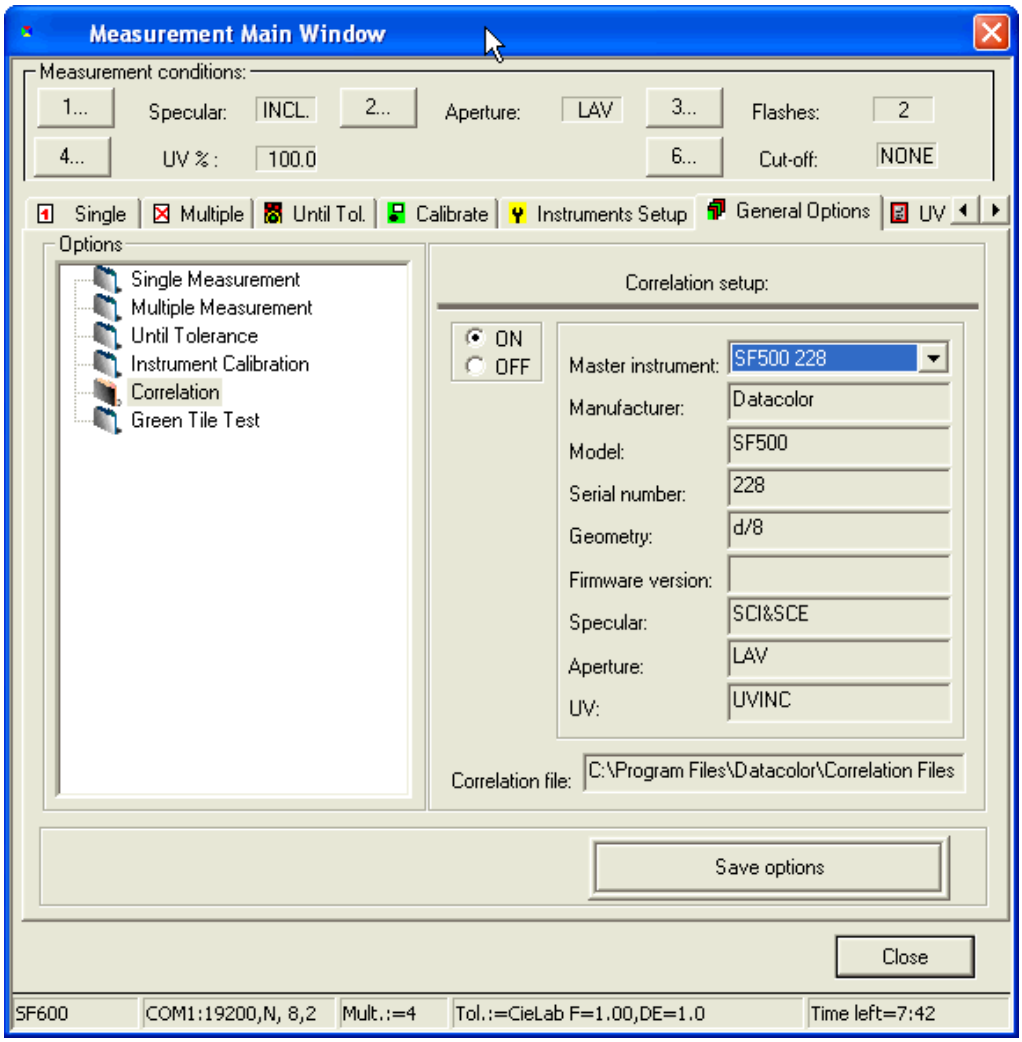
Once the correlation factors have been generated, they can be applied to raw measurement data to compensate changes in instrument performance. The adjusted measurement data should then closely resemble the measurement data produced by the master unit.

By designating a single instrument as "master", and generating correlation factors for every instrument used in the supply chain, you can minimize any color differences caused by differences in instrument performance. This allows you to share color data electronically, and you will have the confidence that the instruments' Pass/Fail decisions are accurate evaluations, regardless of the instrument(s) used for the measurement.

Configure and Enable the Maestro Correlation Feature

Notes

- **Master Instrument:** You must identify the master instrument. This is the instrument used to generate the master measurements for the reference tile set. When you select "Install" in the Maestro correlation feature, the information about the reference instrument will become available here.
- If the instrument correlation is enabled, all measurement data displayed and stored will be adjusted data.
- Instrument correlation can be enabled/disabled using any Datacolor program. The "Measurement Main Window" is accessed using either an "Instrument" menu or an instrument icon of the Datacolor program you are running.

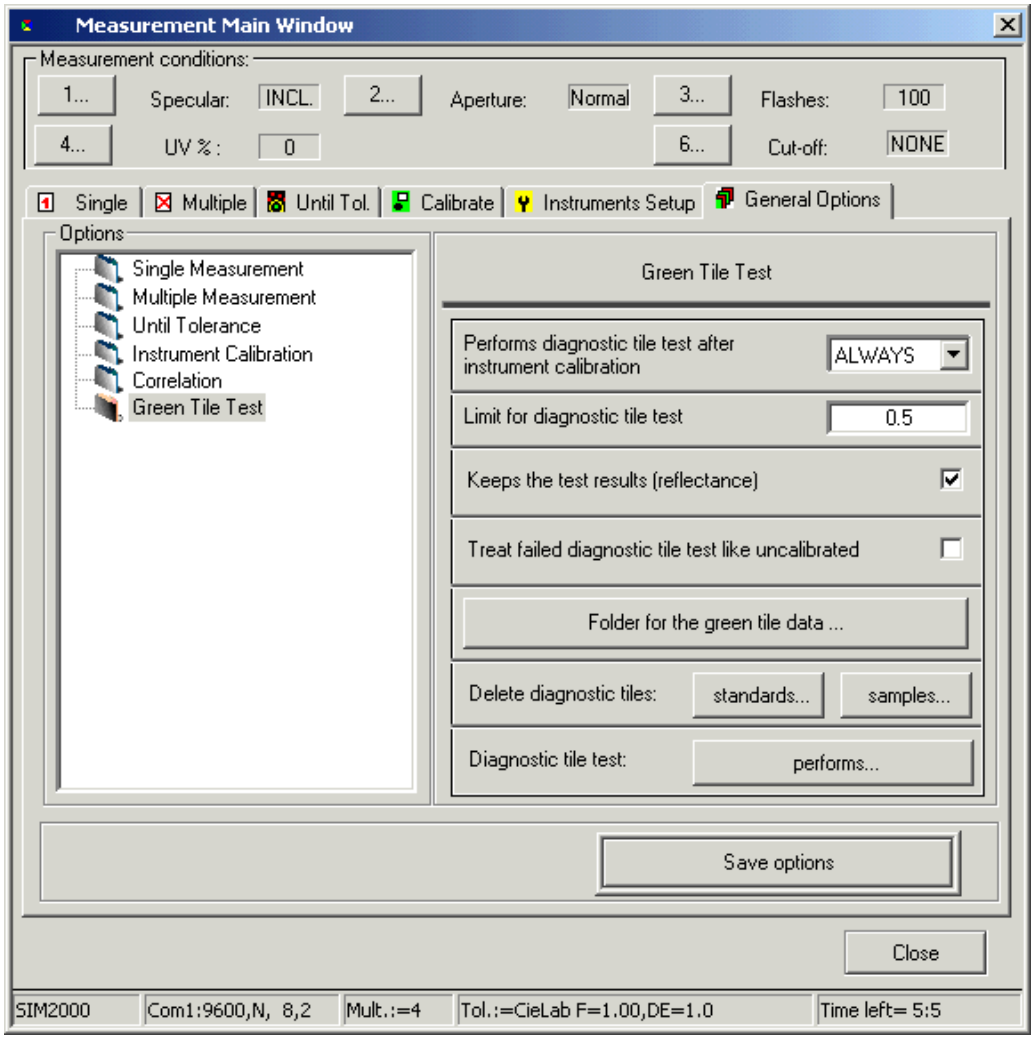


	Action	Result/Notes
1	In the “Measurement Main Window”, select the **General Options** tab.	
2	In the left box, click „Correlation“.	The „Correlation setup“ box appears on the right.
3	Select the master instrument.	All information about the master instrument selected appears in the corresponding fields.
4	Click the button **ON** to enable the correlation feature, resp. the button **OFF** to disable it.	When enabled, every measurement made will be adjusted based on the correlation data in the file identified at the bottom of the window.
5	Click **Save options** to save your settings.	

Green Tile Test

The green tile test checks the instrument after the calibration. If the test fails the instrument must be calibrated again.

Configure the green tile test

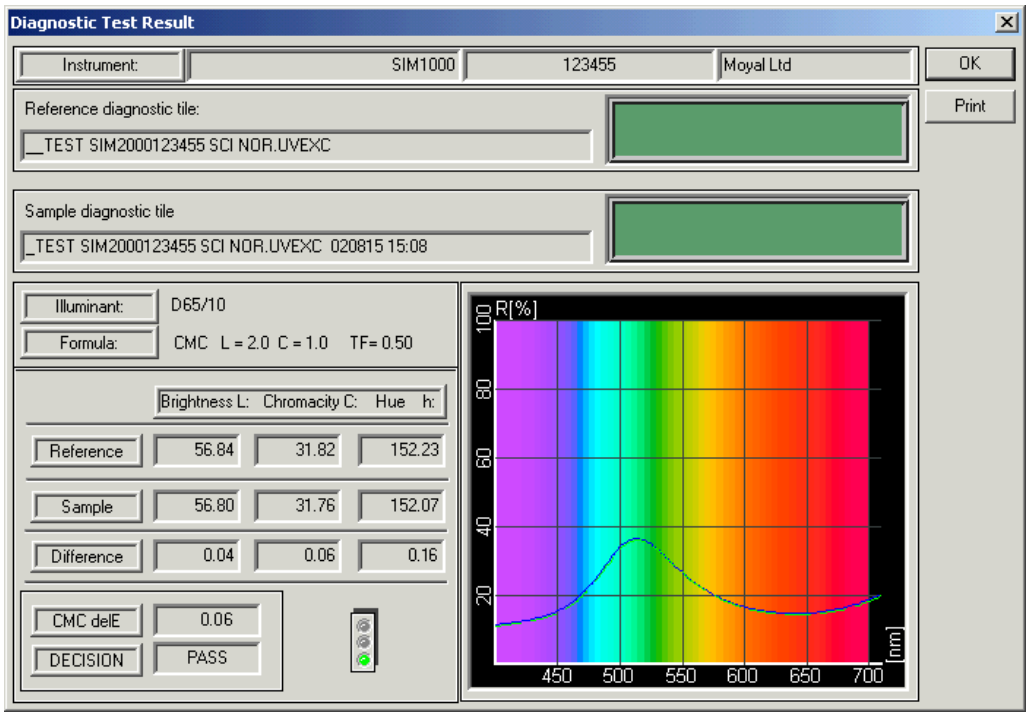


Parameters

Perform diagnostic tile ...	**Values:**	ALWAYS	The test is performed after each calibration.
		OPTIONAL	The test can be skipped.
		NEVER	The test is not performed.

	Action	Result/Notes
1	In the **General Options Tab** of the „Measurement Main Window", select **Green Tile Test**.	
2	Set the parameter values, and click **Save Options**.	

Test results:



Note

- Only CMC 1:2 is used for the test.
- If the test fails, the traffic light is red. If configured, the status of the instrument is set to „not calibrated“.

The samples are named as follows:

Green tile test (Standard): __TEST SF3008 SCI UVINC

Green tile test (Batch): __TEST SF3008 SCI UVINC 010321 11:46

The name contains the type (SF300), the serial number (8), the measurement condition (SCI UVINC), and (only for samples) the date and the time of the measurement.

The instrument settings and the measurement conditions are displayed in the status bar of the „Measurement Main Window“.

Measurement

Note

The program stores the type (tab) of the last measurement. The tab used for the last measurement appears for each new one.

Single measurement using the "Measure Directly" button

	Action	Result/Notes
1	Check that your spectrophotometer is switched on and calibrated.	Refer to *Calibrating Your Spectrophotometer on page 4-8*
2	Place the sample into the spectrophotometer.	
3	For a single measurement and if you do not need any parameter alterations, click the **Measure Directly** button.	The measurement is executed.
4	Click **Insert** to save the measurement.	Inserts a substrate delivery measurement into the substrate deliveries, for example.

Measurement using the "Measure" button

	Action	Result/Notes
1	Check that your spectrophotometer is switched on and calibrated.	Refer to *Calibrating Your Spectrophotometer on page 4-8*.
2	Click the **Measure** button, or, on the context-sensitive menu, select **Measure**.	The "Measure" dialog box appears. Refer to *Measurement Main Window on page 6-27*.
3	Select the "Single" tab for a single measurement.	Refer to *Single measurement on page 4-18*.
	Select the "Multiple" tab for a multiple measurement.	Refer to *Multiple measurement on page 4-19*.
	Select the "Until Tolerance" tab for an until tolerance measurement.	Refer to *Until tolerance measurement on page 4-20*.

Single measurement

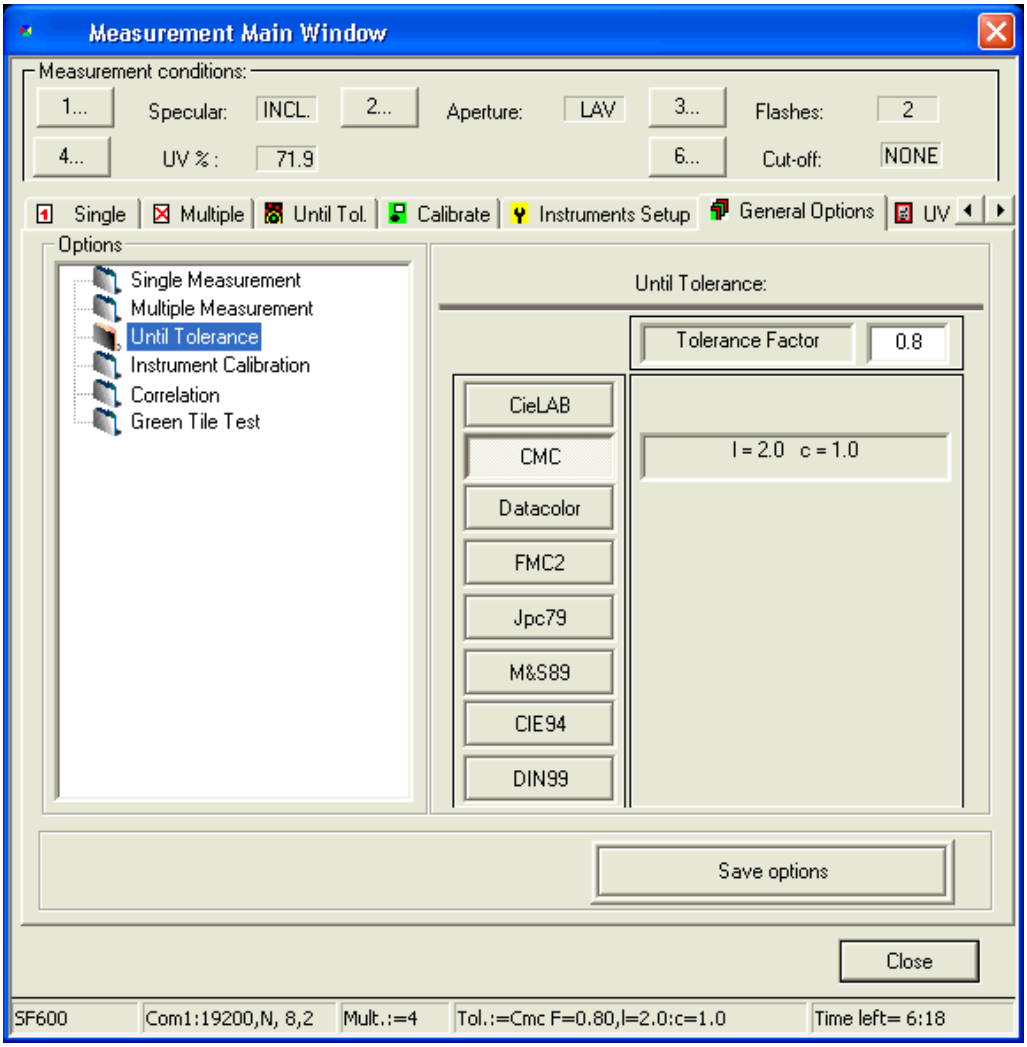
	Action	Result/Notes
4	Place the sample to the spectrophotometer, and click the **Measure** button.	The results of the measurement are displayed in the subordinate tabs.
5	Click **Close**.	The "Measurement" dialog box is closed.
6	Click **Insert** to save the measurement.	Inserts a substrate delivery measurement into the substrate deliveries, for example.

Multiple measurement

	Action	Result/Notes
4	Place the sample to the spectrophotometer, and click the **Measure** button. For each additional measurement, move the sample and click **Measure** again.	The results are displayed in the graph and in the table. Average and deviation are calculated continually. Refer to *Multiple Tab on page 6-28* (Measurement Dialog Box.)
5	In the table, cancel the unusable measurements using the mouse. Click **Accept Now** to save the measurement before the specified number is done.	Average and deviation are calculated continually.
6	If the specified number of measurements is done, the „Measure“ button changes to „Accept“. Click **Accept** to save the measurement.	Inserts a substrate delivery measurement into the substrate deliveries, for example.
7	Click **Close**.	The “Measurement” dialog box is closed.

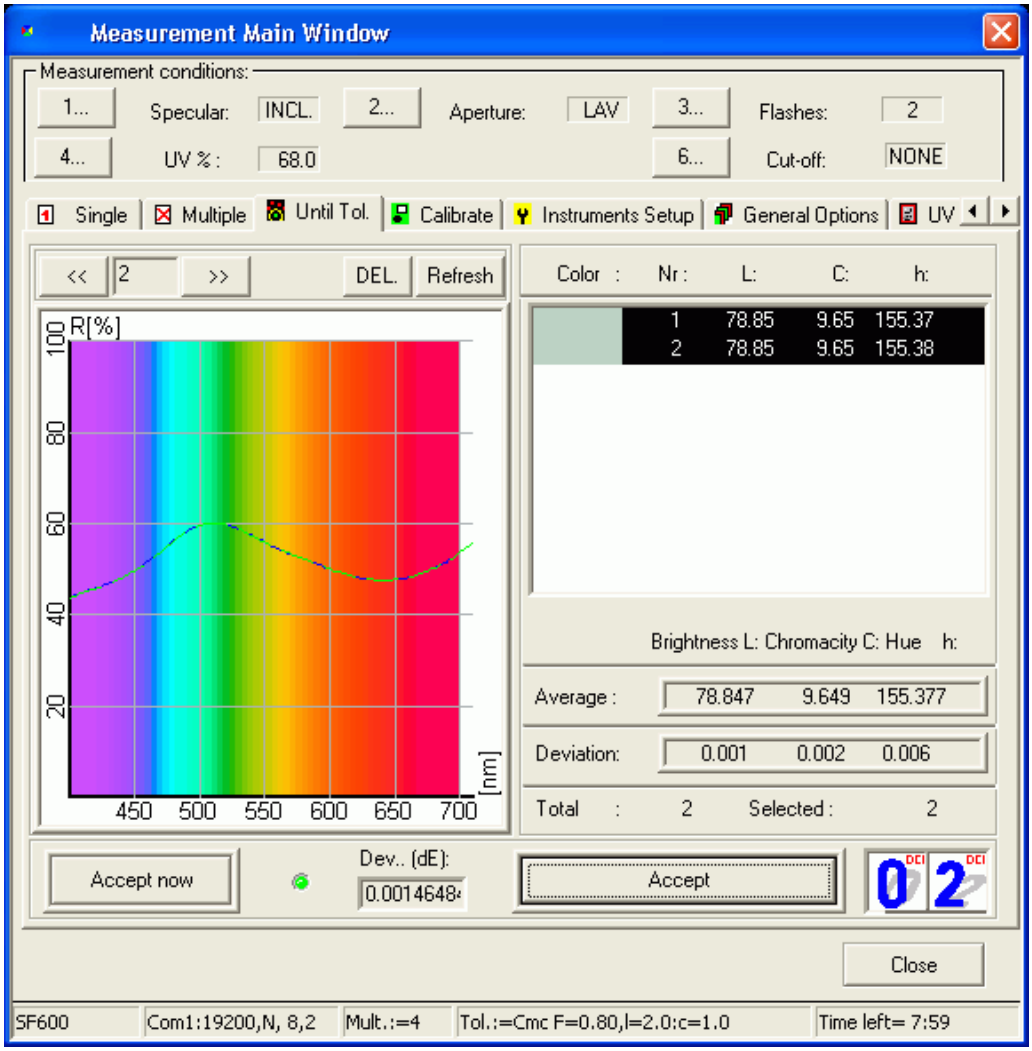
Until tolerance measurement

	Action	Result/Notes
1	In the „General Options“ tab, select the **Until Tolerance** option.	The „Until Tolerance“ data box appears.



2 Select the formula, set the tolerance factor, and click **Save Options**.

3 Select the **Until Tolerance** tab.



4	Place the sample on the spectrophotometer, and click the **Measure** button. For each additional measurement, move the sample and click **Measure** again.	The results are displayed in the graph and in the table. Average and deviation are calculated continually. Refer to *Multiple Tab on page 6-28* (Measurement Dialog Box.)
5	In the table, cancel the unusable measurements using the mouse. Click **Accept Now** to save the measurement before the specified number is done.	Average and deviation are calculated continually.

Specifying, Modifying or Deleting Tolerances

Specifying A New Tolerance

	Action	Result/Notes
1	Open the "Tolerance Block Program" dialog box.	Refer to *Tolerance Block Program Dialog Box on page 6-34* for information about the parameters.
2	Specify the tolerance name	
3	Select the requested tab and specify the tolerance values. For Datacolor pass/fail formula refer to the following section.	Refer to *Browse and Selecting on page 4-2* and *Specifying, Modifying and Deleting Objects on page 4-6*.
4	Click **Save**.	The new tolerance is created.

Datacolor pass/fail formula

	Action	Result/Notes
1	Select the “Datacolor” tab.	
2	Specify the tolerance name	
3	• Click **Datacolor Block Training** for tolerance block calculation based on visually excepted standards and the related batches.	The “Datacolor Tolerance Block” dialog box appears. Refer to *CieLab Tab on page 6-35* for information about the parameters.
	• For changing the formula, click **Diff. Formula** and select the formula.	The „Select Difference Formula“ dialog box appears.
	Select or measure the standard and the related batches.	In the table, the batches are listed. All batches with a CMC color difference <= 1 are selected automatically. Click the refused batches to select.
	Select other colors (standards and batches) to specify a color-independent tolerance block.	Select at least all colors you want to proof to get a useful tolerance block.
	Click **Apply**.	The „Datacolor Tolerance Block“ dialog box closes.
	• Click **Block Manual Input** for a manual input of tolerance values.	The „Manual Input of Tolerance Values“ dialog box appears Refer to *Manual Input of Tolerance Values Dialog Box on page 6-44* for information about the parameters.
	Select or measure the standard and specify the tolerance values.	
	Click **Apply**	The “Manual Input Tolerance Values” dialog box closes.
4	Click **Save**.	The new tolerance is created.

Note

A Datacolor tolerance block can be modified by adding more standards and batches.

Displaying Datacolor Tolerance Values

	Action	Result/Notes
1	Select the requested "Datacolor" tolerance.	
2	Click **Tolerance Values**.	The "Tolerance Value Output" dialog box appears. Refer to *Tolerance Block Program Dialog Box on page 6-34*.
3	Select or measure the requested batch.	The tolerance values are displayed.

Modifying and Deleting Tolerance Values

	Action	Result/Notes
1	Open the "Tolerance Block Program" dialog box.	Refer to *Tolerance Block Program Dialog Box on page 6-34* for information about the parameters.
2	***Modifying:*** Select the tolerance, alter the data, and click **Save**. ***Deleting:*** Select the tolerance, click **Delete**, and confirm the deletion.	

Datacolor SORT

Introduction

Traditional "555 shade sorting" is a system for sorting samples into a 3-dimensional array of blocks (centered around the standard) in order to subdivide the "acceptable" matches to the standard into smaller groups. Each group is described using a three digit code. Each digit varies from 1-9 and represents the distance to the standard for each color difference dimension. The center block (containing the standard) is assigned a sort code of "555". Each member of a group is close enough to other members of the same group in color to prevent any noticeable color variation between them. The "size" of each block is set by the user (by means of a tolerance value) to limit the amount of shade variation within each group. The tolerance is a set of three numerical values that control the dimensions of each block, typically in dL*, dC*, and dH* - although variations exist using dL*, da*, and db* as well as HunterLab dL, da, and db.

The selection of the tolerances by the user is critical to the performance of the system. Tolerances that are too large will produce shade groups with excessive shade variations within each group. Tolerances that are too small will result in too many subdivisions of the population, with many of the shade blocks containing only one or two samples.

An alternative to the "555 shade sorting" system is a dynamic sorting system that we will call "clustering" or "grouping". This alternative is realized in the new Datacolor SORT module.

Clustering

Clustering is an alternative to "555 shade sorting", whereby all the samples (rolls, pieces, garments, cones) are placed into groups such that all members of the group may be shipped or cut together. The members of the group have minimal color differences from the overall group average . As described below, there are usually two steps in the process:

1 Clustering or grouping the entire population of samples into a manageable number of distinct groups, then:

2 a sequencing or tapering process to put the members of the group in the correct order for shipment or cutting.

