
Software Update Notification



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**Mastersizer 2000 version 5.21
English**

**Mastersizer 2000 version 5.12
French
Chinese
Japanese
German**

**Application Software for use with Microsoft Windows NT,
Windows 2000 Professional and
Windows XP Professional**

Mastersizer 2000

(Part Number PSS0002-15)

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1 Installation

This is Version 5.21 of the Mastersizer 2000 instrument application software. The software is tested and supported on the following Microsoft Operating Systems: Windows NT 4.0™ (service pack 6a and higher), Windows 2000™ Pro (service pack 4 and higher) and Windows XP™ Pro (service pack 1a and higher) and comes on one auto loading compact disc (CD).

1.1 Microsoft Internet Explorer

Mastersizer 2000 v5.21 software requires Microsoft Internet Explorer 4.1 or greater to be present in order for it to install. This software is included on a separate installation CD (PSS0018-01: Operating System Component Update Suite) for all the supported languages and is available from the Microsoft Internet site for download.

1.2 Microsoft Data Access Components (MDAC)

Mastersizer 2000 v5.12 [FGJC] software requires MDAC 2.5 or greater to be present in order for it to install. This software is included in Windows 2000 and Windows XP but may need to be installed on Windows NT 4.0. The installer will detect if it is required. This software is included on a separate installation CD (PSS0018-01: Operating System Component Update Suite) for all the supported languages and is available from the Microsoft Internet site for download.

2 Instrument compatibility

The Mastersizer 2000 v5.21 software is back compatible with all prior versions of Mastersizer 2000.

Note: In common with a large number of applications that undergo significant updating, Data files produced by earlier versions will be compatible with this release but data files produced by this release will not be legible by earlier versions. Where there is regular correspondence between systems, users are advised to ensure that all instruments are updated to the same level.

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3 Functional Features Released in v5.xx

3.1 Planned Additions and Headline Utilities.

3.1.1 21CFR11 Support

Mastersizer 2000 v5.xx software includes full support for customers who require the software to run within a 21CFR Part 11 compliant environment. This includes new features relating to software access control, measurement auditing and the setting up of SOPs. These features are enabled by use of a software feature key which is specific to each instrument. Please contact your local Malvern Representative if you wish to obtain a feature key in order to enable the software's 21CFR11 features on your system.

Full details of the 21CFR11 features available within the Mastersizer 2000 software can be found in the following documents included on the Mastersizer 2000 software CD-ROM:

- **21CFR Part 11 User Guide (MRK531-01)** – provides a full description of the software features associated with 21CFR11, including the software's security system.
- **Creation of Digital Signatures (MRK532-02)** – guide to the use of Adobe Acrobat as a solution to Digitally signing results.
- **21 CFR Part 11 Compliance Guide for MS2000 (MRK537-01)** – background information for users relating the functionality provided within the Mastersizer 2000 software to each of the requirements mentioned with 21CFR11

A brief overview of the 21CFR11 features is given below.

Security System

The security requirements of 21 CFR Part 11 are more stringent than previously required. In order to comply with these, the Assess Level security system previously provided within the Mastersizer software has been replaced with a new security system. This provides:

- Independent security system from the Windows NT™ security system, allowing multiple users to use the Spraytec system without the need to log in and out of Windows NT™.
- Fully configurable users and groups.
- Fully compliant with 21 CFR Part 11 requirements '11.200 Electronic signature components and controls' and '11.300 Controls for identification codes/passwords'
- Encrypted passwords.
- Encrypted security settings file.
- Log in and out of the application without shutting it down.
- Continuous use check.

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Audit Trails

Audit trail functionality is provided within the software so that an external auditor can review the process of record creation. This includes:

- Auditing of security events such as logging in and out of the system.
- Auditing of deletion of user accounts
- Auditing of measurement record creation, editing, and deletion.
- Auditing of SOP record creation, editing, and deletion.
- Auditing of creation of Acrobat PDF files from within a SOP
- Display of audit trail contents.
- File encrypted, preventing file editing.
- Decryption and export of audit trail file in ASCII format for review.

SOP Version Control

Version control is now provided for user-specified SOP files. Each time that a SOP is edited, details of the new settings are appended in the file and tagged as a new version. Details of all earlier original versions are retained. The software provides users with:

- A version history showing all versions of a SOP.
- Ability to display the difference between versions of a SOP.
- Automatic logging of persons making changes, what the changes entailed, and why they have been made.

SOP details, including version numbers, are automatically stored in the measurement record.

Electronic Signatures

Support for the electronic signing of records as been provided by integrating the Mastersizer 2000 software with Adobe Acrobat®. When the 21CFR11 feature key has been enabled and Acrobat® is install it is possible to create a PDF file automatically at the end of a SOP measurement. Users can then sign the document using the VeriSign® technology included in the Acrobat® software.

This solution of using Adobe Acrobat® to digitally sign electronic documents is available for any application that currently produces printed reports to manually sign. This solution is especially effective in a GxP environment because it is very similar in usage to existing paper based systems but provides the technology benefits of electronic storage and transfer of information.

3.2 Requested Additions and changes.

The following software additions and changes have been included in v5.21 (Issue 15) of this software:

Software Change Request Number	Description	Comments
3885	Automatic SOPs for the Hydro 2000 S/G no longer run	Fixed (Issue 15)
4059	If the 21 CFR key fails to validate features are not disabled.	Fixed (Issue 15)

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The following software additions and changes have been included in v5.20 (Issue 14) of this software:

Software Change Request Number	Description	Comments
1297	Allow blue light data to be removed from a result during edit result.	Implemented (Issue 14)
1590	Allow access to report view tabs during a measurement	Implemented (Issue 14)
2130	Locked out accounts should be indicated in security page	Implemented (Issue 14)
3746	The optical background has been placed immediately prior to sample addition in the Autosampler schedule to improve result sensitivity.	Implemented (Issue 14)
3848	The Autosampler control of the transfer valve has been modified to extend the life time of the Y-Piece.	Implemented (Issue 14)
3749	Autosampler does not switch off continuous sonication on Hydro S.	Fixed (Issue 14)
3759	Default dispersion settings not restored at end of autosampler schedule.	Fixed (Issue 14)
3785	QAS glass bead measurement SOPs updated to follow the latest OQ procedures.	Implemented (Issue 14)
3802	Support added for Scirocco 2000 with vibrating hopper. This functionality is specific to cement and other bulk material measurements.	Implemented (Issue 14)
3840	Autosampler average record sample name is replaced by "average". It needs to append SOP sample name.	Fixed (Issue 14)
3879	Add additives to autosampler pot before filling to give a better mix with sample	Implemented (Issue 14)
3885	Reduce sensitivity to transient error signals from the wet accessory. (Caused by electrical noise)	Implemented (Issue 14)
3914	Increased additive limit to pot. Dilute additives may require more significant volume.	Implemented (Issue 14)

Version v5.20 also includes the following changes that were implemented in software versions from v5.00 (Issue 8) to v5.13 (Issue 13):

Software Change Request Number	Description	Comments
482, 1400	Changes to the screen should be reflected in the printed report.	Implemented (Issue 13)
1124	During a measurement it should be possible to open other result files and view/print reports.	Implemented (Issue 13)
2228	Introduce a cleaning cycle for the Scirocco 2000 dispersion unit.	Implemented (Issue 13)
2300	Average result records should not be able to be recalculated, as they contain no data.	Fixed (Issue 13)
2301	Results imported from previous Mastersizer systems should not be able to be recalculated in the MS2000 software.	Fixed (Issue 13)
3540	The report page footer ignores the margin settings in the page layout, causing printer problems.	Fixed (Issue 13)

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Software Change Request Number	Description	Comments
2941, 2968	German text appears in French SOP	Fixed (Issue 12)
2963	French translation of open incorrect	Fixed (Issue 12)
2964	Dry tray is incorrect type in French SOP	Fixed (Issue 12)
2965	Air pressure units are incorrect in French	Fixed (Issue 12)
2967	Autosampler editor has text too large to fit screen in French	Fixed (Issue 12)
3065	The tray code can mismatch on localized software	Fixed (Issue 12)
3328	Non-Automation variable used in remote interface	Fixed (Issue 12)
3207	Make the autosampler script less sensitive to intermittent error signals from accessory	Implemented (Issue 12)
3277	Acrobat 6.0 support for 21 CFR Enabled Systems	Implemented (Issue 12)

Software Change Request Number	Description	Comments
2210	Start menu icon is in the wrong place	Fixed (PSW 0037-5.11)
2212	The Mastersizer S/X record fails to import within 8 hours of creating the S record	Fixed (PSW 0037-5.11)
2191	The Mastersizer S/X record import can fail if the comments field is too long	Fixed (PSW 0037-5.11)
2279	The Mastersizer S/X record import can fail if the date format is not understood by the Mastersizer 2000	Fixed (PSW 0037-5.11)
2188	If security is not enabled the user name can be reset to Unknown instead of the NT user name	Fixed (PSW 0037-5.11)
2233	If the additive name is not entered the SOP editor does not warn the user that the other additive settings will not be retained	Fixed (PSW 0037-5.11)
2529	The obscuration SOP values are now validated between 0-100	Implemented (PSW 0037-5.11)
2532	Enabling password expiration disables the force change password function	Fixed (PSW 0037-5.11)
2595	The default autosampler obscuration in the SOP editor was 0 which is outside the allowable range	Fixed (PSW 0037-5.11)
2622	In 21 CFR mode password expiration warns too soon	Fixed (PSW 0037-5.11)
2645	The edit SOP in the Quick Start was not controlled by the security system	Fixed (PSW 0037-5.11)
2950	The Hydro 2000 μ P incorrectly applied pre-measurement ultrasound before each measurement. It now only applies ultrasound before the first measurement in a series of measurements.	Fixed (PSW 0037-5.11)
3029	It is possible to specify in the registry that the security system should not show the name of the last user in the login window.	Implemented (PSW 0037-5.11)
3031	The time stamp format for the audit trail files was	Implemented