Jarvis and Aspland at Clemson first developed clustering in the early nineties. The Apparel Research Dept. has a fully functioning garment assembly plant, and shade sorting has always been one of their specialties. Simon developed the original 555 concept there in 1955. Sorting by 555 has certain drawbacks:

- The fixed grid in CIELab or CIELCH results in large numbers of boxes,
- boxes with few members, and
- the corners present problems in that samples can be very similar to a neighbor, but are sorted into different boxes.

Clustering eliminates all of these problems by grouping them according to their proximity to each other in a logical fashion, in much the same way you would group them visually. The use of CMC-based ellipsoids for the clusters helps to insure that samples are placed into clusters that best correspond to visual shade grouping. The center of the ellipsoid is taken to be the average of the cluster. Clustering definitely produces fewer groups and a better color agreement within the group.

The only disadvantage is that clustering does not provide a color relationship to the original standard, whereas 555 does. This is not usually a problem, because the clusters can be plotted in color space relative to the standard, and the samples have already been screened for Pass/Fail in the production QC process.

In clustering and tapering methods, there are user-defined criteria that determine the taper sequence(s), the number of clusters, and color differences. These are described in the section below. It must be remembered that there will be samples within a taper or clustering process that fall outside the limits established by the user. In the case of tapering, these samples are "outliers", and are listed as such. In clustering, there may be outliers that do not belong in any cluster. The object is to include all samples, but not to compromise the user's tolerances.

Since clustering usually precedes tapering, the cluster program must be dynamic rather than static. A population may be clustered and the results can be saved as a table, printed, etc. However, as new samples are added to the population, the entire table will change accordingly. If the new samples fall very close to an existing cluster, they will become part of that cluster, and the average of the cluster will be re-calculated. If enough samples fall elsewhere, but are very similar to each other, a new cluster may be formed and the entire population re-clustered.

Tapering

It is best to think of tapering as a sequencing method. A series of dye lots (typically rolls of fabric or cones of yarn) are to be shipped to a given location for cutting and assembly. It is important that the rolls are sent in a sequence such that there is minimal color difference from roll to roll. The rolls are usually cut as they are received. The cutter will therefore have a much easier job if the fabric supplier has already provided the optimum sequence of rolls.

In many dyeing processes, the processes themselves will result in a tapering effect, especially in continuous dyeing of woven fabrics. Factors such as roller pressure and dye tank feeds cause variations in the run, but this variation is gradual. We would expect the variation to occur more often in lightness/darkness and in chroma. Differences in hue can occur, but less frequently, and are associated with the differences in dye substance to the fiber rather than mechanical effects.

Start Datacolor SORT

Sorting with Datacolor SORT is performed using a sort job according to a sort script. SORT criteria is specified in a SORT script.

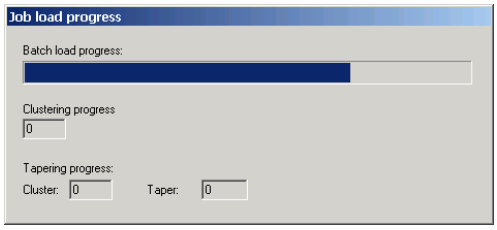
Note

Before you can use the program to cluster and / or taper samples, you have to define „SORT Scripts'". A 'SORT Script' contains the conditions and limitations (sort criteria) that are used to build clusters and tapers.

Starting the Standalone Version

1 On the Windows start menu or the desktop, click the Datacolor SORT icon.
The „SORT Job" window appears.

Open A SORT Job

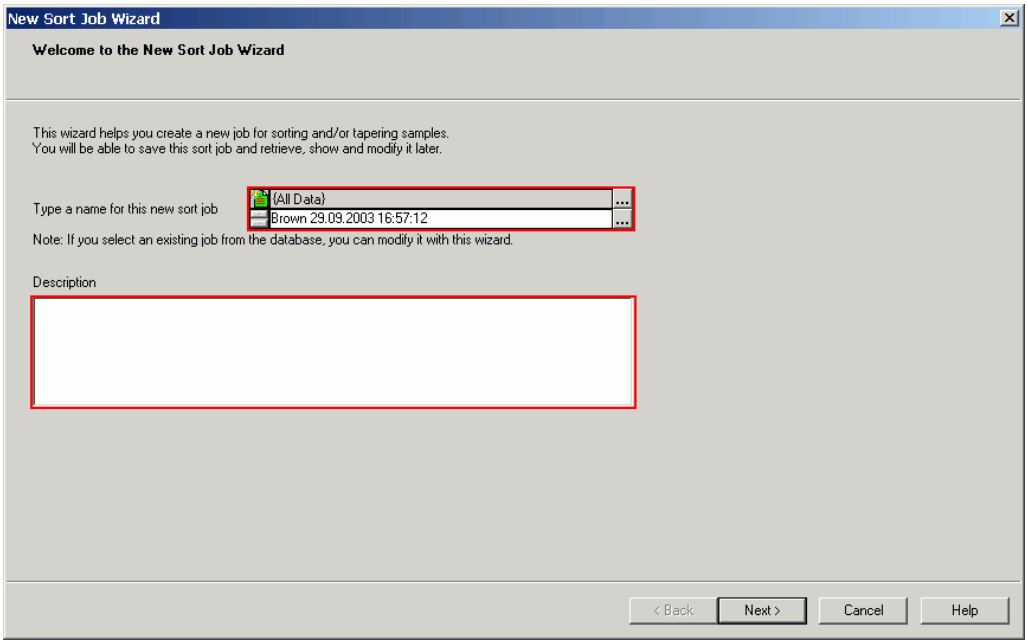
	Action	Result/Notes
1	Double-click the job in the „SORT Job" window.	The „Job load progress" message box shows the progress of the loading.  If the loading is finished, the „Job Result" window appears. Refer to *Job Result Window on page 6-9*.

Specifying A New SORT Job

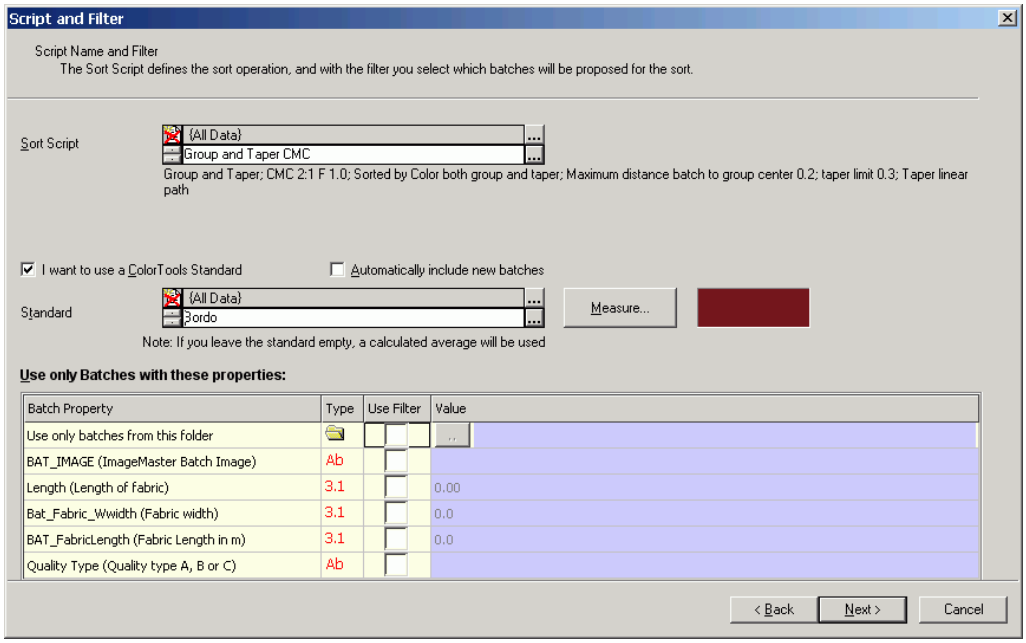
	Action	Result/Notes
1	Select either the option **New SORT Job** on the „Datacolor SORT" menu or on the context-sensitive menu.	The „New SORT Job" wizard starts. The sort job name may be modified and a description can be entered into the description field. Refer also to *SORT Job Maintenance Dialog Box on page 6-14*.

Note

Depending on the settings in the „SORT Job Definition Options", you may not see all pages of the wizard. Refer to *SORT Job Definition Options on page 4-38*.



2	Click **Next**.	The following dialog box appears.



3 Select the **SORT Script** containing the sort conditions you need.

For more information about selecting data in the database, refer to *Data Handling on page 4-2*.

The sort script defines the sort operation. All parameters defined in the sort script are used as defaults. Depending on your access rights, you can modify these default values. Refer to *Specifying A New SORT Job on page 4-28* and *Modifying A SORT Script on page 4-35*.

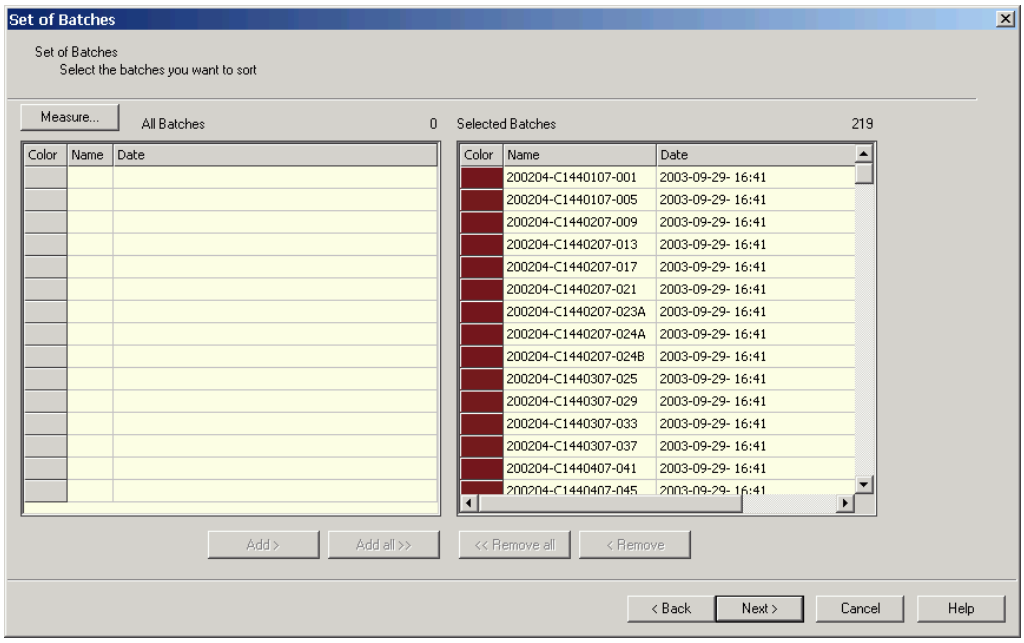
4 Select a standard in the database or click the **Measure** button. The „Measurement“ dialog box appears. Refer to *Calibration and Measurement on page 4-8*.

If you do not select a standard, the program calculates the average of all batches and uses this as the theoretical standard for the pass/fail decision.

5 You can set filters to reduce the number of batches that are displayed for selection. A filter might be a specific folder or any user defined field you have created either with Datacolor TOOLS or with Datacolor SORT.

Notes

- If you check „I want to use a Datacolor TOOLS Standard“ only Datacolor TOOLS standards are displayed to select from. The batches linked to this standard are listed on the next page. They are already selected if „Automatically include new batches“ is checked as well. In this case, it is not possible to remove batches from the list. This is only possible if „Automatically include new batches“ is not selected.
- Click the **Measure** button to measure more batches.



6	The next pages of the SORT Job wizard are the same as described in chapter „Specifying A New SORT Script". Depending on your access rights set in the sort job definition options. You can now modify all grouping and tapering parameters.	Refer to *Specifying A New SORT Script on page 4-31*. Refer to *SORT Job Definition Options on page 4-38*.

Modifying A SORT Job

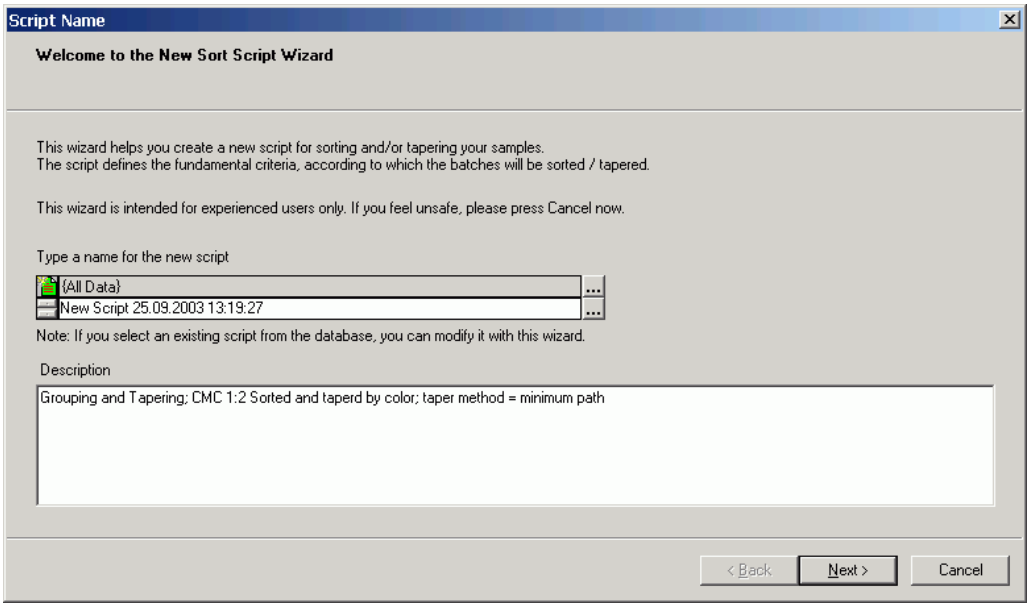
	Action	Result/Notes
1	Select either the option **Maintain SORT Job** on the „Datacolor SORT“ menu or on the context-sensitive menu.	The „SORT Job Maintenance“ dialog box appears. Refer to *SORT Job Maintenance Dialog Box on page 6-14*.
2	Modify the data and click **OK**.	

Note

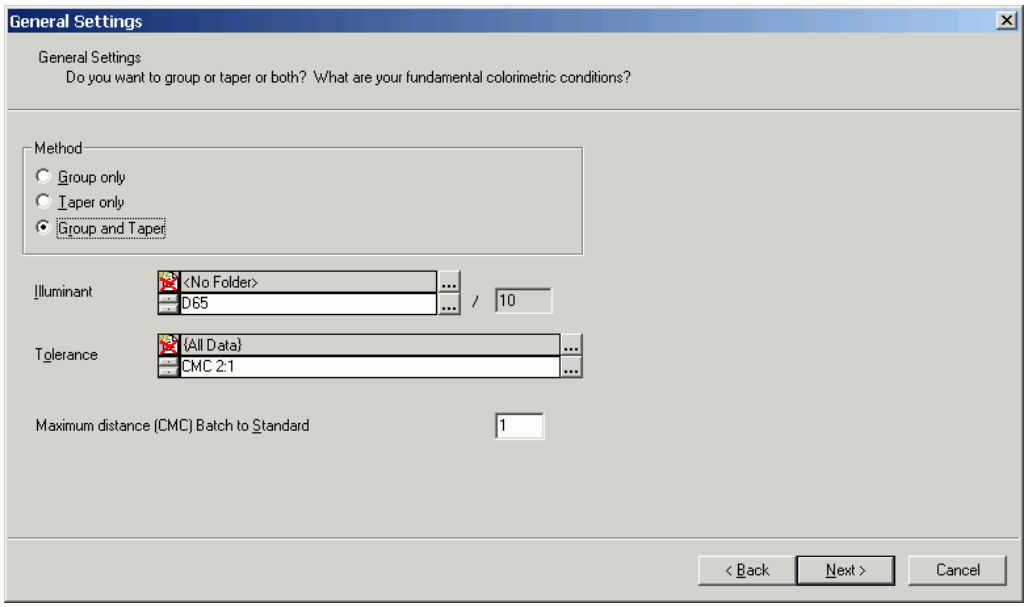
The data you can change depends on your access rights and the job itself.

Specifying A New SORT Script

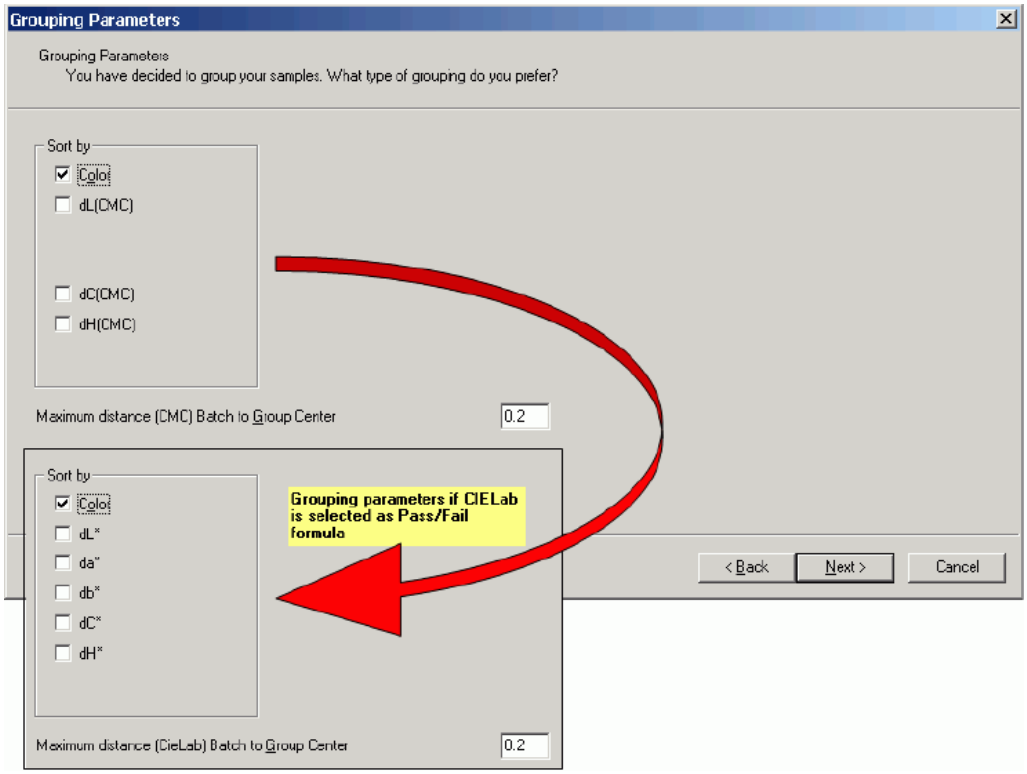
	Action	Result/Notes
1	Select either the option **New SORT Script** on the „Datacolor SORT“ menu or on the context-sensitive menu.	The „New SORT Script“ wizard starts. The sort job name may be modified and a description can be entered into the description field. Refer also to *SORT Script Maintenance Dialog Box on page 6-21*.



2	You can modify the name (default is New Script <date and time>) of the script and you can describe the script.	Refer to *Script Name Tab on page 6-21*.
3	Click **Next**.	The following dialog box appears.

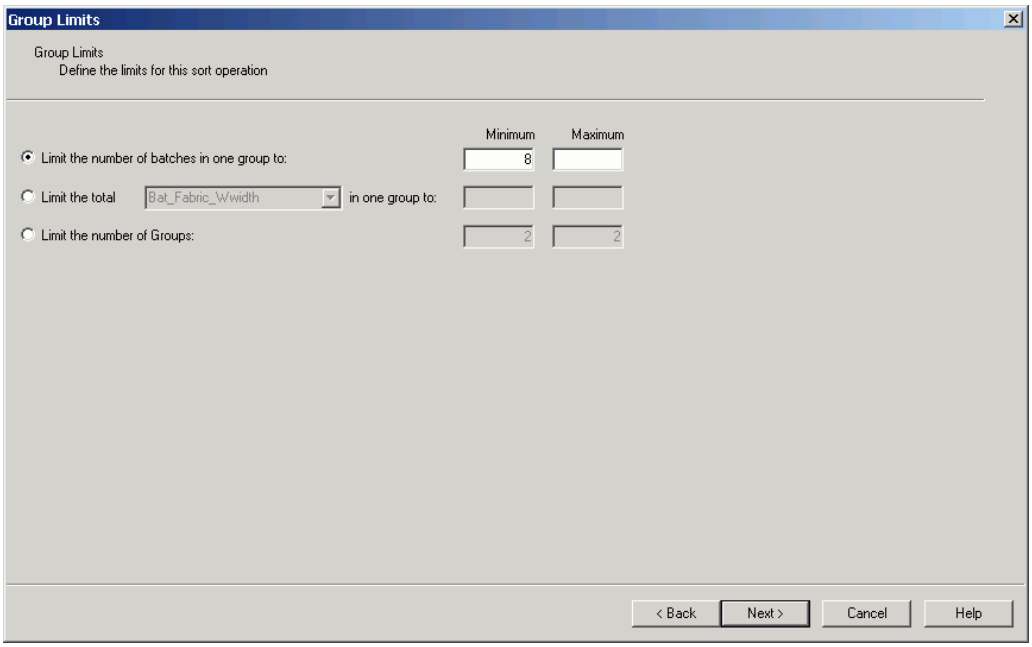


4	Define which sorting method, illuminant, tolerance formula and tolerance factor you would like to use.	Refer to *General Settings Tab on page 6-22*.
5	Click **Next**.	The following dialog box appears.



6 Select the sorting type. The grouping parameters you can select are dynamic and depend to the selected tolerance formula.

7 Click **Next**. The following dialog box appears.



Parameters

Limit the number of batches in one group to:

You can define a minimum and a maximum number of batches in a group. If no maximum is given, there is no limit.

Limit the total (XXX) in one group to

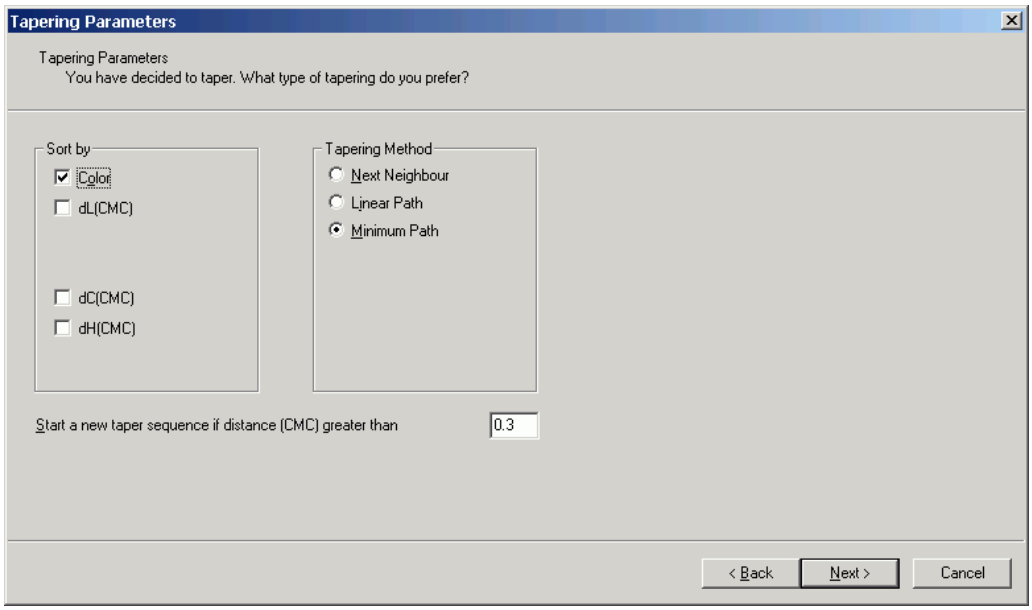
Here you can limit the group to the value of a user defined field, e.g., fabric length, quality level, etc.

Limit the number of groups

This limits the number of groups to the range you type in.

8 Select the group limits.

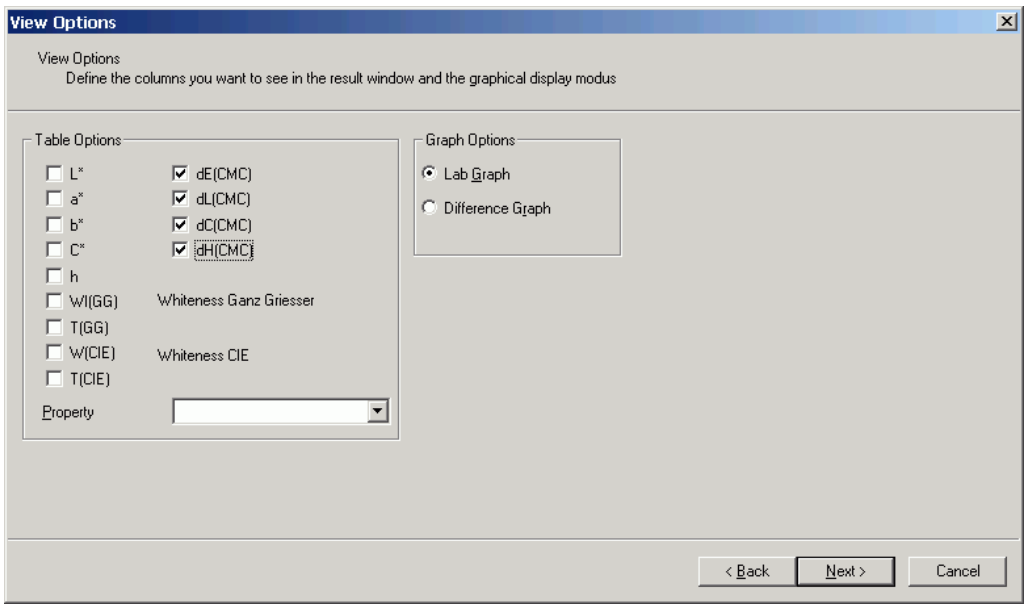
9 Click **Next**. The following dialog box appears.



10 Select the tapering parameters. The parameters can be different than selected for clustering. In addition to the sort type you must select a tapering method.

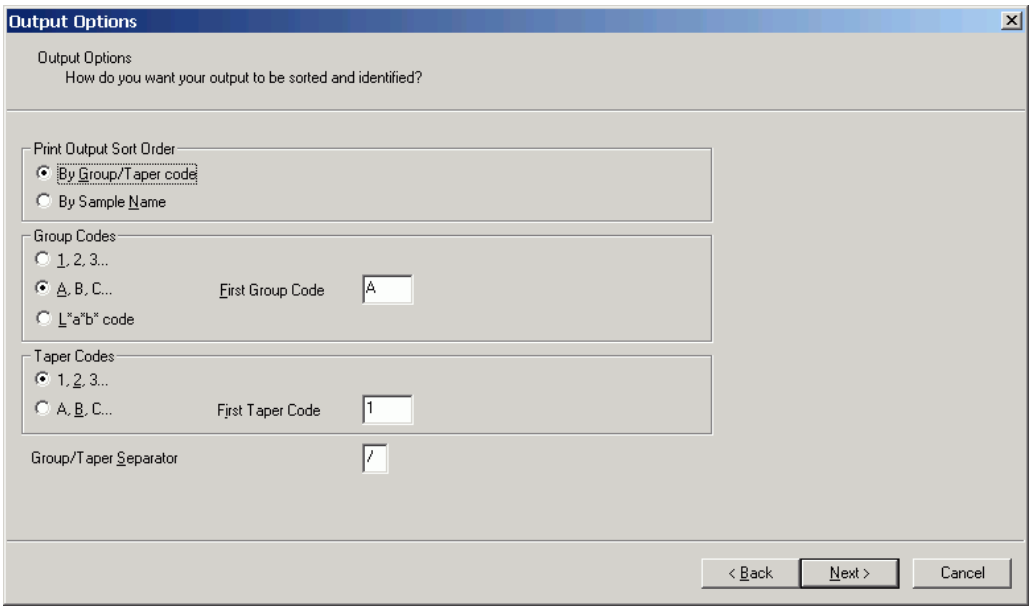
Refer to *Tapering Parameters Tab on page 6-17*.

11 Click **Next**. The following dialog box appears.



12 Define what you would like to see in the results window. Refer to *View Options Tab on page 6-19*.

13 Click **Next**. The following dialog box appears.



The last wizard page is used to set up the output and to select the coding you would like to use for groups (clusters) and tapers. The print output sort order is linked to individual print forms. One is used to print the job ordered by Group/ Taper code, and the second is sorted identically to the order you have displayed in the output screen. You can change the order in the output screen by clicking in the table columns.

14 Click **Next** to finish the wizard.

Modifying A SORT Script

	Action	Result/Notes
1	Select either the option **Maintain SORT Script** on the „Datacolor SORT“ menu or on the context-sensitive menu.	The „SORT Script Maintenance“ dialog box appears. Refer to *Specifying A New SORT Script on page 4-31* and *SORT Script Maintenance Dialog Box on page 6-21* for more information about the settings.
2	Modify the data and click **OK**.	

Note

Existing sort jobs are not modified automatically if you change the sort script. Modifications are taken into account if you recalculate the sort job.

Maintain the Sample Property

With the „Maintain Sample Property“ function, you can add or modify a sample property and its value (user defined field).

- In the „Property“ tab, it is possible to specify or modify a property.
- In the „Sample Property“ tab, you can set the values.

Properties and values are assigned to the batch selected in the table. The new property is added to the Datacolor file USER.FLD.

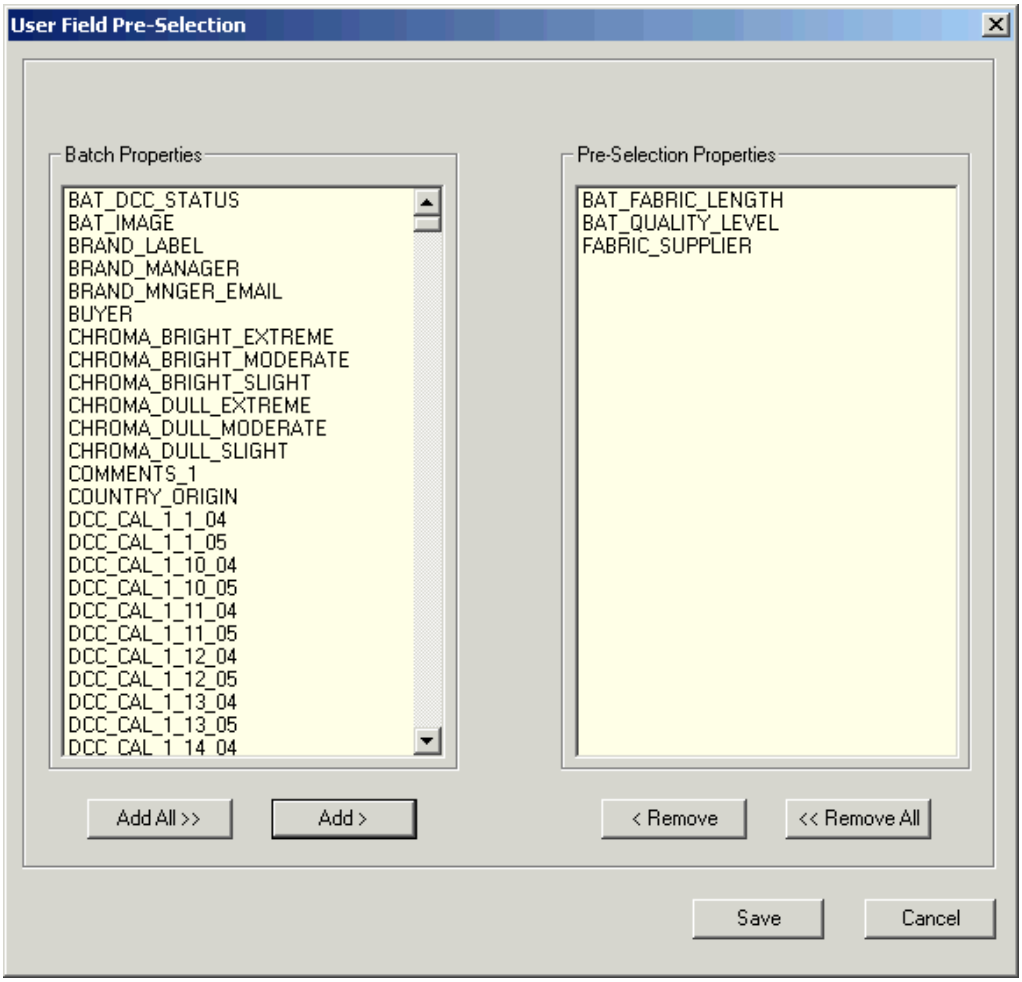
	Action	Result/Notes
1	Select either the option **Maintain Sample Property** on the „Datacolor SORT“ menu or on the context-sensitive menu.	The „Sample Property“ dialog box appears. Refer to *Sample Property Dialog Box on page 6-23*.
2	Modify the data and click **OK**.	

Note

If you have installed Datacolor TOOLS, do not add or modify properties in Datacolor SORT. This may affect your Datacolor TOOLS desktop data. Properties may be used as input fields by screen forms in Datacolor TOOLS. Make all modifications with Datacolor TOOLS Form Editor instead.

Pre-Selections of User Defined Fields

The „User.fld“ file may contain many fields that cannot be used by Datacolor SORT. This task is used to select only relevant user defined fields for Datacolor SORT.



	Action	Result/Notes
1	Select the fields in the „Batch Properties“ list box and click **Add** to move them into the „Pre-Selection Properties“ list box.	Datacolor SORT shows only the pre-selected fields to filter the sample list according your field settings or to input the batch property field value when you measure new batches.

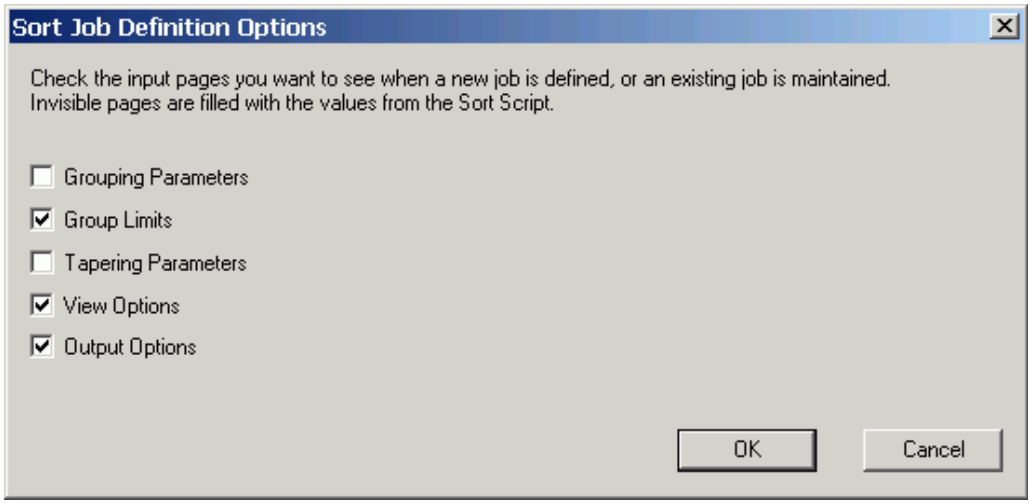
SORT Job Definition Options

This function program is used to create or modify tolerances. Refer to *Specifying, Modifying or Deleting Tolerances on page 4-22*.

	Action	Result/Notes
1	Select either the option **SORT Job Definition Options** on the „Datacolor SORT“ menu or on the context-sensitive menu.	The „SORT Job Definition Options“ dialog box appears. Refer to *Sample Property Dialog Box on page 6-23*.
2	Modify the data and click **OK**.	

Check the input pages you want to see when a new SORT Job is defined.

The default settings for the sort job definition are:



Note

If you want to be sure that a user works only with the predefined settings of the SORT Script, you have to limit the access rights, respectively.

Login as User „DCI“ and run the option „User Administration“
(Menu Tools → User Manager → User Administration).

5

Maintenance and Error Handling

Maintenance of the Spectrophotometer

Refer to the manual of your spectrophotometer.

Maintenance of the Database

Note

The delete, move, copy and rename functions are only available to users having the corresponding access rights.

Deleting Data

You can delete data objects in the corresponding windows and boxes.

Note

An object cannot be deleted, if it is linked to other objects. If the system cannot delete an object, all valid links are listed in the "Delete Check" info box.

Backing Up

Refer to *Backing Up Using Sybase Utilities on page 3-15*.

Error Handling

1. Note the error message and what you were doing before the error occurred.
2. Try to execute the advice of the error message. ***Example below:*** Specify a minimum of one batch before clicking **Save** again.
3. Log out of Datacolor SORT and restart Windows.
4. Restart Datacolor SORT.

If the error occurs again, contact your Datacolor representative for further advice.

Error Messages

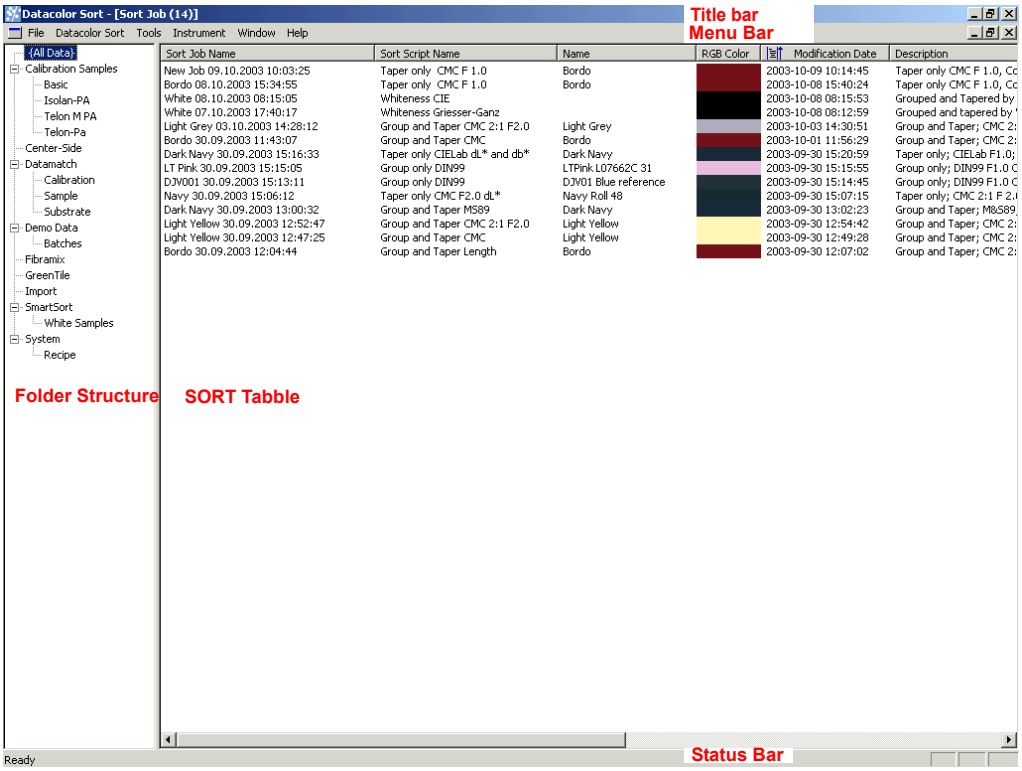
If an error message appears while you are using your system, you should follow the advice above.

Example of an error message:

6

Windows and Dialog Boxes

SORT Job List Window



Title bar

The title bar contains the title of the program, the title of the current window and, if a list window is opened, the number of data records.

Menu bar

Refer to *General Menu Functions on page 6-3* for the general functions or to the related window descriptions for window specific functions.

Status bar

Display of messages.

Folder Structure

Refer to *Folder Structure on page 6-5*.

SORT Table

Refer to *SORT Table on page 6-6*.

General Menu Functions

File

Exit	Closes the program.

Datacolor SORT

Open SORT Job	Opens the SORT window with the selcted data. Refer to *Job Result Window on page 6-9* and *Open A SORT Job on page 4-27*.
Maintain SORT Job	Opens the "SORT Job Maintenance" dialog box. Refer to *SORT Job Maintenance Dialog Box on page 6-14* and *Modifying A SORT Script on page 4-35*.
New SORT Job	Opens the "New SORT Job" wizard. Refer to *Specifying A New SORT Job on page 4-28*.
Maintain SORT Scrip	Opens the "SORT Script Maintenance" dialog box. Refer to *SORT Job Maintenance Dialog Box on page 6-14* and *Modifying A SORT Script on page 4-35*.
New SORT Script	Opens the "New SORT Script" wizard. Refer to *Specifying A New SORT Script on page 4-31*.

Tools

User Manager	Change Password: Refer to *Changing the Password on page 3-2*. User Administration: Refer to *Specifying, Modifying and Deleting User's Data on page 3-2*.
Import	Opens the "Import" dialog box for sample import. Refer to *Import and Export on page 3-10*.
Export	Opens the "Export" dialog box for sample export. Refer to *Exporting Data on page 3-10*.
Backup	Opens the "Backup" dialog box. Refer to *Backing Up Using Sybase Utilities on page 3-15*.
ASCII forms	New: Opens the „ASCII Output Definition" dialog box. Change: Opens the „ASCII Output Definition" dialog box. Delete: Opens the „Delete ASCII Form" dialog box. Refer to *ASCII Output (Option) on page 3-17*.
Calibrate Monitor	Function for calibrating monitors using Datacolor SPYDER2. Refer to *Calibrating the Monitors Using Datacolor SPYDER2 on page 3-9*.
Tolerance	Opens the "Tolerance Block Program" dialog box. Refer to *Tolerance Block Program Dialog Box on page 6-34* and *Specifying, Modifying or Deleting Tolerances on page 4-22*.

Instrument

Calibrate Instrument	Opens the „Calibration Conditions“ dialog box. Refer to *Calibrate Tab on page 6-30* and *Calibration and Measurement on page 4-8*.
Instrument Setup	Opens the „Instrument Setup“ tab of the „Measurement Main Window“. Refer to *Instruments Setup Tab on page 6-31* and *Calibration and Measurement on page 4-8*.
Measurement Setup	Opens the „General Options“ tab of the „Measurement Main Window“. Refer to *Instruments Setup Tab on page 6-31* and *Calibration and Measurement on page 4-8*.
Diagnostic Instrument	***Only if the green tile test is installed***. Opens the „Prepare for Diagnostic“ dialog box. Refer to *UV Calibration Tab on page 6-33* and *Green Tile Test on page 4-16*.
UV Calibration	***Only for instruments with whiteness option.*** Opens the „Measurement Main Window“. Refer to *UV Calibration Tab on page 6-33* and *UV Calibration on page 4-9*.
Ganz/Griesser Calibration	***Only for instruments with whiteness option.*** Opens the „Measurement Main Window“. Refer to *UV Calibration Tab on page 6-33* and *UV Calibration on page 4-9*.
Ganz/Griesser Parameters	***Only for instruments with whiteness option.*** Opens the „Measurement Main Window“. Refer to *UV Calibration on page 4-9*.

Window

Cascade	Arranges the overview and the opened windows as a cascade.
Tile	Arranges the overview in the upper and the opened window in the lower part of the explorer.

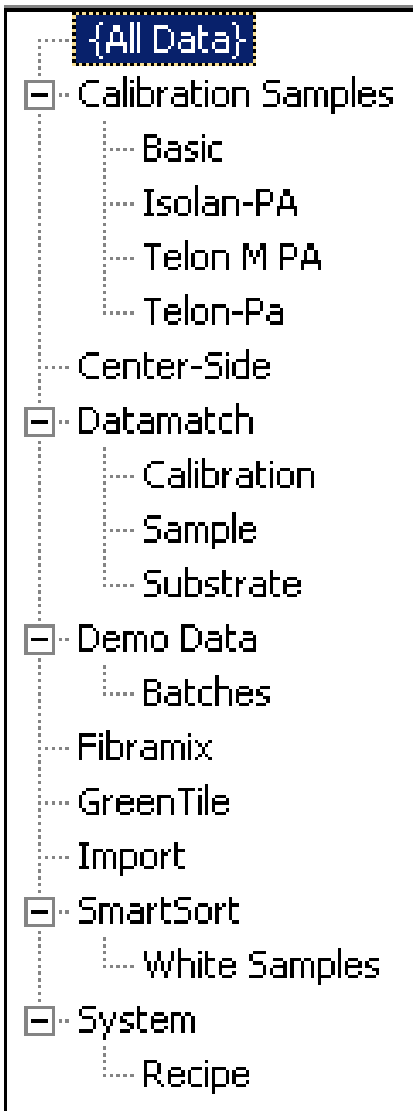
Help

Help Topics	Opens the Acrobat Reader with the „Datacolor SORT Dye Lot User's Guide“.
About DCAppStart	Opens the “About Datacolor SORT” information box with release, copyright and user information.

Note

Refer to the related window description for window specific menu functions.

Folder Structure



All objects are displayed in a structured list at the left of the “Explorer” window.

Opening and closing structure levels

\+ A + sign indicates that there are hidden subordinate folders.

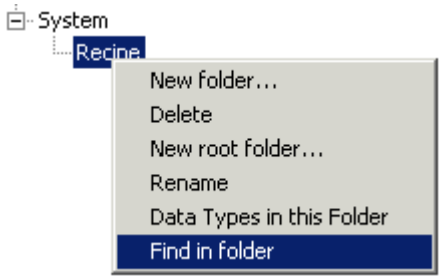
Click the + sign to open the next structure level.

\- Click the - sign to close all subordinate structure levels.

Selection of object types

1. Select the requested object type using the left mouse button.
   If “All Data” is selected, all object types can be displayed.

Context-sensitive menu



New Folder	Adds a new subfolder to the selected folder. *Type a meaningful name.*
Delete	Deletes the selected folder (only if the folder is empty).
New Root Folder	Adds a new root folder. *Type a meaningful name.*
Rename	Is used to rename the selected folder.
Data Type in this Folder	Opens the „Data in Folder“ dialog box used for searching data types and the corresponding data in the selected folder. Refer to *Data in Folder Dialog Box on page 6-7*
Find in Folder	Opens the „Find <data type> in Folder“ dialog box used for searching data with a determined name or part of the name. The <data type> of the opened list window is used. Refer to *Find in Folder Dialog Box on page 6-8*

SORT Table

Table columns

The data (table columns) to be displayed and the names of the table columns can be altered using the "User's Browser Definition" function of the "Tools" menu. Refer to *Browser Customizing on page 3-4*.

SORT Job Name	Unique name of the sort job.
SORT Script Name	Unique name of the sort related script.
Name	Name of the standard.
Modification Date	Date of last modification.
Description	Description of the standard.

Functions Context-sensitive Menu

Open SORT Job	Opens the SORT window with the selcted data. Refer to *Job Result Window on page 6-9* and *Open A SORT Job on page 4-27*.
Maintain SORT Job	Opens the "SORT Job Maintenance" dialog box. Refer to *SORT Job Maintenance Dialog Box on page 6-14* and *Modifying A SORT Script on page 4-35*.
New SORT Job	Opens the "New SORT Job" wizard. Refer to *Specifying A New SORT Job on page 4-28*.
Maintain SORT Scrip	Opens the "SORT Script Maintenance" dialog box. Refer to *SORT Job Maintenance Dialog Box on page 6-14* and *Modifying A SORT Script on page 4-35*.
New SORT Script	Opens the "New SORT Script" wizard. Refer to *Specifying A New SORT Script on page 4-31*.
Maintain Sample Property	Refer to *Maintain the Sample Property on page 4-36*.
Print	Prints the result without displaying on screen. Refer to *Examples of Printouts on page 6-12*.
User's Browser Definition	Opens the "Browse Columns for Explorer" dialog box. Refer to *Browser Customizing on page 3-4*.

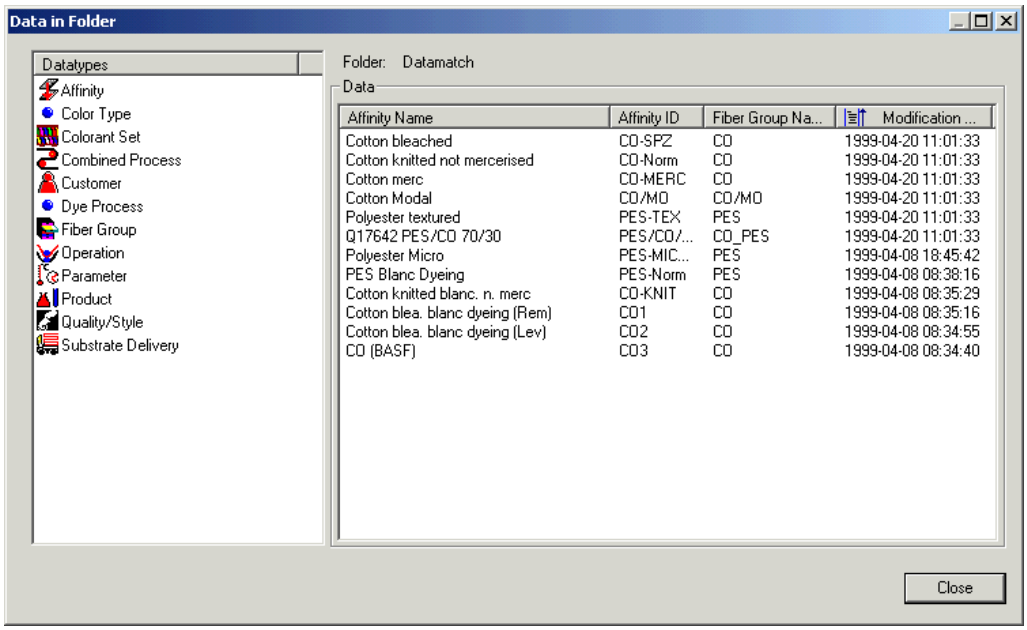
Note

The delete and rename functions are only available to users with the corresponding access rights.

Rename	Is used to rename the selected object.
Delete	Deletes the selected object after confirmation.
Move to	Moves a selected object to another folder.
Filter	Refer to *Browse Filters on page 3-6*.
Reset Filter	Resets the selected filter.

Data in Folder Dialog Box

Used to search for data types and the corresponding data records stored in the folder selected in the folder structure.



Data type box:	Shows all data types that the folder selected in the folder structure contains.
Data box	Shows all data records of selected data type.

Context-sensitive menu of the Data box:

User's Browser Definition	Opens the "Browse Columns for Explorer" dialog box. Refer to *Browser Customizing on page 3-4*.

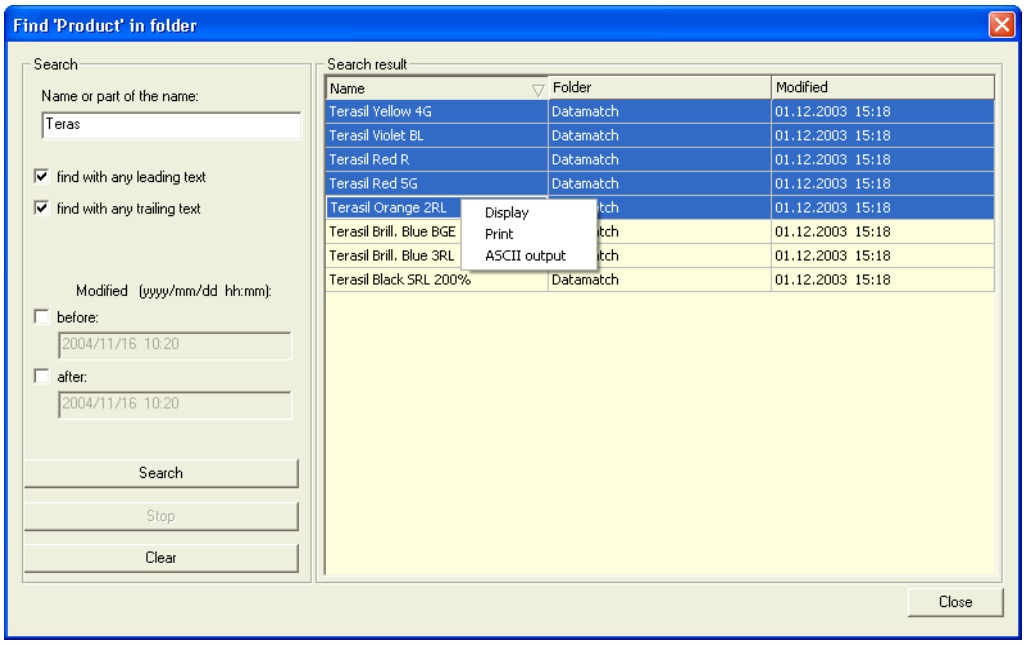
Note

The delete and rename functions are only available to users with the corresponding access rights.

Rename	Is used to rename the selected object.
Delete	Deletes the selected object after confirmation.
Move to	Moves a selected object to another folder.
Filter	Refer to *Browse Filters on page 3-6*.
Reset Filter	Resets the selected filter.

Find in Folder Dialog Box

Used for searching data records with a determined name or part of the name. The data type of the opened list window is used. Refer to *Searching objects of a determined data type on page 4-3*.



Search criteria:

You can type a complete name or a part of it. If you are typing a part it is necessary to check one or both of the boxes for leading or trailing text.

Note

Wildcards cannot be used.

Additionally, you can select the time range of the last modification.

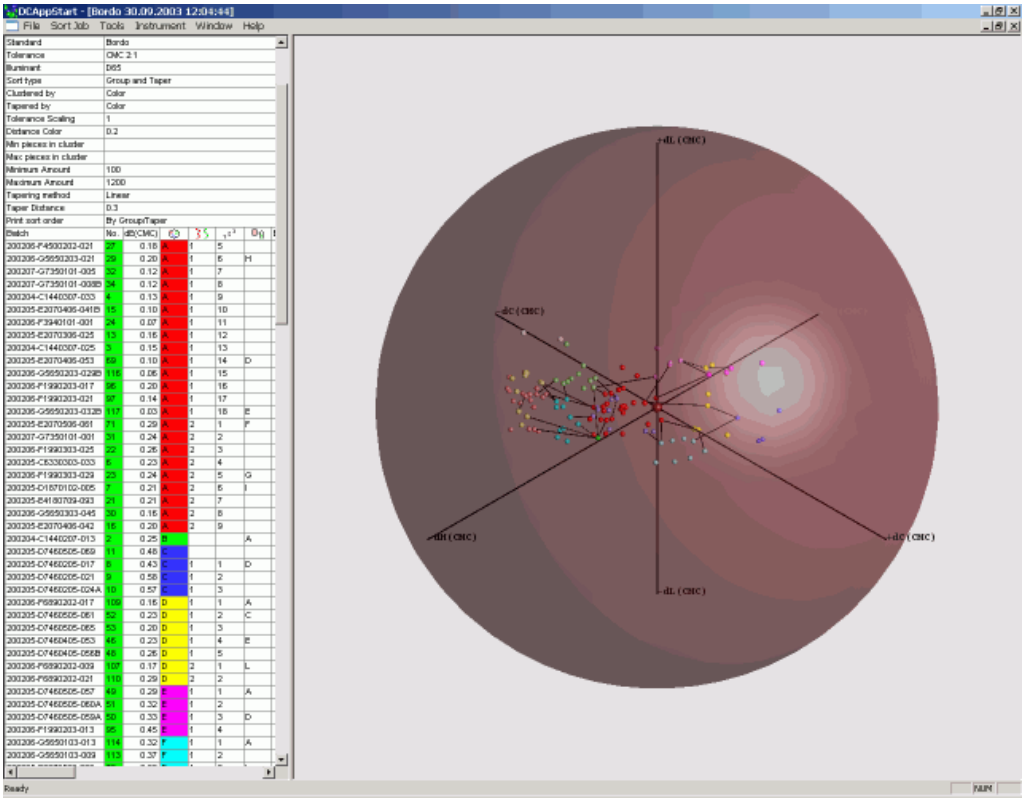
Buttons:

Search	Starts the search.
Stop	Stops the current search.
Clear	removes all data from the input and list boxes.

Context-sensitive menu in the „Search Result" table:

Display	Displays a print preview of the selected object.
Print	Prints data of the selected object.
ASCII Output	Saves data of the selected object into a ASCII output.

Job Result Window



Menu Functions of the SORT Job Menu

Maintain Sample Property

Refer to *Maintain the Sample Property on page 4-36*.

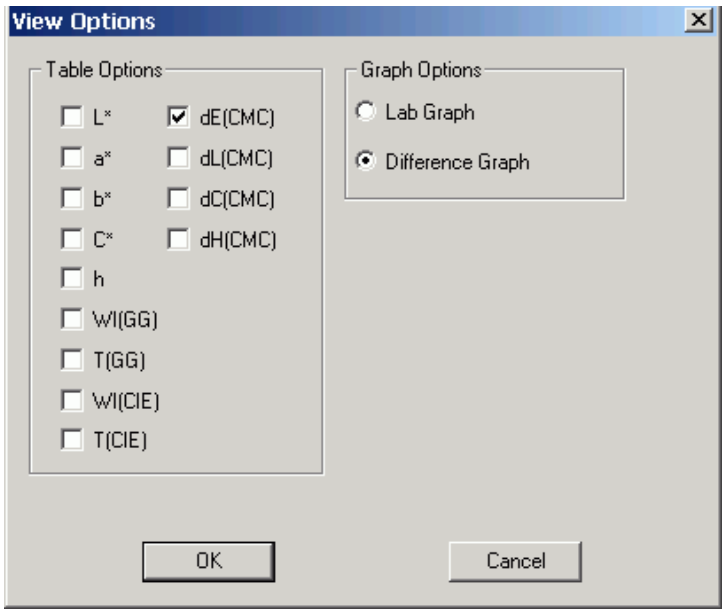
Recalculate

If you open an existing sort job, the program recalculates the job with the settings and batches saved in the job.

Executing the option „Recalculate“ - the program reads the SORT Script again and re-builds the job with all modified settings. If „I want to use a Datacolor Tools Standard“ was activated in the job, all new batches are added automatically. This task is very important, if you build the groups and tapers on the basis of fabric length. For example, if some of the fabric rolls have been delivered and the remaining length has changed, the job must be recalculated, so that the new length is taken into account when new clusters and tapers are built.

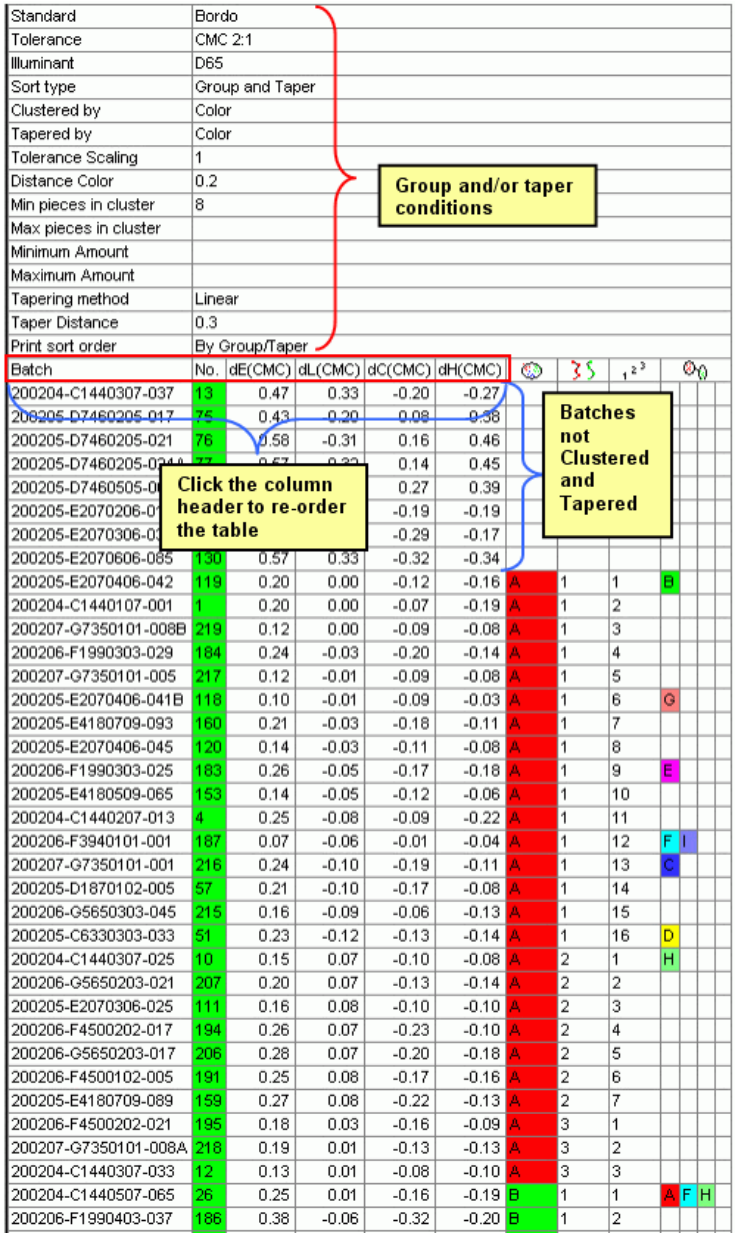
Options

You can select other data to be displayed in the „Job Result“ window:



Batch removed	You can remove batches from a job, e.g., if the sample (fabric roll) is delivered. The sample is grayed out but it is not deleted from the job. To re-activate the sample, remove the check from the option.
Modify Job	Refer to *Modifying A SORT Job on page 4-31*.
Save Job	Saves the job.
Save Job As	You can specify a copy of an existing job using the function. The copy of the job can be used to cluster and taper with new conditions without loosing the original data.
Copy	This task copies the entire table to the Windows clipboard. E.g., this is a simple way to transfer the data to Excel.
Print Preview	Shows the print out in the Job Result table. Refer to *Examples of Printouts on page 6-12*.
Print	Prints the result without displaying on screen. Refer to *Examples of Printouts on page 6-12*.
ASCII Output (optional)	Writes the job result to an ASCII file (An ASCII form must exist). Refer to *ASCII Output (Option) on page 3-17*.
Close SORT Job	Closes the sort job.

Details to the Job Result Table



Standard	Bordo
Tolerance	CMC 2:1
Illuminant	D65
Sort type	Group and Taper
Clustered by	Color
Tapered by	Color
Tolerance Scaling	1
Distance Color	0.2
Min pieces in cluster	8
Max pieces in cluster	
Minimum Amount	
Maximum Amount	
Tapering method	Linear
Taper Distance	0.3
Print sort order	By Group/Taper

Batch	No.	dE(CMC)	dL(CMC)	dC(CMC)	dH(CMC)				
200204-C1440307-037	13	0.47	0.33	-0.20	-0.27				
200205-D7460205-017	75	0.43	0.20	0.08	0.38				
200205-D7460205-021	76	0.58	-0.31	0.16	0.46				
200205-D7460205-024	77	0.57	0.32	0.14	0.45				
200205-D7460505-0				0.27	0.39				
200205-E2070206-0				-0.19	-0.19				
200205-E2070306-0				-0.29	-0.17				
200205-E2070606-085	130	0.57	0.33	-0.32	-0.34				
200205-E2070406-042	119	0.20	0.00	-0.12	-0.16	A	1	1	B
200204-C1440107-001	1	0.20	0.00	-0.07	-0.19	A	1	2	
200207-G7350101-008B	219	0.12	0.00	-0.09	-0.08	A	1	3	
200206-F1990303-029	184	0.24	-0.03	-0.20	-0.14	A	1	4	
200207-G7350101-005	217	0.12	-0.01	-0.09	-0.08	A	1	5	
200205-E2070406-041B	118	0.10	-0.01	-0.09	-0.03	A	1	6	Q
200205-E4180709-093	160	0.21	-0.03	-0.18	-0.11	A	1	7	
200205-E2070406-045	120	0.14	-0.03	-0.11	-0.08	A	1	8	
200206-F1990303-025	183	0.26	-0.05	-0.17	-0.18	A	1	9	E
200205-E4180509-065	153	0.14	-0.05	-0.12	-0.06	A	1	10	
200204-C1440207-013	4	0.25	-0.08	-0.09	-0.22	A	1	11	
200206-F3940101-001	187	0.07	-0.06	-0.01	-0.04	A	1	12	F I
200207-G7350101-001	216	0.24	-0.10	-0.19	-0.11	A	1	13	C
200205-D1870102-005	57	0.21	-0.10	-0.17	-0.08	A	1	14	
200206-G5650303-045	215	0.16	-0.09	-0.06	-0.13	A	1	15	
200205-C6330303-033	51	0.23	-0.12	-0.13	-0.14	A	1	16	D
200204-C1440307-025	10	0.15	0.07	-0.10	-0.08	A	2	1	H
200206-G5650203-021	207	0.20	0.07	-0.13	-0.14	A	2	2	
200205-E2070306-025	111	0.16	0.08	-0.10	-0.10	A	2	3	
200206-F4500202-017	194	0.26	0.07	-0.23	-0.10	A	2	4	
200206-G5650203-017	206	0.28	0.07	-0.20	-0.18	A	2	5	
200206-F4500102-005	191	0.25	0.08	-0.17	-0.16	A	2	6	
200205-E4180709-089	159	0.27	0.08	-0.22	-0.13	A	2	7	
200206-F4500202-021	195	0.18	0.03	-0.16	-0.09	A	3	1	
200207-G7350101-008A	218	0.19	0.01	-0.13	-0.13	A	3	2	
200204-C1440307-033	12	0.13	0.01	-0.08	-0.10	A	3	3	
200204-C1440507-065	26	0.25	0.01	-0.16	-0.19	B	1	1	A F H
200206-F1990403-037	186	0.38	-0.06	-0.32	-0.20	B	1	2	


Symbol for cluster


Symbol for taper


Symbol for taper sequence


Symbol for compatible cluster

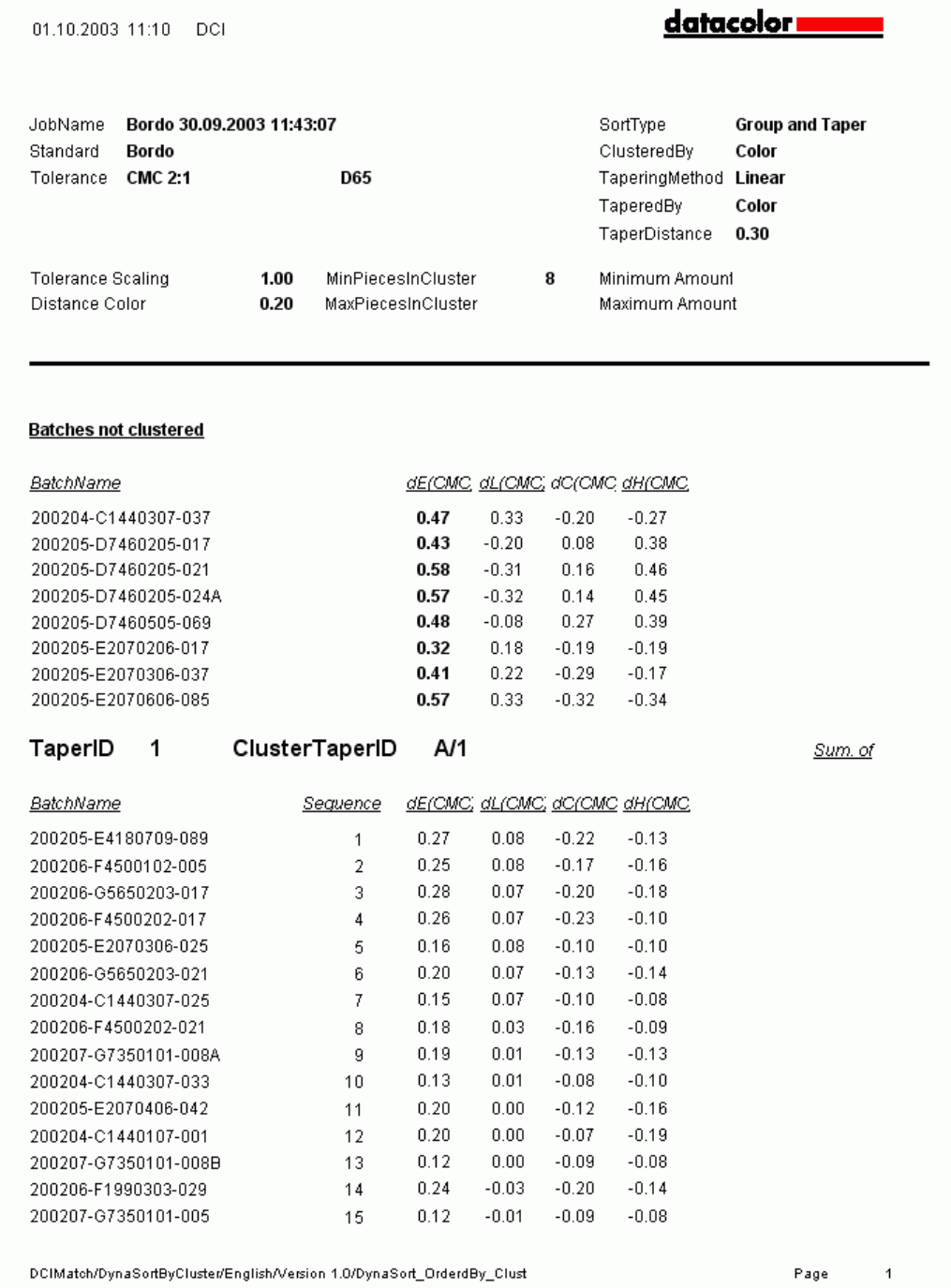
Symbol for Cluster A, Cluster B etc.

Batch 200205-E3940101-001 is compatible to Cluster F and I

Examples of Printouts

Use the menu function **SORT Job**, **Print Preview**, or **Print** to show or print the sort result

Example 1:
Printout sorted by group and/or taper code



01.10.2003 11:10 DCI

datacolor

JobName	**Bordo 30.09.2003 11:43:07**			SortType	**Group and Taper**
Standard	**Bordo**			ClusteredBy	**Color**
Tolerance	**CMC 2:1**	**D65**		TaperingMethod	**Linear**
				TaperedBy	**Color**
				TaperDistance	**0.30**
Tolerance Scaling	**1.00**	MinPiecesInCluster	**8**	Minimum Amount	
Distance Color	**0.20**	MaxPiecesInCluster		Maximum Amount	

Batches not clustered

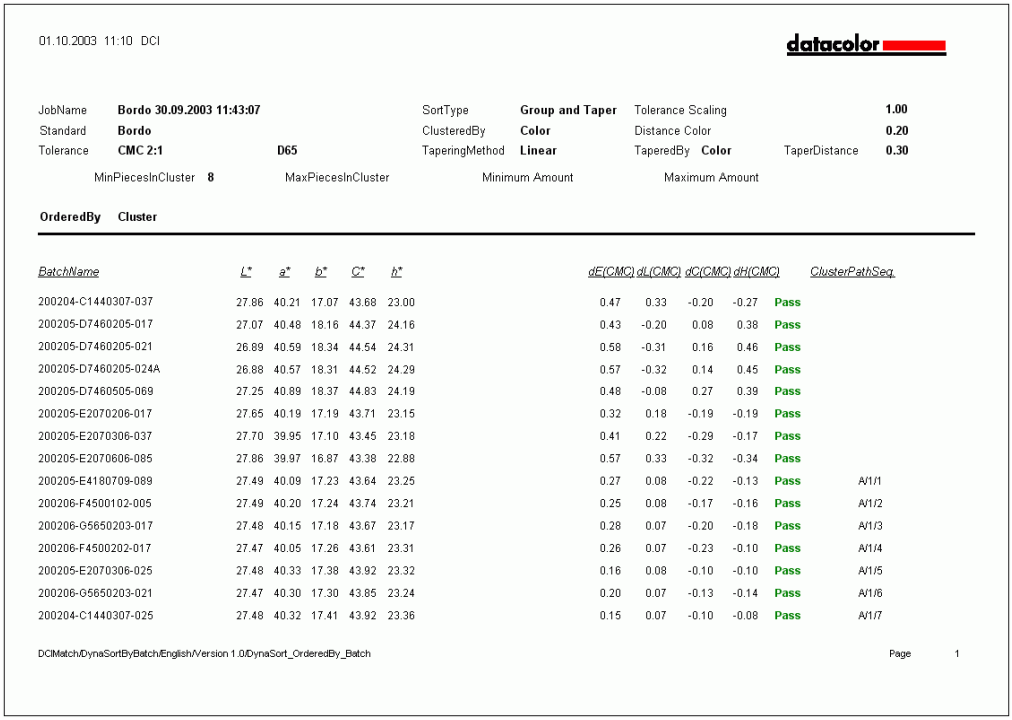
BatchName	dE(CMC	dL(CMC	dC(CMC	dH(CMC
200204-C1440307-037	**0.47**	0.33	-0.20	-0.27
200205-D7460205-017	**0.43**	-0.20	0.08	0.38
200205-D7460205-021	**0.58**	-0.31	0.16	0.46
200205-D7460205-024A	**0.57**	-0.32	0.14	0.45
200205-D7460505-069	**0.48**	-0.08	0.27	0.39
200205-E2070206-017	**0.32**	0.18	-0.19	-0.19
200205-E2070306-037	**0.41**	0.22	-0.29	-0.17
200205-E2070606-085	**0.57**	0.33	-0.32	-0.34

TaperID 1 ClusterTaperID A/1 *Sum. of*

BatchName	Sequence	dE(CMC	dL(CMC	dC(CMC	dH(CMC
200205-E4180709-089	1	0.27	0.08	-0.22	-0.13
200206-F4500102-005	2	0.25	0.08	-0.17	-0.16
200206-G5650203-017	3	0.28	0.07	-0.20	-0.18
200206-F4500202-017	4	0.26	0.07	-0.23	-0.10
200205-E2070306-025	5	0.16	0.08	-0.10	-0.10
200206-G5650203-021	6	0.20	0.07	-0.13	-0.14
200204-C1440307-025	7	0.15	0.07	-0.10	-0.08
200206-F4500202-021	8	0.18	0.03	-0.16	-0.09
200207-G7350101-008A	9	0.19	0.01	-0.13	-0.13
200204-C1440307-033	10	0.13	0.01	-0.08	-0.10
200205-E2070406-042	11	0.20	0.00	-0.12	-0.16
200204-C1440107-001	12	0.20	0.00	-0.07	-0.19
200207-G7350101-008B	13	0.12	0.00	-0.09	-0.08
200206-F1990303-029	14	0.24	-0.03	-0.20	-0.14
200207-G7350101-005	15	0.12	-0.01	-0.09	-0.08

DCIMatch/DynaSortByCluster/English/Version 1.0/DynaSort_OrderdBy_Clust Page 1

Example 2:
Printout sorted by name (sort order depends on order on result screen)



01.10.2003 11:10 DCI

datacolor

JobName	**Bordo 30.09.2003 11:43:07**		SortType	**Group and Taper**	Tolerance Scaling		**1.00**
Standard	**Bordo**		ClusteredBy	**Color**	Distance Color		**0.20**
Tolerance	**CMC 2:1**	**D65**	TaperingMethod	**Linear**	TaperedBy	**Color**	TaperDistance **0.30**

MinPiecesInCluster **8** MaxPiecesInCluster Minimum Amount Maximum Amount

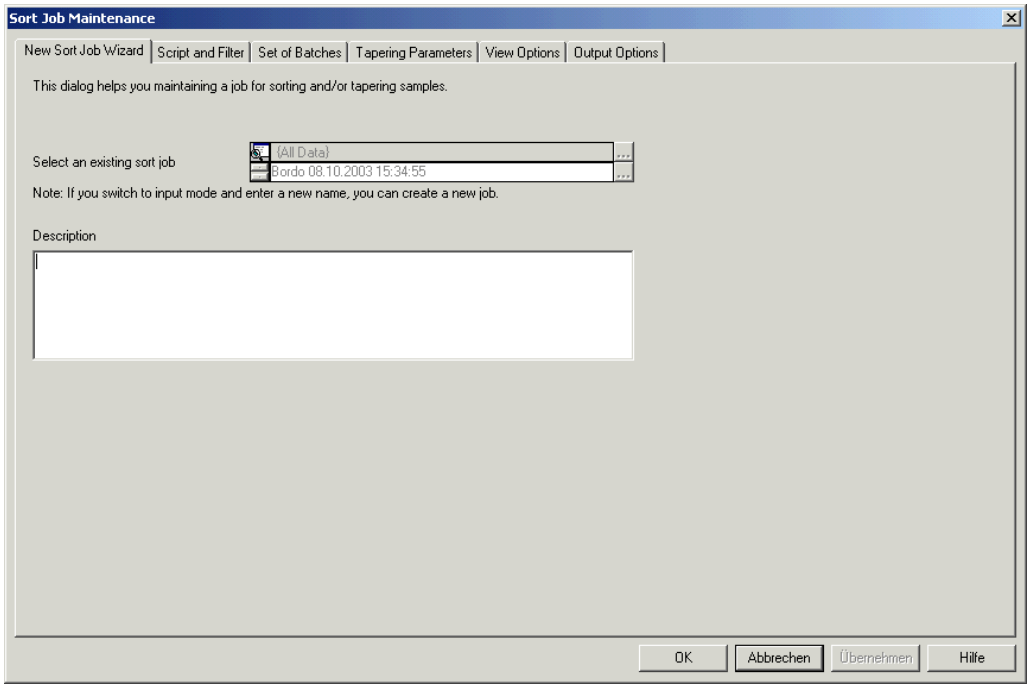
OrderedBy Cluster

BatchName	L*	a*	b*	C*	h*	dE(CMC)	dL(CMC)	dC(CMC)	dH(CMC)		ClusterPathSeq
200204-C1440307-037	27.86	40.21	17.07	43.68	23.00	0.47	0.33	-0.20	-0.27	Pass	
200205-D7460205-017	27.07	40.48	18.16	44.37	24.16	0.43	-0.20	0.08	0.38	Pass	
200205-D7460205-021	26.89	40.59	18.34	44.54	24.31	0.58	-0.31	0.16	0.46	Pass	
200205-D7460205-024A	26.88	40.57	18.31	44.52	24.29	0.57	-0.32	0.14	0.45	Pass	
200205-D7460505-069	27.25	40.89	18.37	44.83	24.19	0.48	-0.08	0.27	0.39	Pass	
200205-E2070206-017	27.65	40.19	17.19	43.71	23.15	0.32	0.18	-0.19	-0.19	Pass	
200205-E2070306-037	27.70	39.95	17.10	43.45	23.18	0.41	0.22	-0.29	-0.17	Pass	
200205-E2070606-085	27.86	39.97	16.87	43.38	22.88	0.57	0.33	-0.32	-0.34	Pass	
200205-E4180709-089	27.49	40.09	17.23	43.64	23.25	0.27	0.08	-0.22	-0.13	Pass	A/1/1
200206-F4500102-005	27.49	40.20	17.24	43.74	23.21	0.25	0.08	-0.17	-0.16	Pass	A/1/2
200206-G5650203-017	27.48	40.15	17.18	43.67	23.17	0.28	0.07	-0.20	-0.18	Pass	A/1/3
200206-F4500202-017	27.47	40.05	17.26	43.61	23.31	0.26	0.07	-0.23	-0.10	Pass	A/1/4
200205-E2070306-025	27.48	40.33	17.38	43.92	23.32	0.16	0.08	-0.10	-0.10	Pass	A/1/5
200206-G5650203-021	27.47	40.30	17.30	43.85	23.24	0.20	0.07	-0.13	-0.14	Pass	A/1/6
200204-C1440307-025	27.48	40.32	17.41	43.92	23.36	0.15	0.07	-0.10	-0.08	Pass	A/1/7

DCIMatch/DynaSortByBatch/English/Version 1.0/DynaSort_OrderedBy_Batch Page 1

SORT Job Maintenance Dialog Box

New SORT Job Wizard Tab

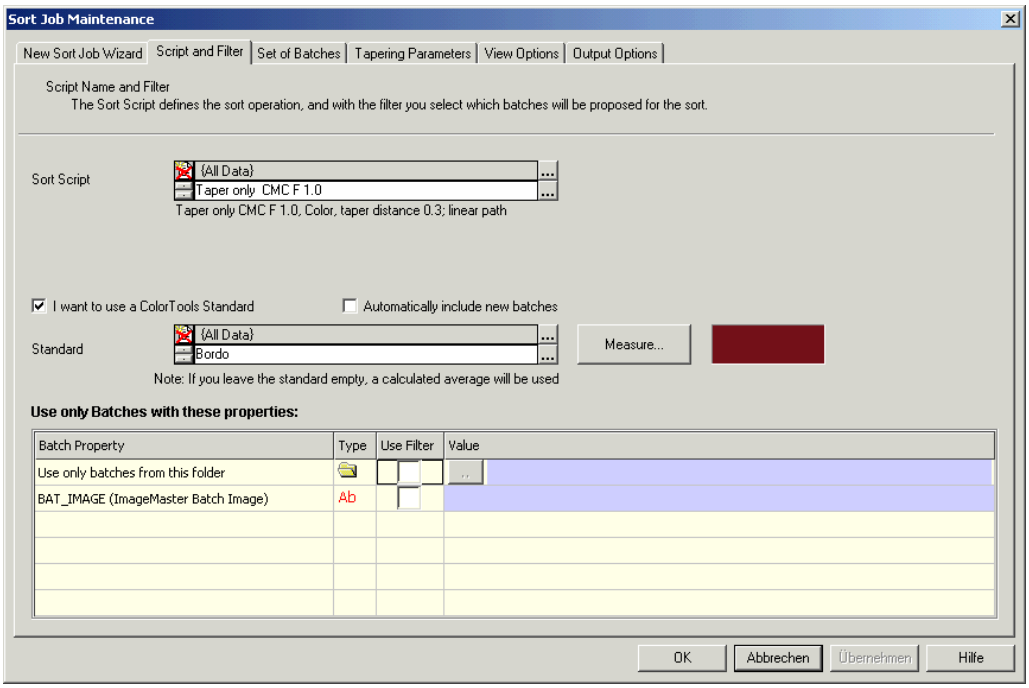


Parameters

Select an existing sort job Selection box with the name of the sort job.

Description Text box for an additional description of the sort job.

Script and Filter Tab



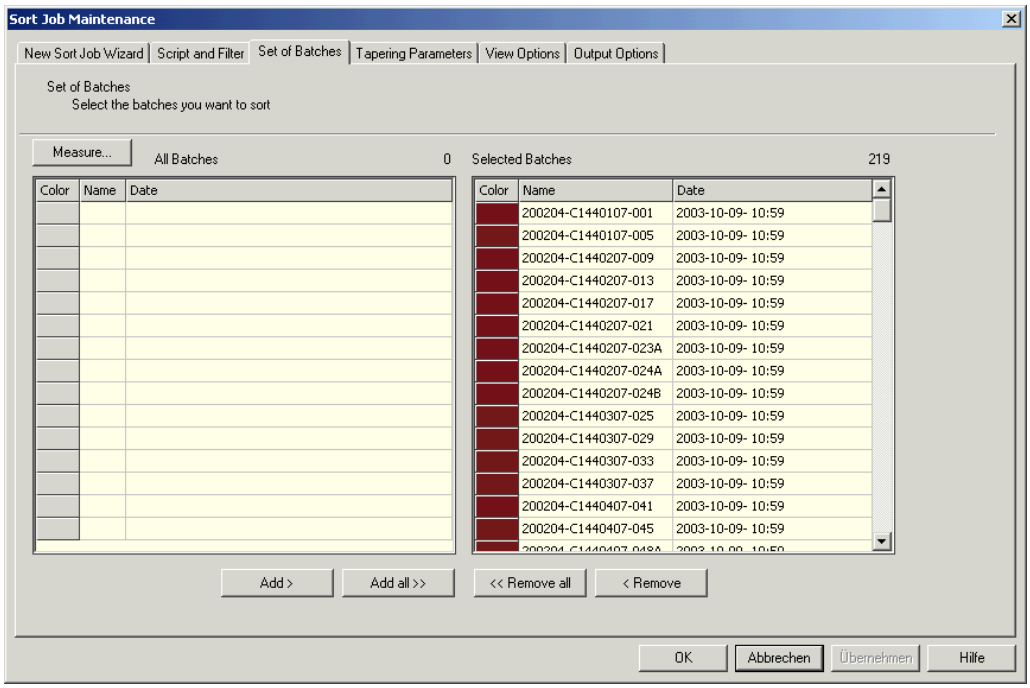
Parameters

SORT Script	Selection box with the currently used sort job.
Check boxes	If you check „I want to use a Datacolor Tools Standard“ only Datacolor Tools standards are displayed to select from. The batches linked to this standard are listed in the set of Batches“ tab. They are already selected if „Automatically include new batches“ is checked as well. In this case, it is not possible to remove batches from the list. This is only possible if „Automatically include new batches“ is not selected.
Standard	Selection box with the selected standard. If you do not select a standard, the program calculates the average of all batches and uses this as the theoretical standard for the pass/fail decision.
Measure	Start button for the measurement. Refer to *Measurement on page 4-18*.

Table:

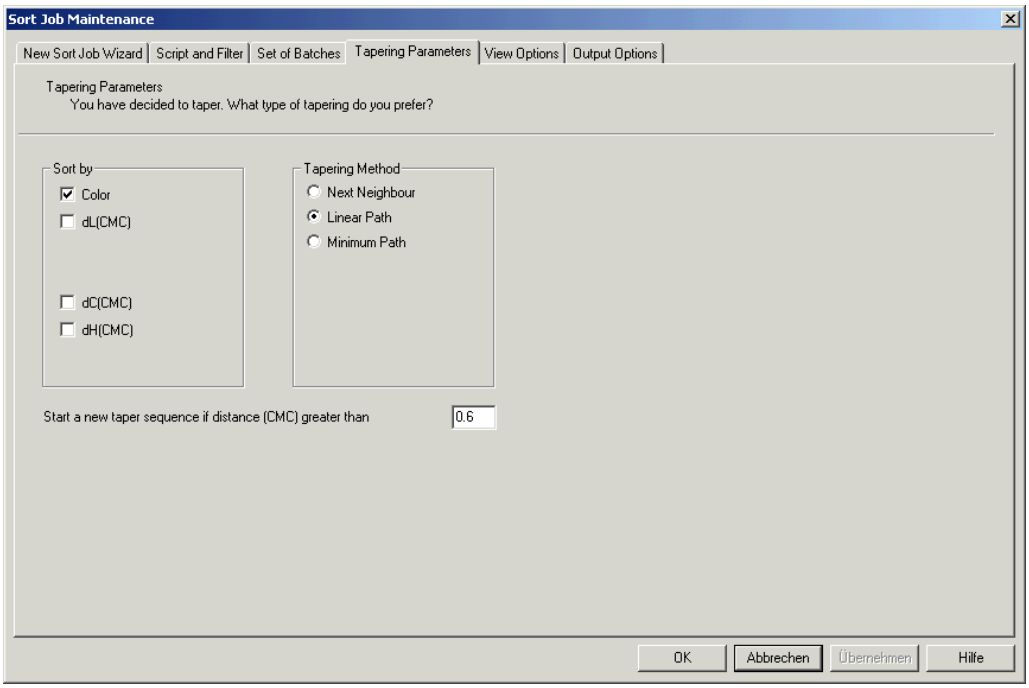
You can set filters to reduce the number of batches that are displayed for selection. A filter might be a specific folder or any user defined field you have created either with Datacolor Tools or with Datacolor SORT.

Set of Batches Tab



Selection table for the batches to be used.

Tapering Parameters Tab



Parameters

Sort by

Color	Samples are sorted by color. All three dimensions are used (dL, dC and dH).
dL(xxx)	Samples are sorted by dL only. (xxx) = placeholder for selected Pass/Fail formula (1 dimensional).
dC(xxx)	Samples are sorted by dC only. (xxx) = placeholder for selected Pass/Fail formula (1 dimensional).
dH(xxx)	Samples are sorted by dH only. (xxx) = placeholder for selected Pass/Fail formula (1 dimensional).

dL(xxx) plus dC(xxx) or dH(xxx)

Samples are sorted by dL plus dC or dH.
(xxx) = placeholder for selected Pass/Fail formula (2 dimensional)

Start a new taper if distance (xxx) is greater

This tolerance defines the distance between the batches. If the distance is above the limit, a new taper starts. If "Color" is selected as the sort type, the limit corresponds to a color difference dE(xxx).
We call the limit a distance because it is not a real color difference if you select a 2-dimensional sort, e.g. dL plus dC.
The distance represents in this case:

$$Maxdis = \sqrt{dL(xxx)^2 + dC(xxx)^2}$$

(xxx) = placeholder for selected Pass/Fail formula

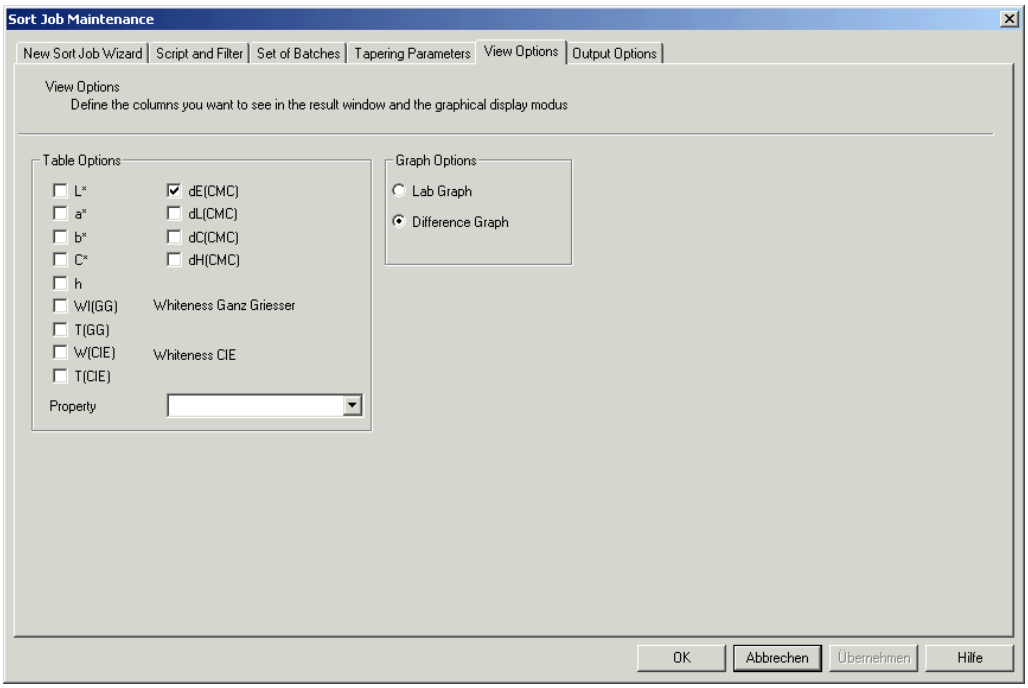
Tapering Method

Note

The program starts tapering with a batch that has a connection to a compatible cluster. This allows a taper to be built across the cluster borders

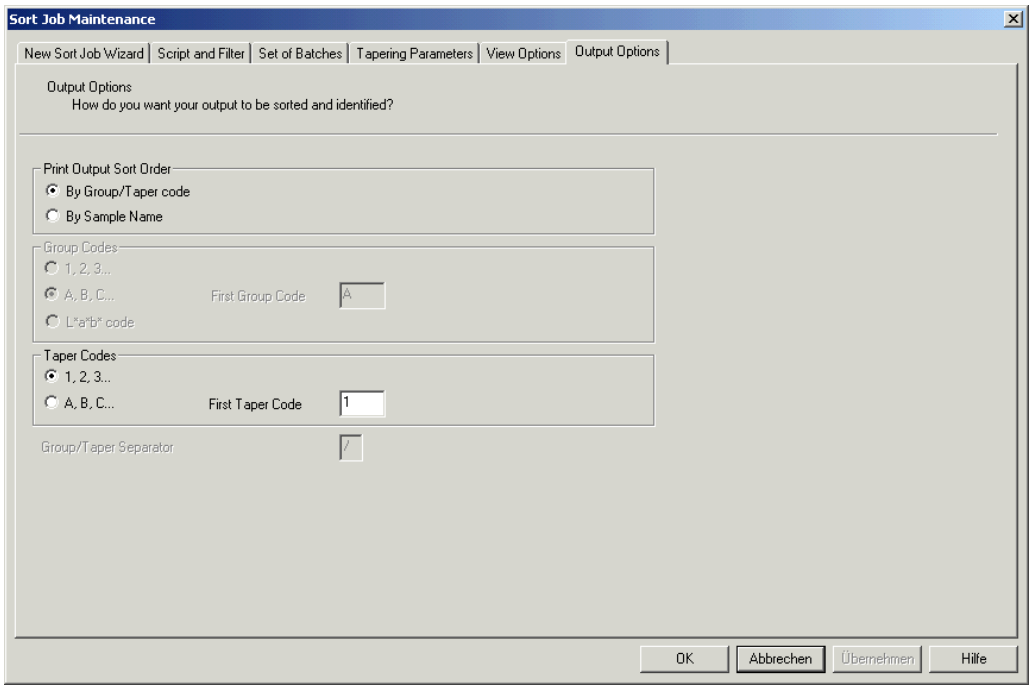
Next neighbor	The program searches for the closest next batch.
Linear path	The program calculates a regression line and tapers the batches along this line.
Minimum path	The program calculates the total distance of all batches of a taper path using "next neighbor" and "linear path" methods. The method with the lower total distance is selected as the "Minimum Path".

View Options Tab



In the „View Options“ tab, you can define what you would like to see in the results window.

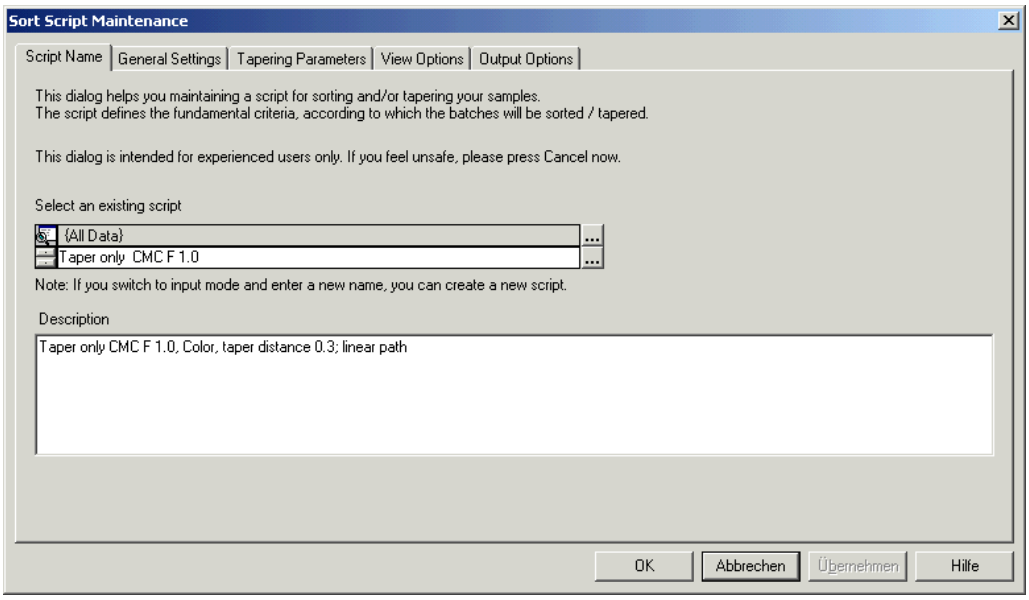
Output Options Tab



The last wizard page is used to set up the output and to select the coding you would like to use for groups (clusters) and tapers. The print output sort order is linked to individual print forms. One is used to print the job ordered by Group/Taper code, and the second is sorted identically to the order you have displayed in the output screen. You can change the order in the output screen by clicking in the table columns.

SORT Script Maintenance Dialog Box

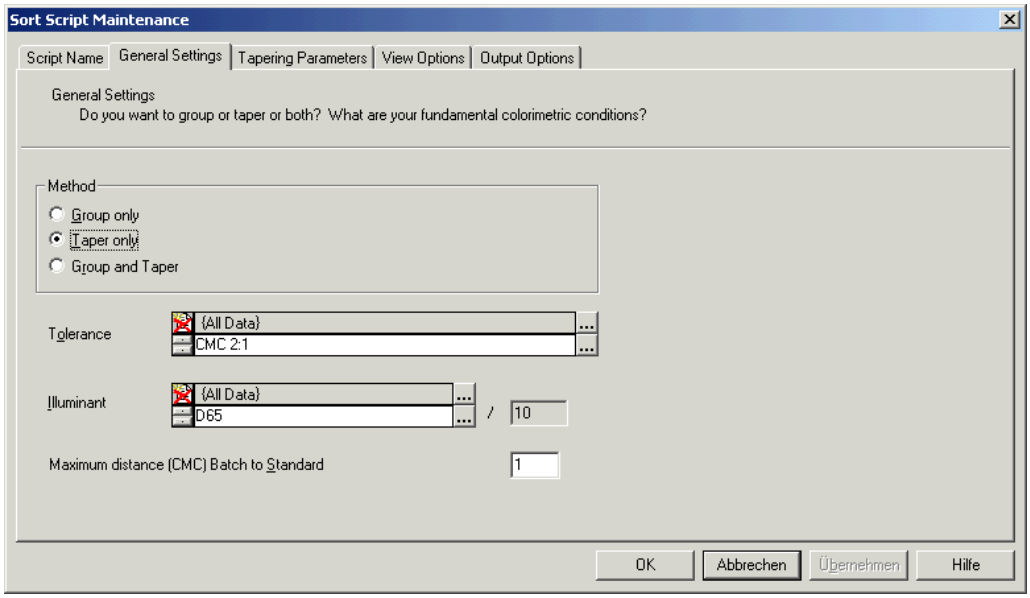
Script Name Tab



Parameters

Select an existing script	Selection box with the name of the sort script.
Description	Text box for an additional description of the sort script.

General Settings Tab



Parameters

Group only	The program builds subsets of samples (clusters, groups) that pass the pass/fail decision based on the selected formula and tolerance factor.
Taper only	The program searches for the best sequence of samples that pass the pass/fail decision based on the selected formula and tolerance factor.
Group and Taper	In the 1st step the program builds subsets of samples (clusters, groups) and in the 2nd step it tapers the samples in each cluster.
Tolerance	All tolerance formulas can be selected.

Note

M&S89 is optional. If M&S 89 is used you must select one of the M&S illuminants (msTL84-10, msD65-10, msA-10).
No results are displayed if other than ms-illuminants are selected.

Maximum distance[xxx] Batch to Standard

Tolerance factor (scaling factor) used for Pass/Fail. (XXX) is a placeholder for the selected formula.

Note

This scaling factor modifies the tolerance value set in the tolerance block.

Tapering Parameters Tab

Refer to *Tapering Parameters Tab on page 6-17*.

View Options Tab

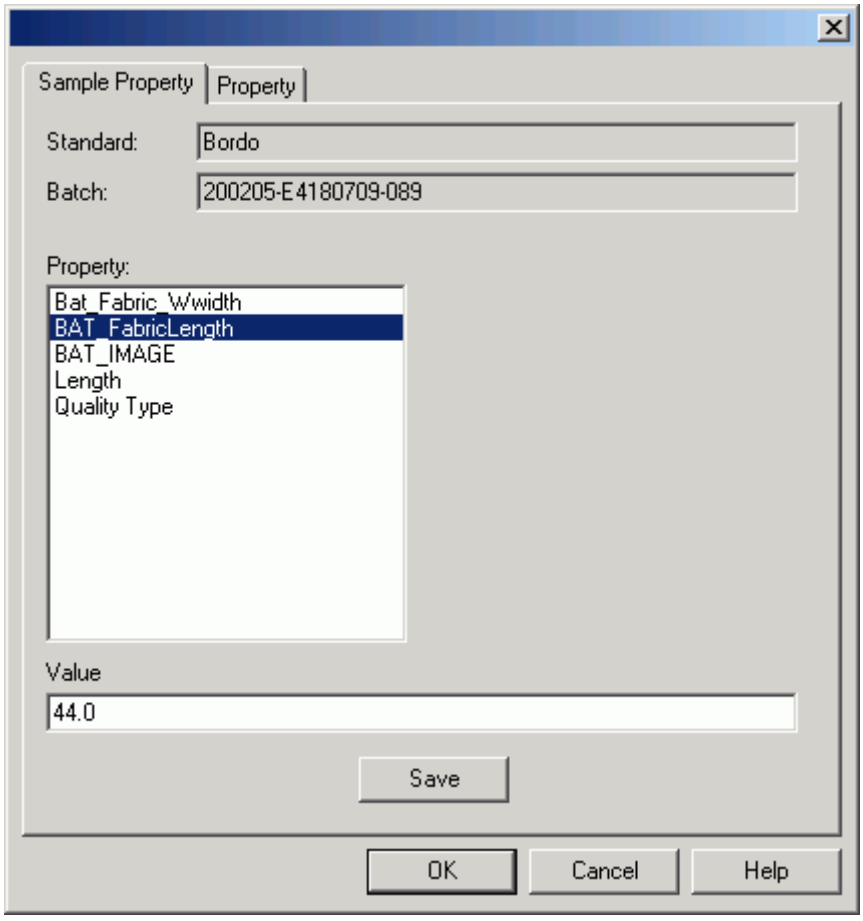
Refer to *View Options Tab on page 6-19*.

Output Options Tab

Refer to *Output Options Tab on page 6-20*.

Sample Property Dialog Box

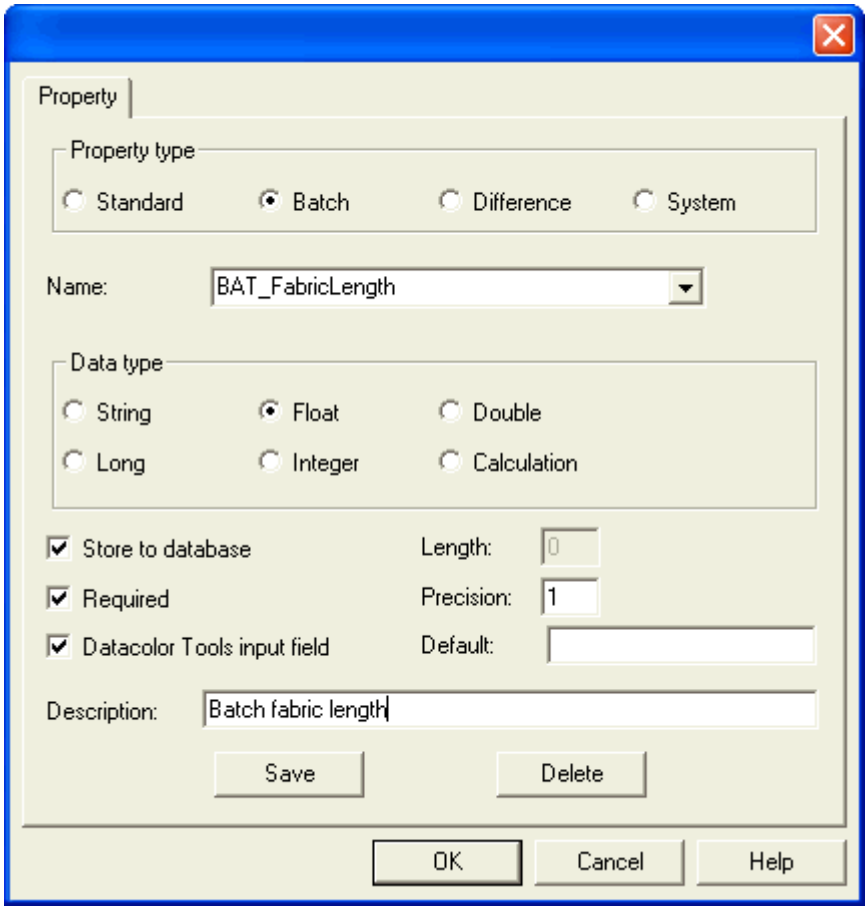
Sample Property Tab



Parameters

Standard	Standard, the sample is related to.
Batch	Batch, the sample is related to.
Property	Properties specified for the sample.
Value	Value of the selected property.

Property Tab

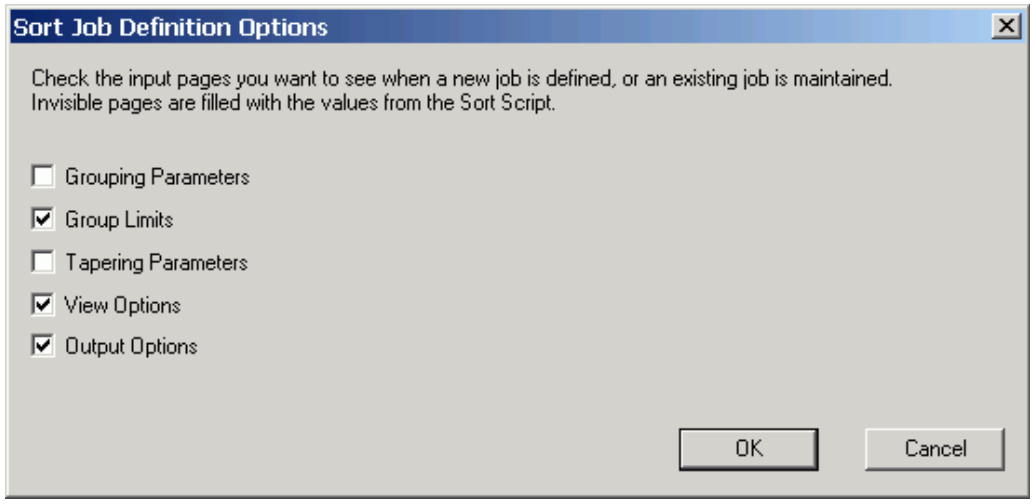


Parameters

Property type	Selection of the property type.
Name	Selection (or input) of the name.
Data type	Selection of the data type.
Store to database	If checked, the property is stored in the database.
Required	If checked, the value must be filled in (mandatory field).
Database Tools input field	If checked, the field is defined as input field in Datacolor TOOLS.
Length	Length of a field of type „String“.
Precision	Defines the number of decimals.
Default	Field for setting a default value.
Description	Description of the property.

SORT Job Definition Options Dialog Box

In the sort job definition options dialog box can be specified, which dialog boxes of the „SORT Job“ wizard and tabs of the „SORT Job Maintenance“ dialog box are displayed for specifying and modifying sort jobs. The invisible tabs are filled with the corresponding data of assigned sort script.



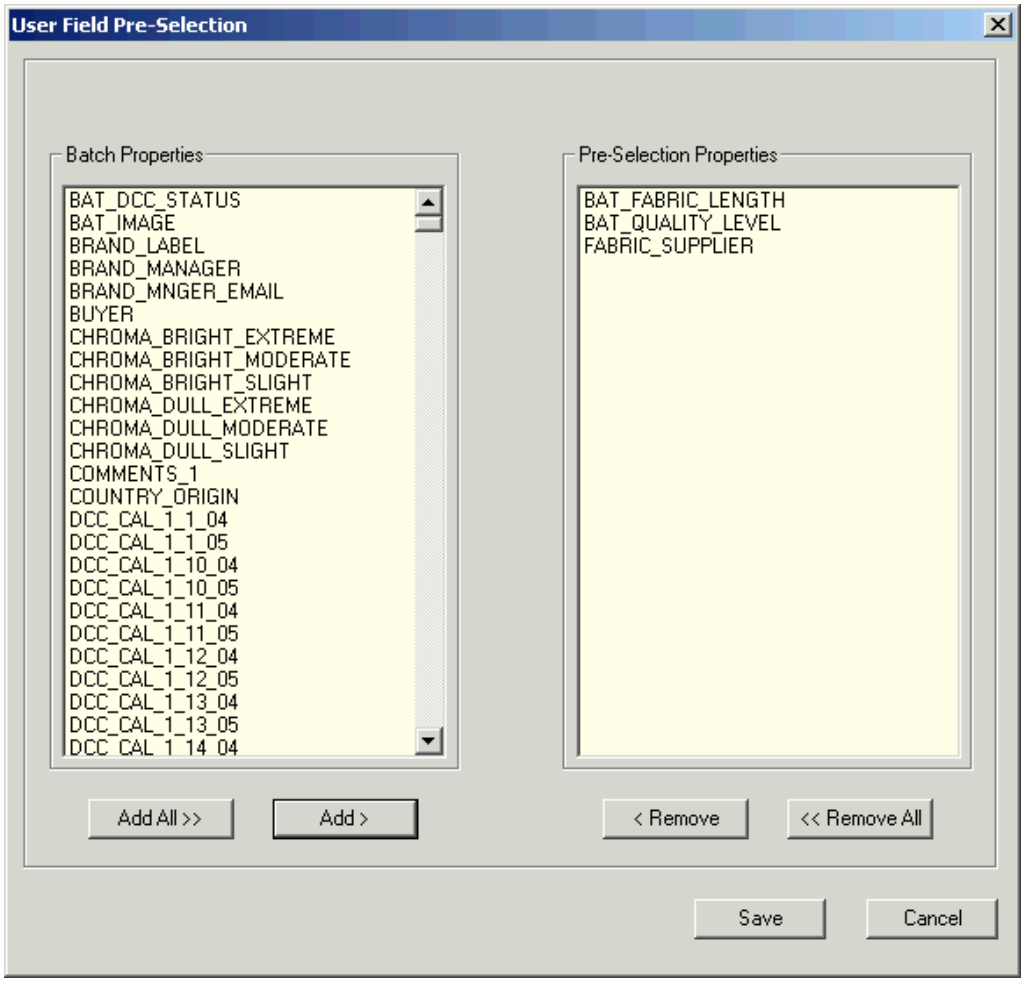
Note

If you want to be sure that a user works only with the predefined settings of the sort script, you have to limit the access rights, respectively.

Login as User „DCI'“ and run the option „User Administration“ (**Menu Tools** → **User Manager** → **User Administration**).

User Field Pre-selection Dialog Box

The „User.fld" file may contain many fields that cannot be used by Datacolor SORT. This task is used to select only relevant user defined fields for Datacolor SORT.

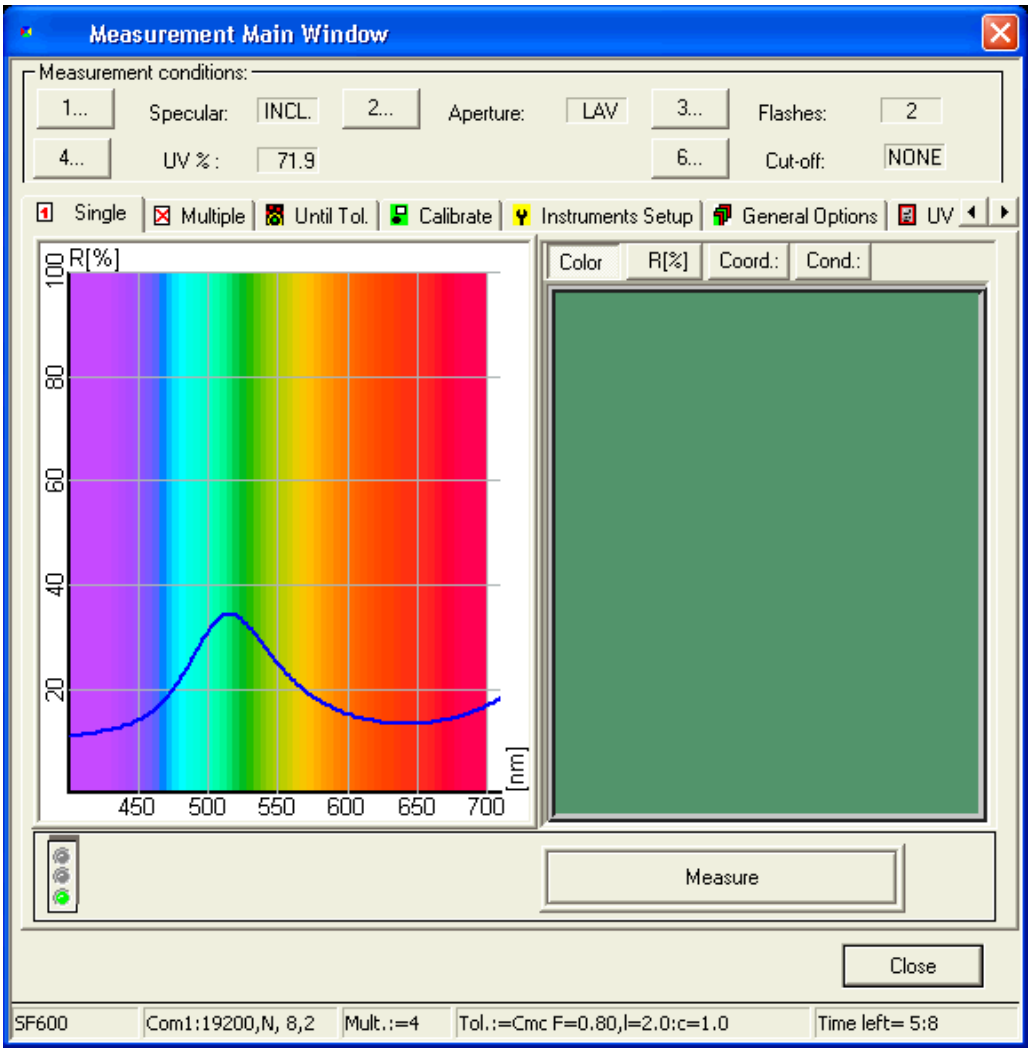


Refer to *Pre-Selections of User Defined Fields on page 4-37*.

Measurement Main Window

The “Measurement” dialog box is used for selection and setting up the instrument, calibration, and measurement. Refer to *Calibration and Measurement on page 4-8*.

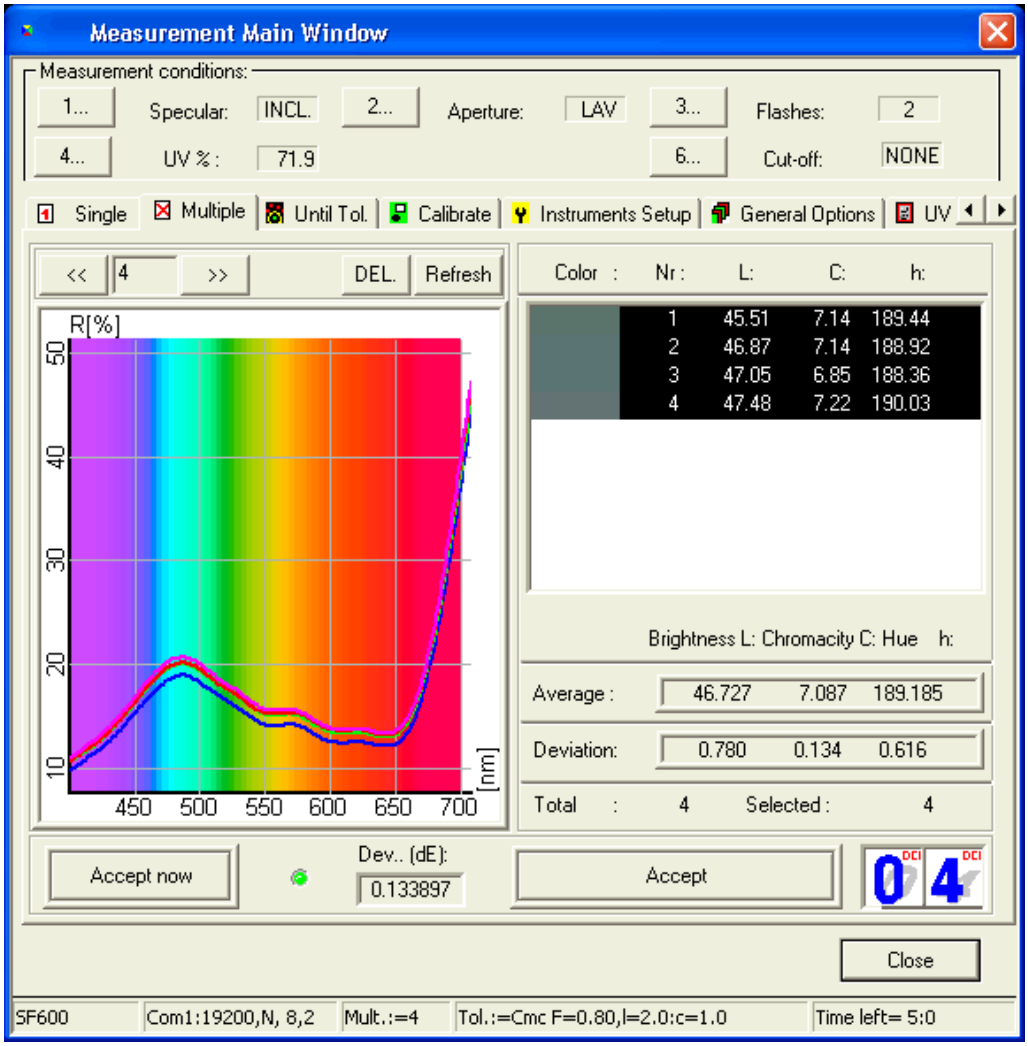
Single Tab (Example)



Refer to the manual of your spectrophotometer for instrument specific information.

„Color“ tab	Shows the color of the measured sample.
„Reflectance“ tab	Shows the reflectance values of the measured sample.
„Coordinates“ tab	Shows the color coordinates (e.g., yxz Lab) of the measured sample.
„Conditions“ tab	Shows the measurement conditions.

Multiple Tab



Parameters

Used for a measurement series.

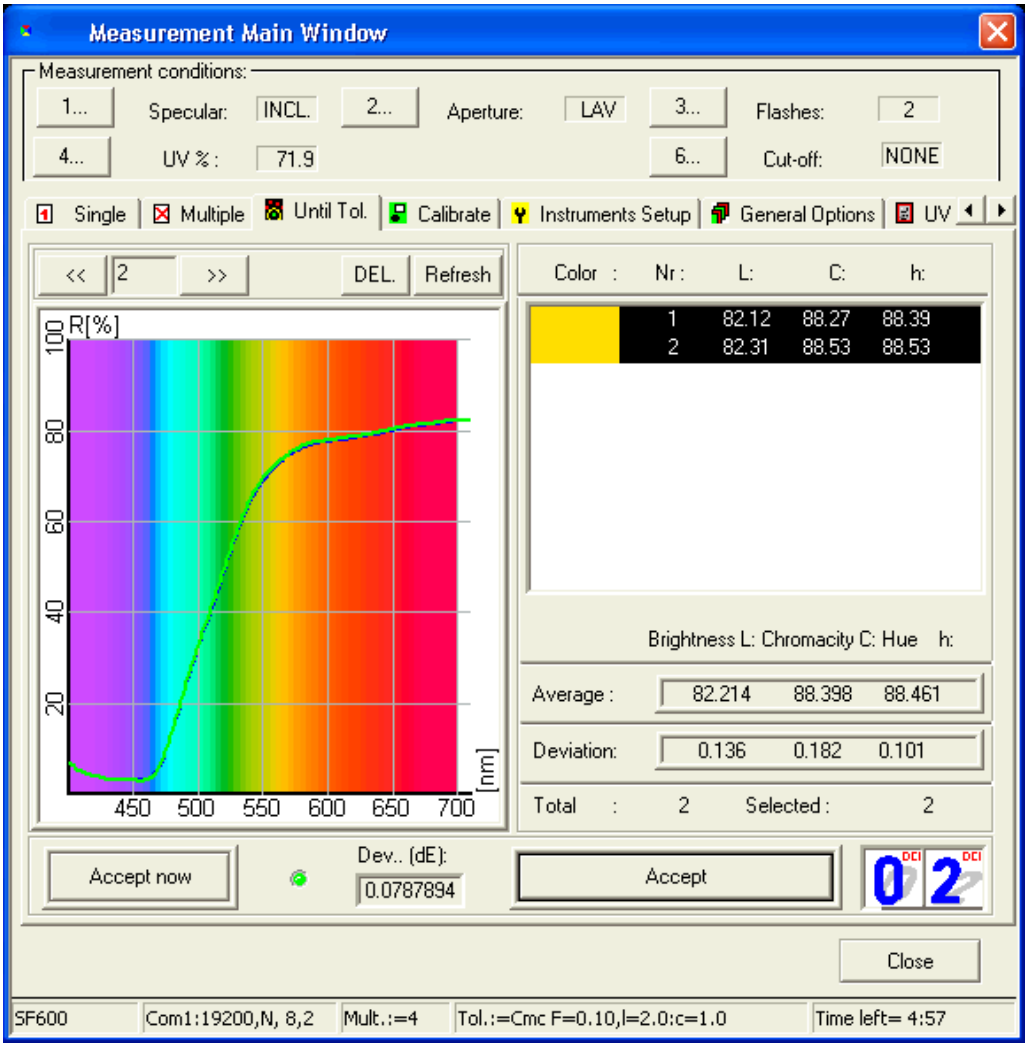
The graph and the fields show the result of the measurement. ***Average and deviation are calculated according to the selected measurements.***

In the table, the measurements can be selected or canceled using the mouse.

Measurements can also be canceled using the measurement selection and the **DEL** buttons at the top of the graph.

Accept now	Selects all measurements.
Measure	Executes the measurement.
Close	Closes the "Measurement" dialog box and saves the currently calculated values.

Until Tolerance Tab



Parameters

Used for multiple measurement until the color differences do no longer exceed the tolerance values.

The graph and the fields show the result of the measurement. ***Averages and deviation are calculated according to the selected measurements.***

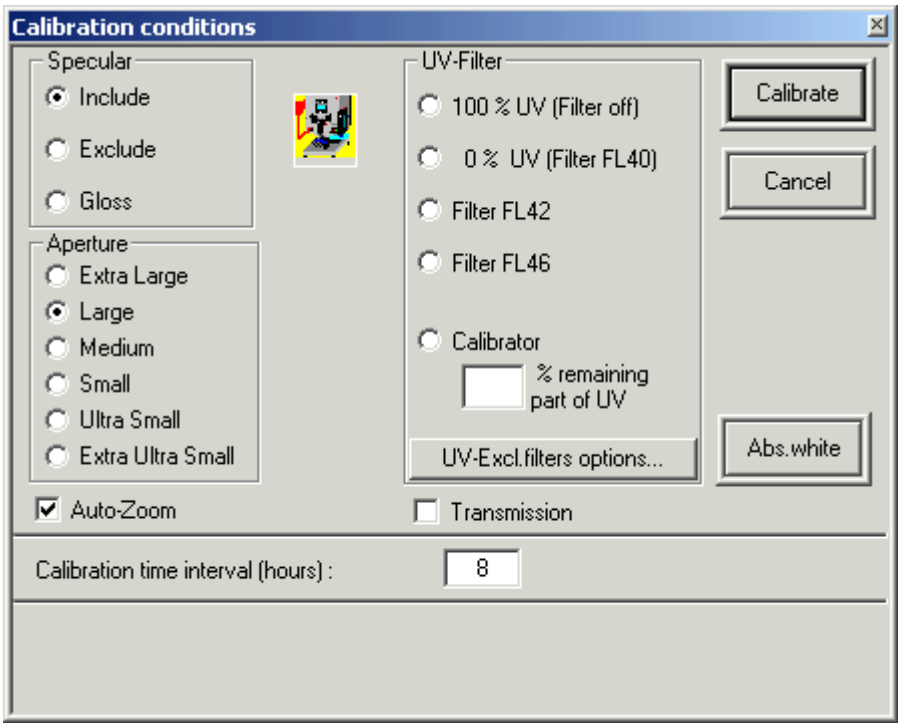
Measurements can be selected or canceled in the table using the mouse.

Measurements can also be canceled using the measurement selection and the **DEL** buttons at the top of the graph.

Accept now	Selects all measurements.
Measure	Executes the measurement.
Close	Closes the “Measurement” dialog box and saves the currently calculated values.

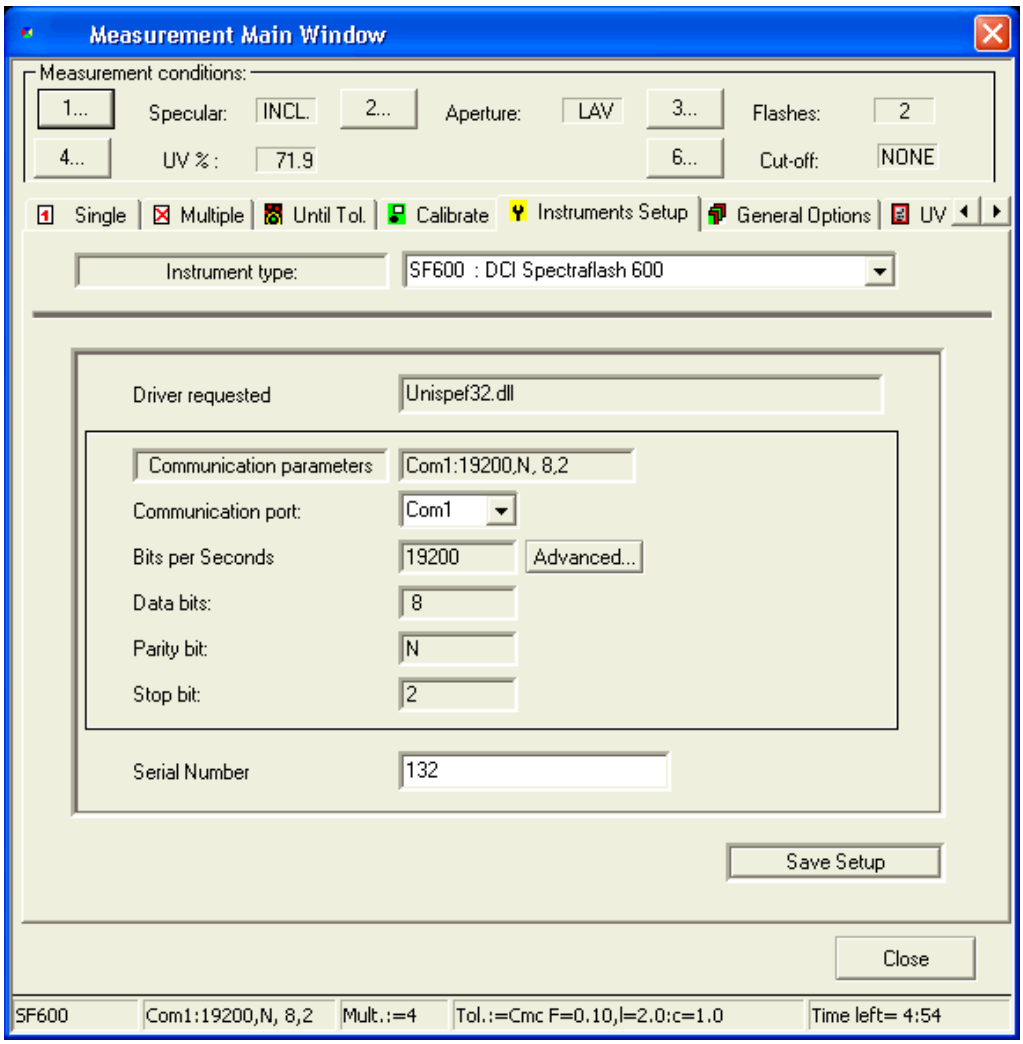
Calibrate Tab

Opens the "Calibration Conditions" dialog box.



Refer to the manual of your spectrophotometer.

Instruments Setup Tab



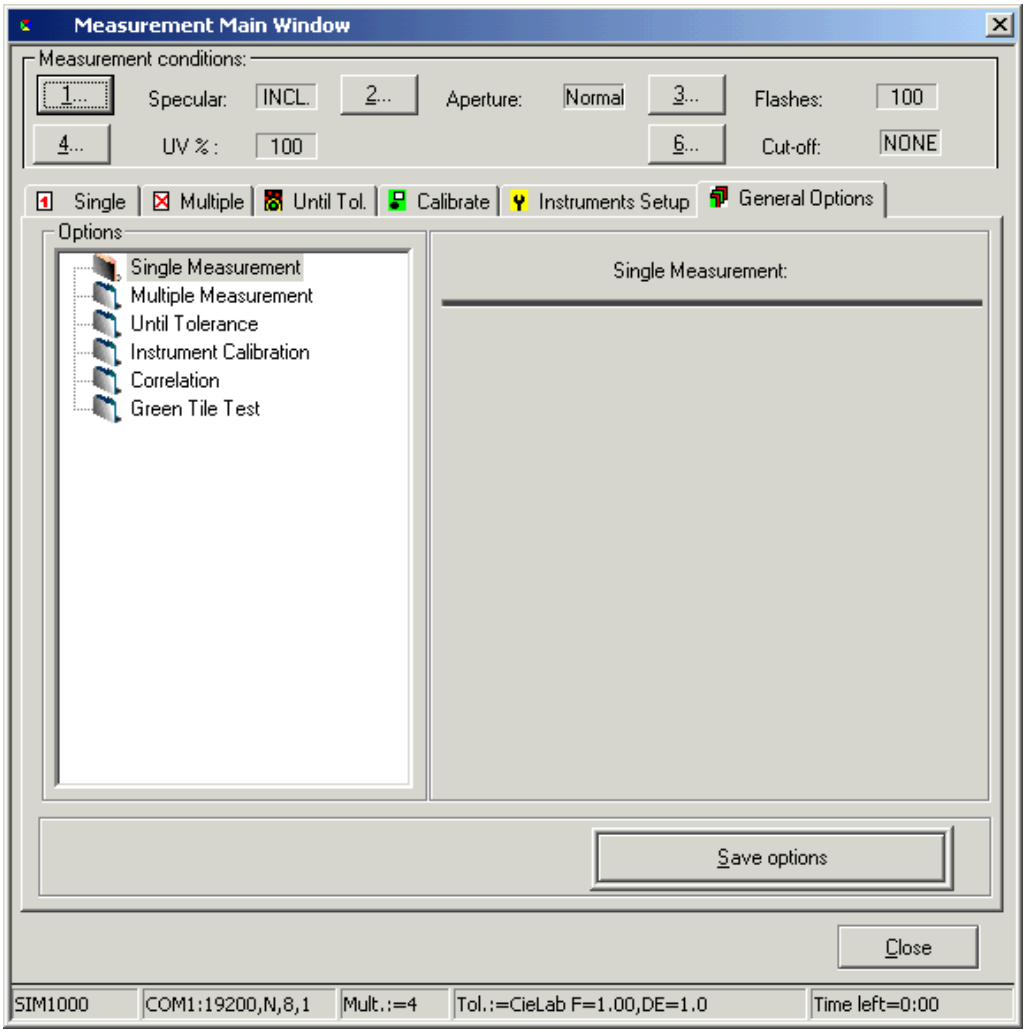
Parameters

Caution

An alteration of these parameters can interrupt the communication between the PC and the spectrophotometer.

Refer to the manual of your spectrophotometer.

General Options Tab



Parameters

Definition of general parameters for single measurement, multiple measurement, until tolerance, calibration, and green tile test (Refer to *Green Tile Test on page 4-16*.).

Until tolerance	Select the formula and specify the tolerance to be accepted.
Correlation	Refer to *Configure and Enable the Maestro Correlation Feature on page 4-14*.

UV Calibration Tab

Calibration Methods

Note

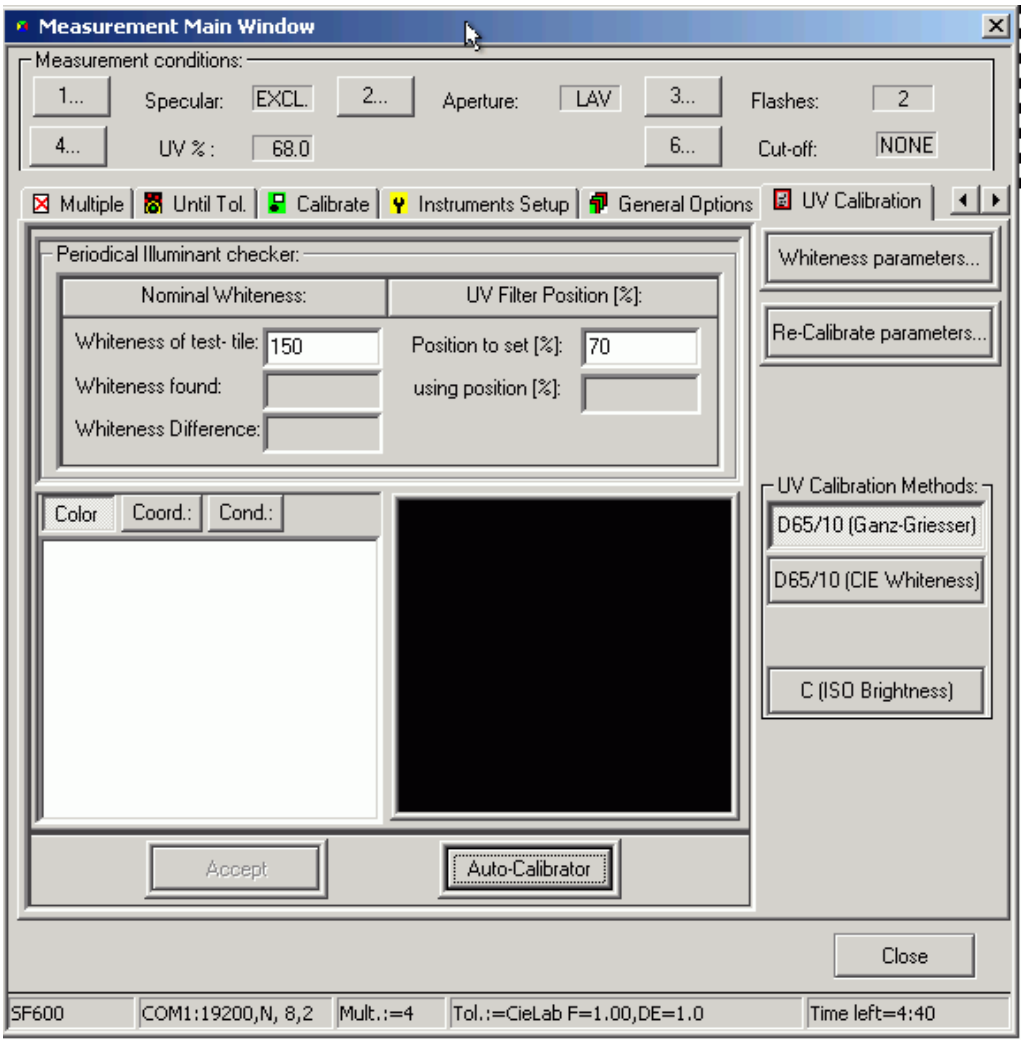
There are several methods that can be used to calibrate the adjustable UV filter position. Please refer to the whiteness standard you are using to determine the method to be used.

Ganz/Griesser: This procedure uses the Ganz/Griesser calibration method. The light source is filtered to simulate the D65 Illuminant and the Ganz Griesser parameters are used to calculate the filter position. In addition, the target whiteness value is based on 10% standard observer data.

CIE using D65/10: The light source is filtered to simulate the D65 illuminant. This is the procedure used to perform a CIE Whiteness evaluation.

ISO Brightness (C): The light source is filtered to simulate Illuminant C. This is the procedure used to perform an ISO Brightness evaluation.

Example Using the Ganz/Griesser Method



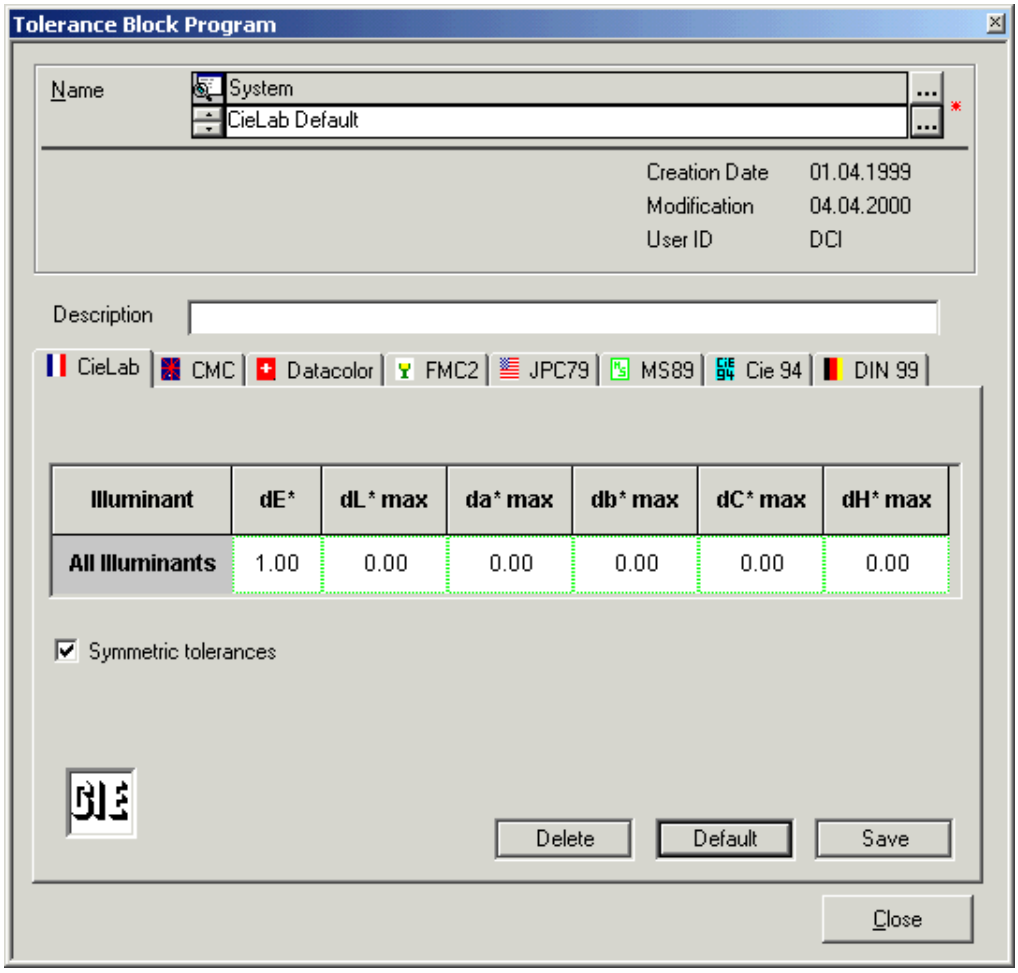
Refer to *UV Calibration on page 4-9*.

Tolerance Block Program Dialog Box

General parameters	
Name	Unique name of the tolerance.
Modification	Date of last tolerance.
User ID	Identification of creating or modifying user.
Description	Text field.
Buttons	
Delete	Deletes the selected tolerance.
Default	Sets the default values in the selected tab.
Save	Saves the current tolerance.
Close	Closes the dialog box.

Refer the following pages for information about the tabs.

CieLab Tab

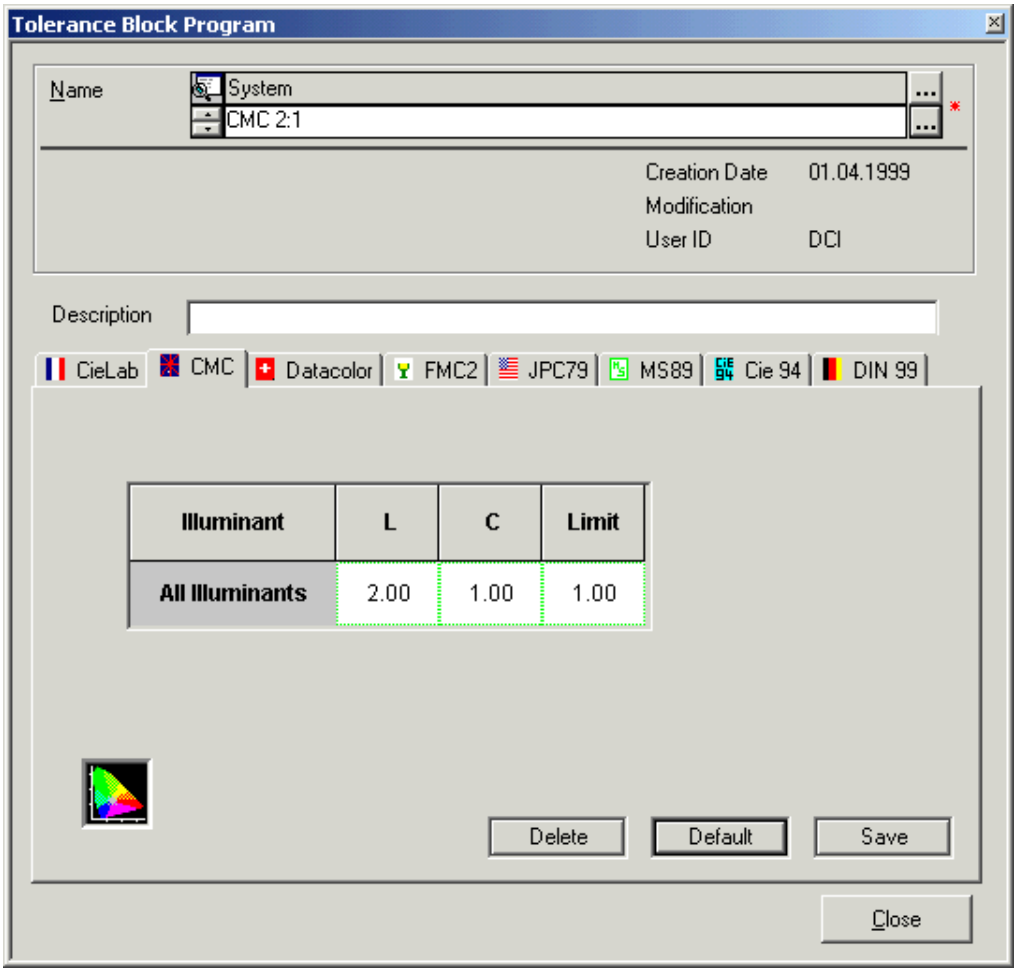


Parameters

Table	Input values for minimum and maximum tolerances.
Symmetric Tolerances	Minimum and maximum values are symmetric.

Refer to *Specifying, Modifying or Deleting Tolerances on page 4-22*.

CMC Tab

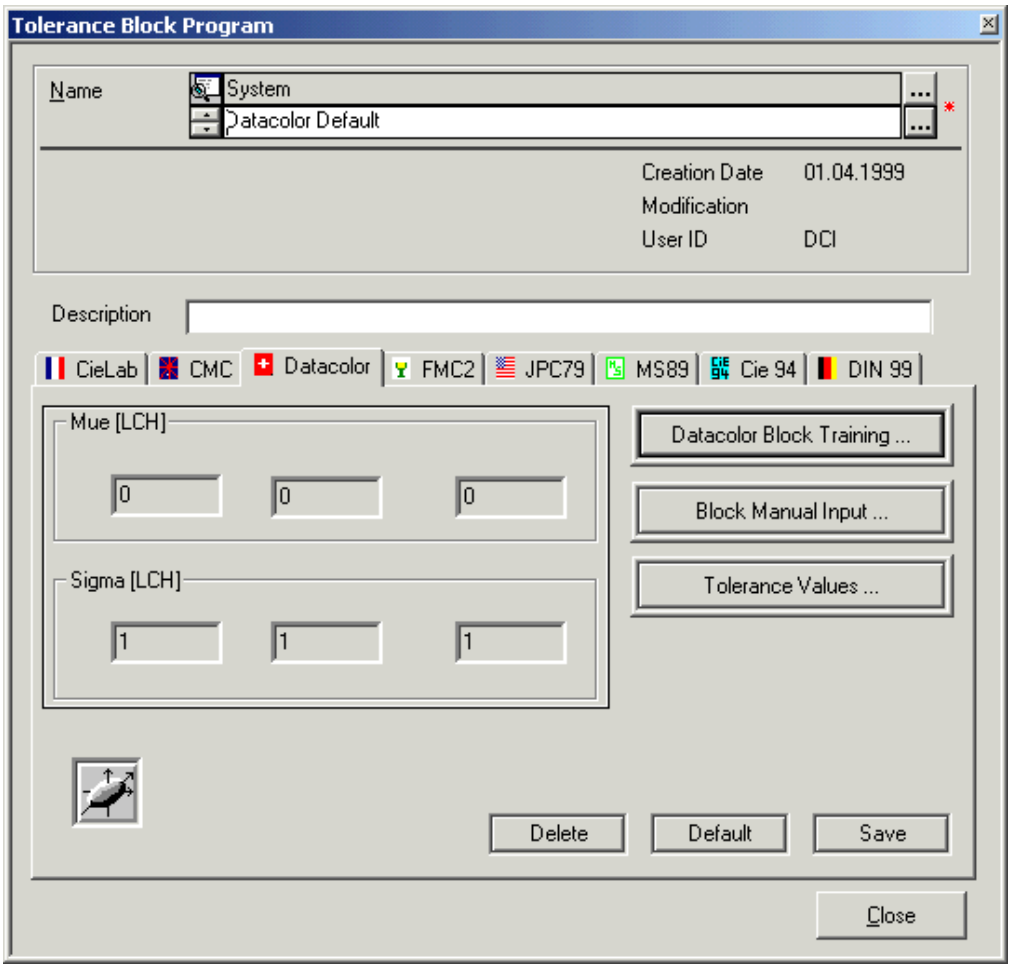


Parameters

Table — Input values for minimum and maximum tolerances.

Refer to *Specifying, Modifying or Deleting Tolerances on page 4-22*.

Datacolor Tab

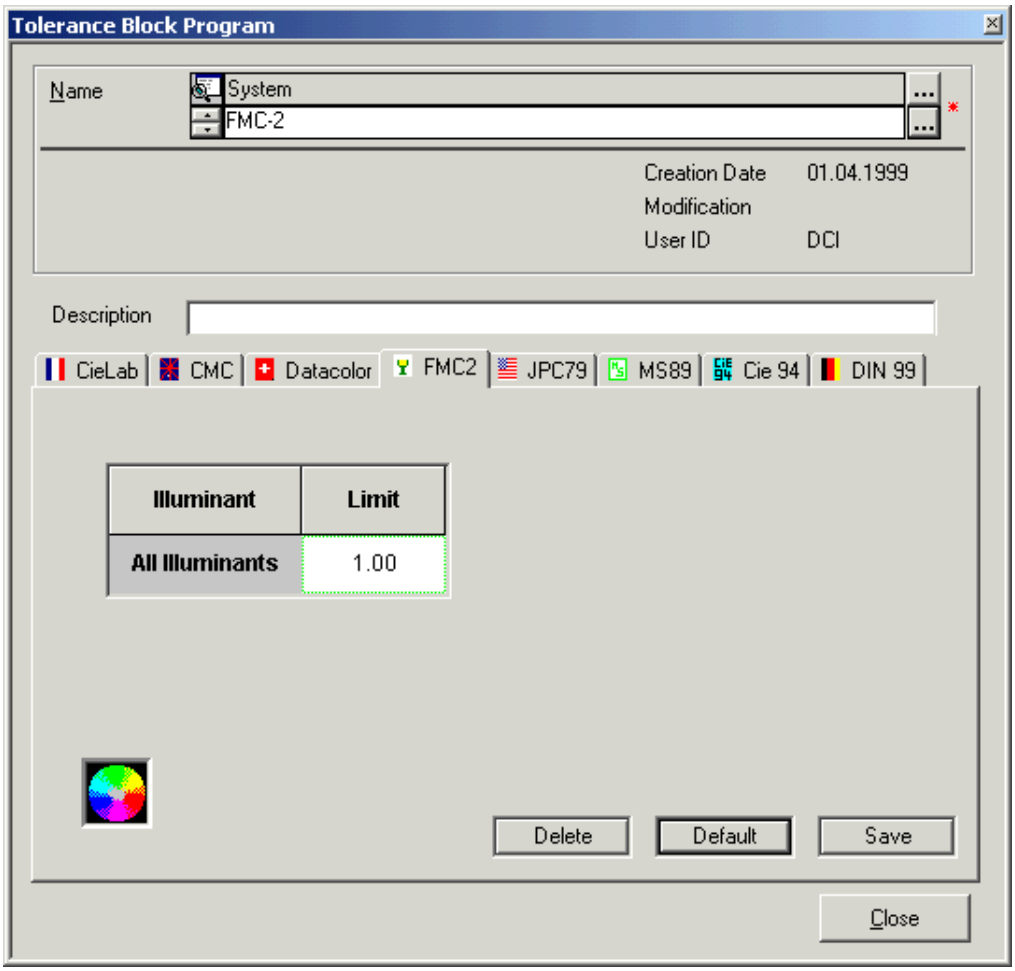


Parameters

Datacolor Block Training	Opens the “Datacolor Tolerance Block” dialog box.
Block Manual Input	Opens the “Manual Input of Tolerance Values” dialog box.
Tolerance Values	Opens the “Tolerance Values Output” dialog box used for information about tolerance values.

Refer to *Specifying, Modifying or Deleting Tolerances on page 4-22*.

FMC2 Tab

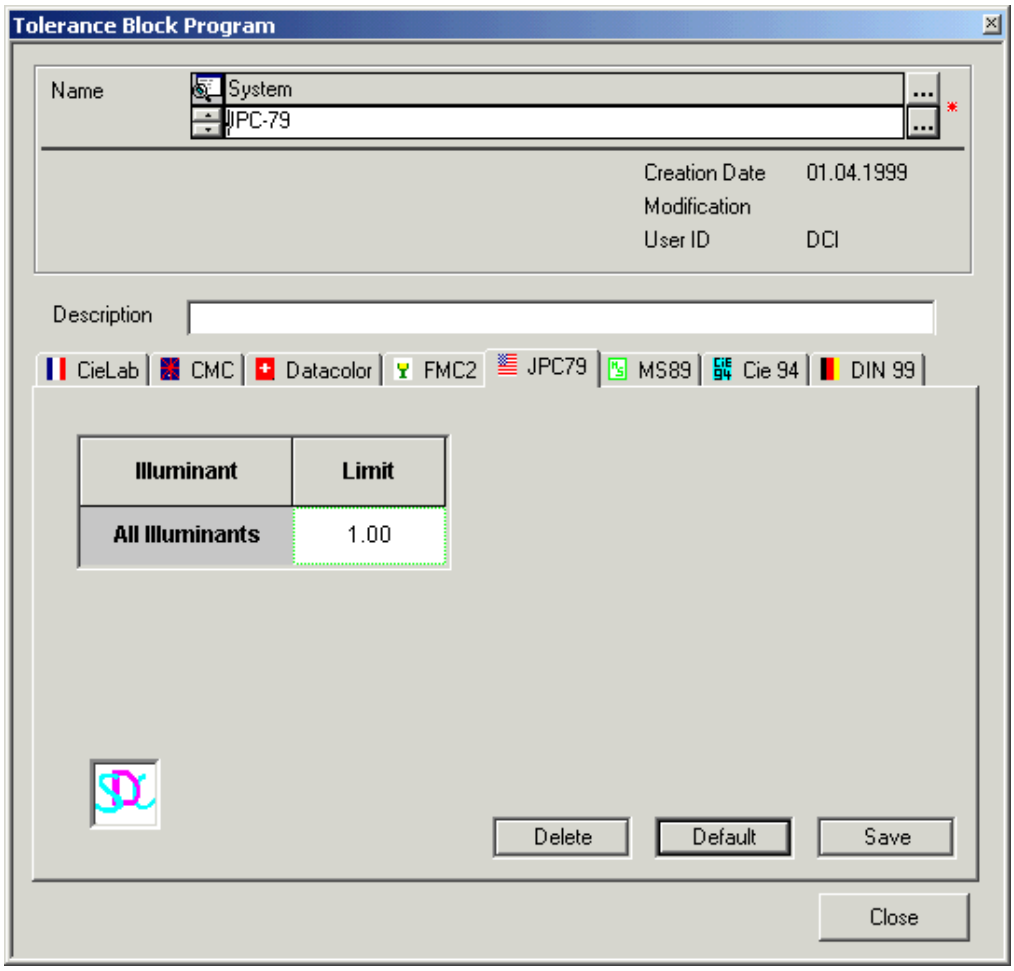


Parameters

Table Input for tolerance value.

Refer to *Specifying, Modifying or Deleting Tolerances on page 4-22*.

JPC79 Tab

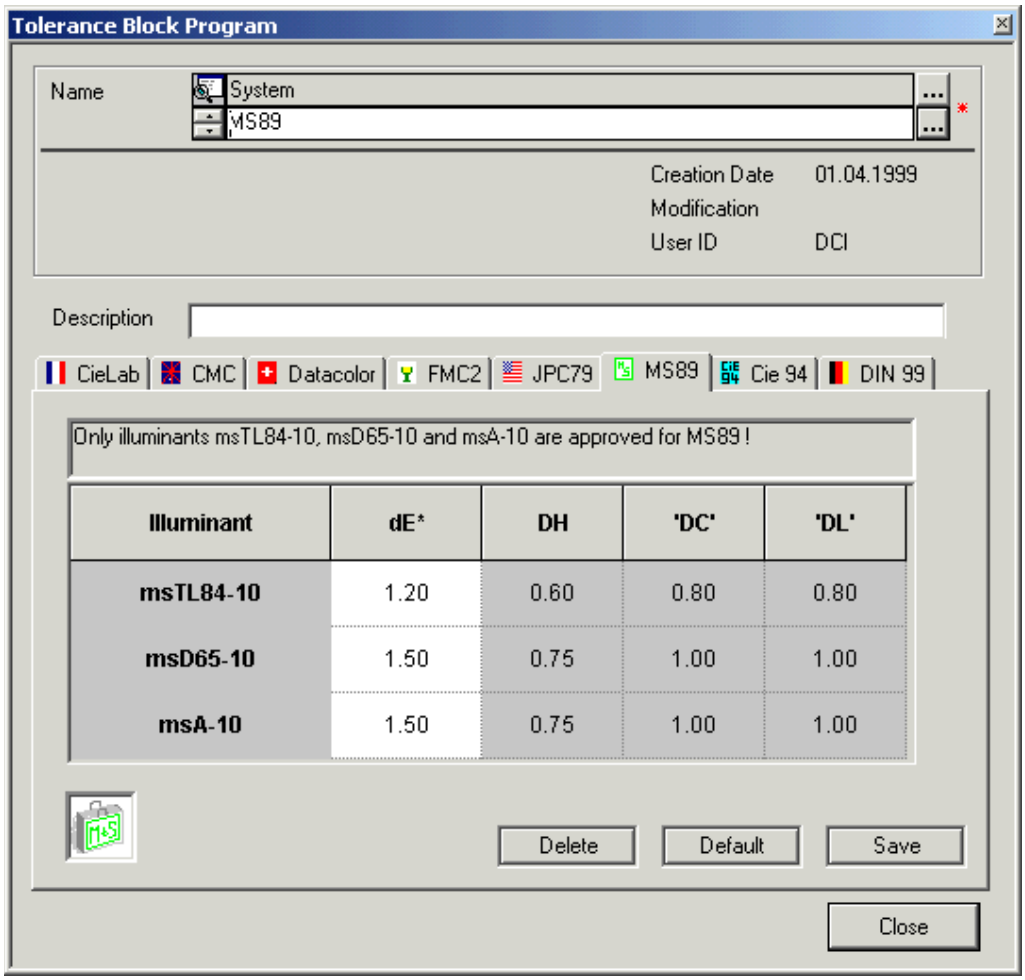


Parameters

Table — Input for tolerance value.

Refer to *Specifying, Modifying or Deleting Tolerances on page 4-22*.

MS89 Tab



Parameters

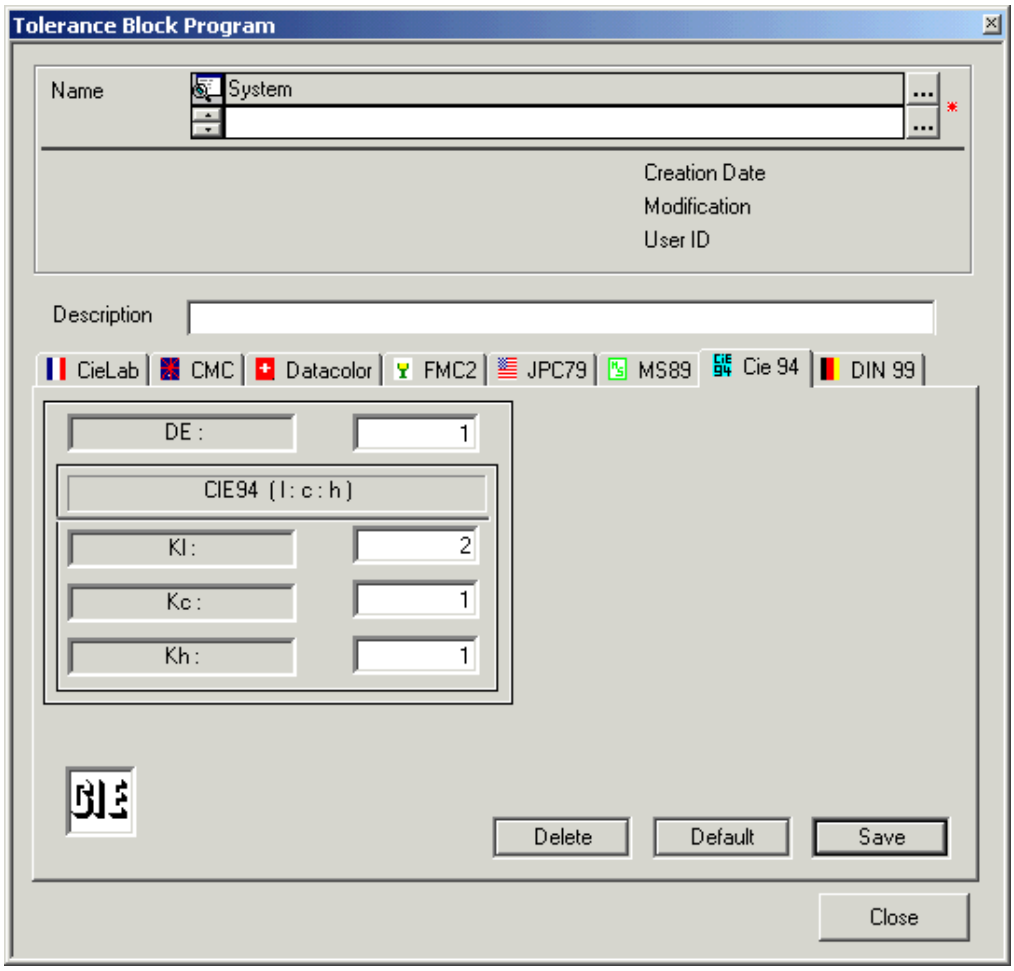
Table — Input of dE values. The other tolerance values are calculated.

Refer to *Specifying, Modifying or Deleting Tolerances on page 4-22*.

Note

The user can only modify the dE values. DH, DC and DL are calculated automatically. These values are displayed after saving the tolerance, and closing and opening the dialog box.

Cie 94 Tab

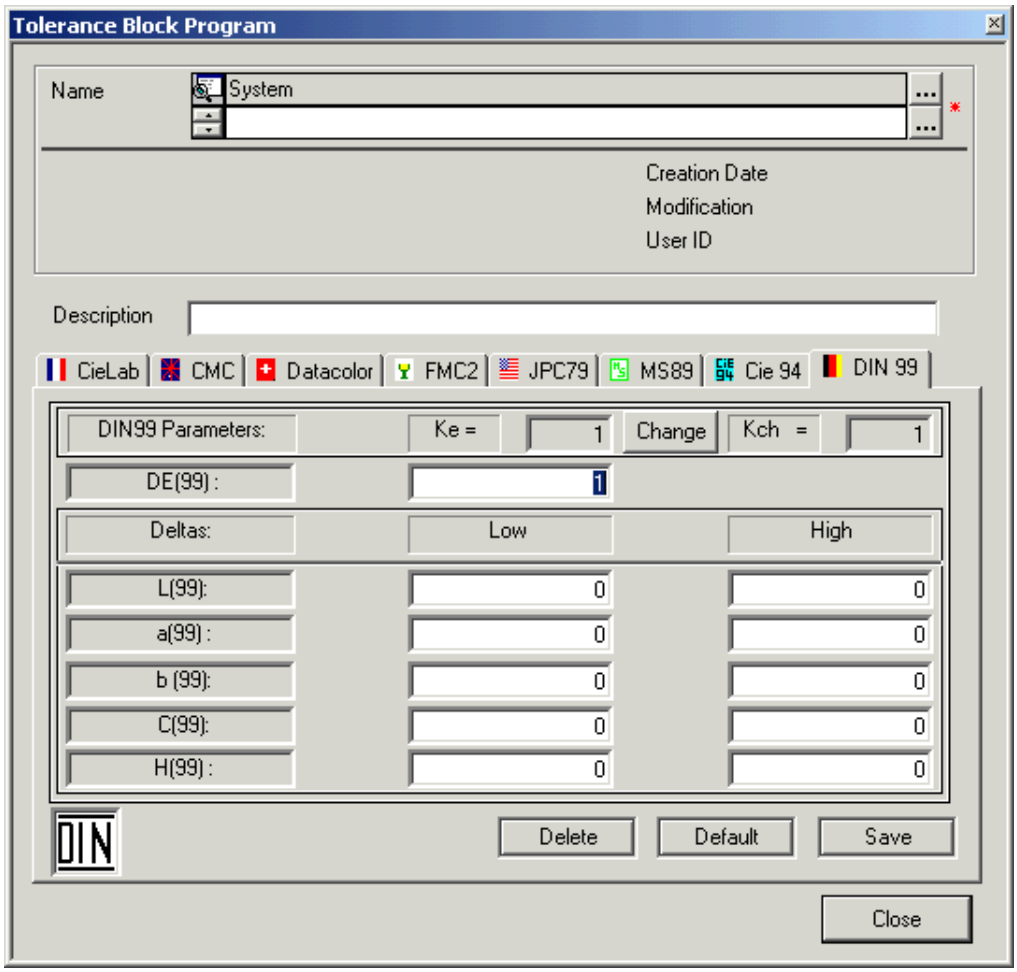


Parameters

Table — Input for tolerance values.

Refer to *Specifying, Modifying or Deleting Tolerances on page 4-22*.

DIN99 Tab

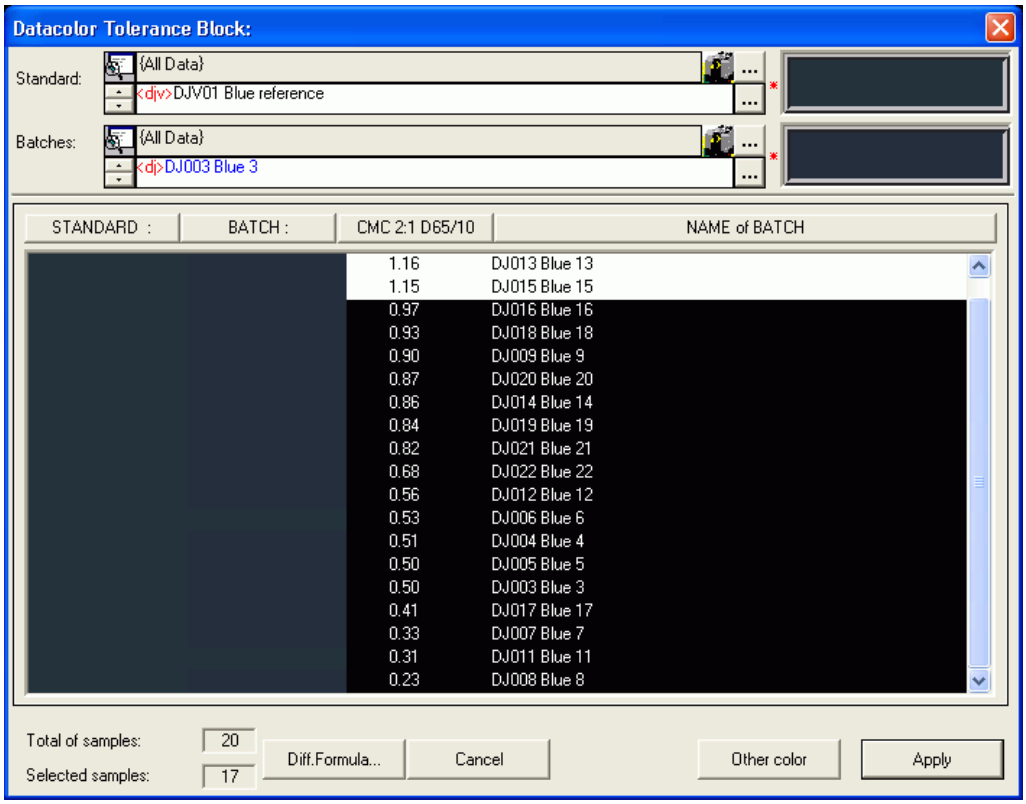


Parameters

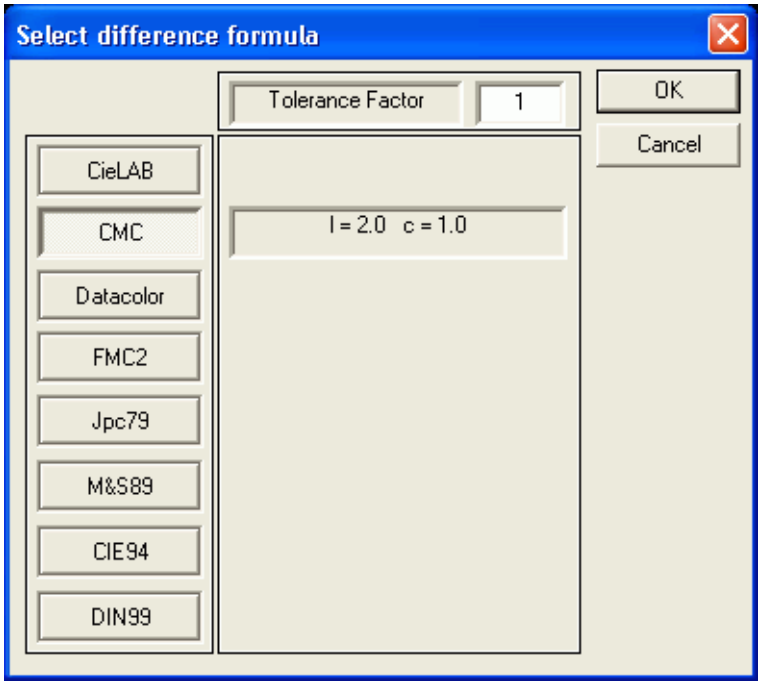
Table Input for tolerance values.

Refer to *Specifying, Modifying or Deleting Tolerances on page 4-22*.

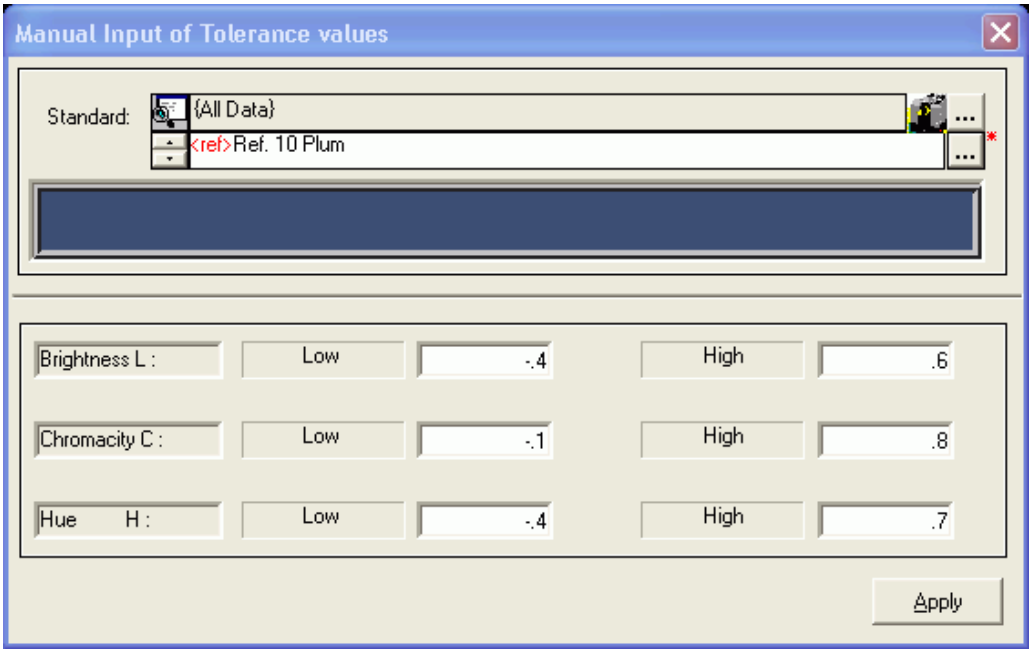
Datacolor Tolerance Block Dialog Box



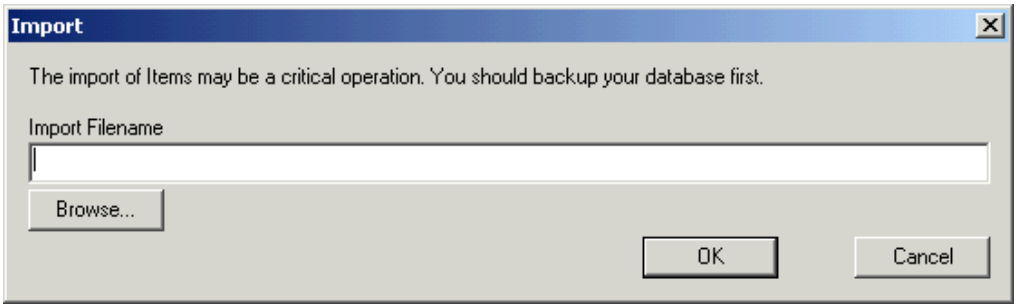
Standard	Selection or measurement of the standard.
Batch	Selection or measurement of the batch.
Diff. Formula (button)	Opens the „Select Difference Formula“ dialog box for the selection of the formula.



Manual Input of Tolerance Values Dialog Box



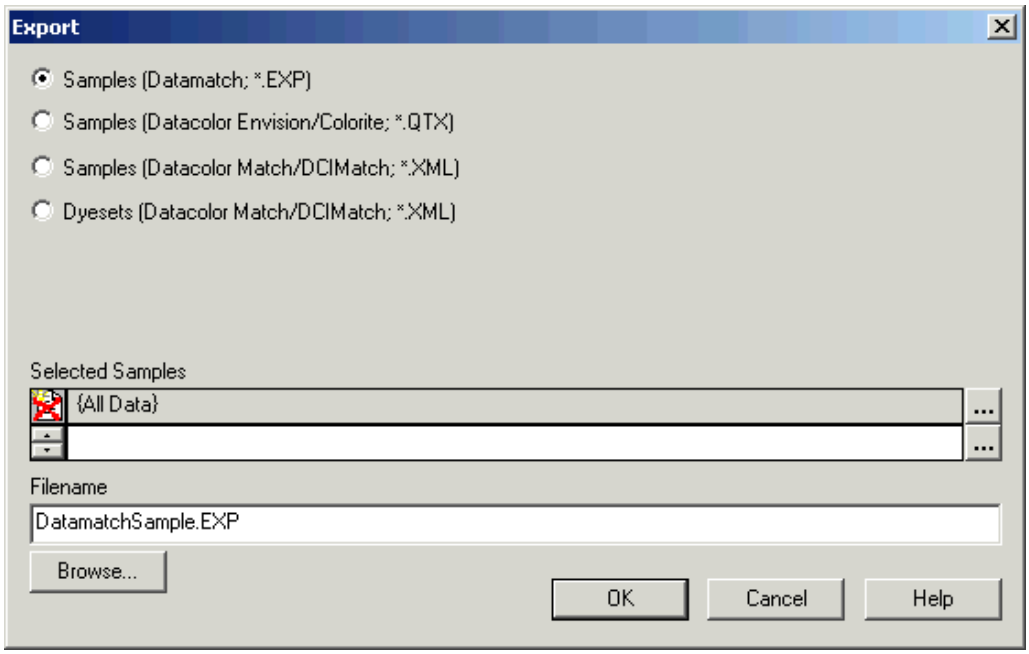
Import Dialog Box



Parameters

Import File Name	Path and name of the file to be imported. Use the „Browse" button for searching and selecting.
Browse (button)	Displays the Windows standard „Open" dialog box.

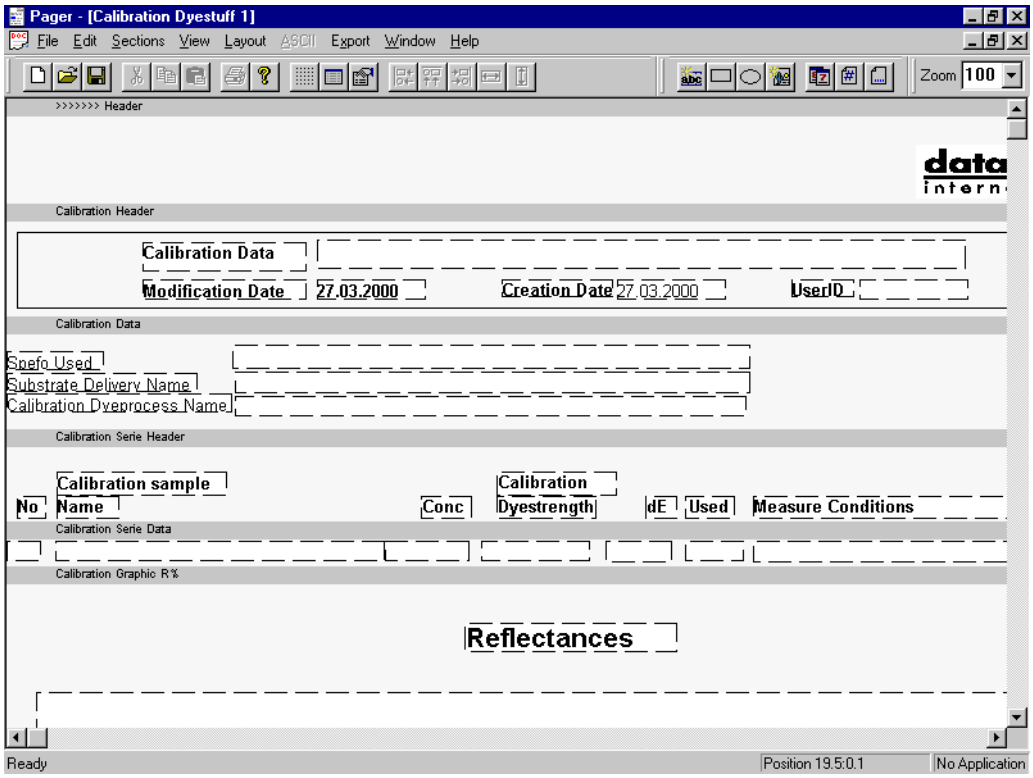
Export Dialog Box



Parameters

Radio buttons	Selection of the sample format.
Selected Samples	Selection of the color samples to be exported.
File Name	Path and name of the export file.
Browse (button)	Displays the Windows standard „Save as“ dialog box.

Pager Window



Page View Designer specific Menu Functions

„File“ menu

Import	Opens the “Open” dialog box used to import an exported print form.
Export	Opens the “Form Maintenance” dialog box used to select and export print forms.
Delete/Rename	Opens the “Form Maintenance” dialog box used for renaming and deleting print forms.
Page Setup	Opens the “Page Setup” dialog box used for specifying the left and the right margin.

„Edit“ menu

Remove all fields from current section
Removes the fields from the selected section.

Hide current section	Hides the selected section.

„Sections“ menu

List of the sections that are available for the current print form. Checked sections are currently used for the form.

„View“ menu

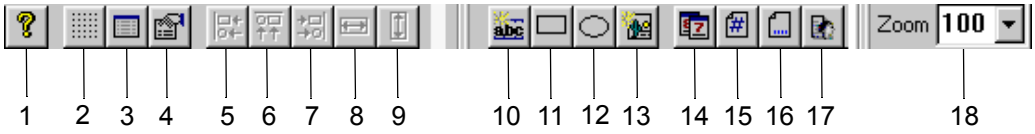
Toolbar	Switches the toolbar on (check mark) and off.
Status Bar	Switches the status bar on (check mark) and off.

Fields	Opens the “Fields” information box with the database fields used for the selected section.
Properties	Opens the “Properties” of the selected field.
Look	Opens the “Look” dialog box used for window settings.

„Layout“ menu

Help functions for a correct alignments of fields.

Page View Designer specific Toolbar Functions



1	About	Page View Designer version info.
2	Grid, Zoom, Ruler	Opens the “Look” dialog box used for window settings.
3	Toggle Fields	Opens the “Fields” information box with the database fields used for the selected section.
4	Toggle Properties	Opens the “Properties” of the selected field.
5	Left Alignment	Active if more than one field is selected.
6	Top Alignment	Active if more than one field is selected.
7	Right Alignment	Active if more than one field is selected.
8	Same Horizontal Size	Active if more than one field is selected.
9	Same Vertical Size	Active if more than one field is selected.
10	Text	Used to specify a text field.
11	Rectangle	Used to draw rectangles.
12	Ellipse	Used to draw ellipses.
13	Bitmap	Used to enter a picture, e.g., a logo. Supported formats: *.bmp, *.pcx, *.jpg.
14	Date/Time	Used to enter a field with date and time.
15	Page Number	Used to enter a page count field.
16	Form Name	Used to enter a field for the form name.
17	Login User	Used to insert the Name of the logged in user.
18	Zoom	Selection of predefined zoom values.

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