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Software Change Request Number	Description	Comments
	confusing for international systems. It has been modified to dd-MMM-yyyy TZ e.g. 11-Jun-2002 GMT	(PSW 0037-5.11)
3032	The locked out accounts in the security system now have a different icon to indicate their status.	Implemented (PSW 0037-5.11)

Software Change Request Number	Description	Comments
2229	The installer fails on Japanese systems	Fixed (Issue 11)

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Software Change Request Number	Description	Comments
2205	Version 3.2 of Mastersizer is missing from the	Fixed (issue 10)
2206	The QAS standard SOP for the ceramic and stainless Scirocco had transposed pressure settings	Fixed (issue 10)
2207	The installer fails to install Measurement.dat if upgrading a previous installation of 5.00	Fixed (issue 10)

Software Change Request Number	Description	Comments
2044	The creation of a new audit trail file should be logged in the current audit trail file.	Implemented (issue 9)
2055	The records used to create an average result should be recorded in the average data file notes.	Implemented (issue 9)
2070	The autosampler stirrer can still be left spinning when the head returns to the wash pot.	Fixed (issue 9)
2071	The prompt for a reason for record deletion should only occur when 21CFR11 mode has been enabled	Fixed (issue 9)
2095	The data fit table is blank for measurements taken using the red light source alone.	Fixed (issue 9)
2109	Editing a result clears the accessory details from the new result	Fixed (issue 9)
2112	User settings are not preserved with software version 5.0	Fixed (issue 9)
2126	The data in the audit trail files is not encrypted and can be viewed using an external text editor.	Fixed (issue 9)
2127	The security permissions on edit and delete results are confused.	Fixed (issue 9)
2151	It is possible for the size range to be set to zero, causing an error when running SOP-driven or manual measurements	Fixed (issue 9)

Software Change Request Number	Description	Comments
622	The clean sequence leaves the pump and stirrer speed high	Fixed (issue 8)
1140	Add an inactivity log-out feature	Implemented (issue 8)
1168	Add security control to the report designer and the calculation editor.	Implemented (issue 8)
1255	Add an audit trail for 21 CFR systems	Implemented (issue 8)
1531	Display the current user name on the main window	Implemented (issue 8)
1625	Add a 21 CFR icon to the status bar	Implemented (issue 8)
1777	Add ability to password-protect report files	Implemented (issue 8)
1835	If the QC calculation returns an unexpected value, the system crashes	Fixed (issue 8)

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Software Change Request Number	Description	Comments
1885	Batch number does not auto increment	Fixed (issue 8)
1961	Wet accessories manual control screen displayed faults using a green LED rather than a RED led.	Fixed (issue 8)
2002	The auto-start stabilisation delay period is not validated in the SOP editor.	Fixed (issue 8)

A full history of all the software changes included in Mastersizer 2000 software versions from v2.00 onwards is given in section 9.

3.3 Deletions

None.

4 Known Bugs

There are no known bugs at the time of this release. If you suspect that you have discovered a bug, you should report this to Malvern Instruments detailing all aspects of the symptoms.

5 Known Issues

5.1 File sizes

In order to increase program performance, measurement records are kept in memory. For customers with a large number of measurements in a single file, this will affect the system performance by consuming large amounts of available memory. The best practice is to keep the number of measurement records in a single file to less than 1000. It is recommended that new files should be created on a regular basis in order to keep the record count per file to less than 1000.

5.2 Installing an earlier version after un-installing v3.x. or above

To replace the Mastersizer 2000 application with another version, it is necessary to first uninstall the software using the command provided. When moving from version 3.x to version 2.00 or below, you must replace the Mastersizer 2000.ini file for the operation to succeed. Once the later software has been uninstalled, rename the **Mastersizer 2000.ini** file **Mastersizer 2000.in3**. Then install the earlier version. If this is not done, the old application will not run correctly.

5.3 Can not install version 4.00 or greater on Windows 95/98/Me

Version 4.00 and above of the Mastersizer 2000 application is only compatible with Windows NT™ - based systems (including Windows 2000™ Pro and Windows XP Pro).

For Windows 95™, 98™ and Millennium™, version 3.20 (which contains no Autosampler support) can be installed. Installing Mastersizer 2000 v3.2 which is available from the Malvern Instruments web site www.malverninstruments.com.

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5.4 New security system.

The new security system introduced in v5.00 is incompatible with the pre-existing 'Secure Layered Access' system. If v5.21 is installed on a system with v4.00 or below, the security settings will have to be reconfigured to add users and groups.

5.5 Autosampler - flashing accessory icons.

The new version of the instrument firmware (FIDACS (v1.03 or greater)) must be downloaded to any instrument where an autosampler is to be used. A full description of how to do this is included in the contents.txt file, stored in the root directory of the installation CD.

5.6 Localised number formats.

The software does not function correctly if the number format set in the localisation settings of the system has the comma character either as the decimal marker or as the separator for thousands. The remedy is to modify the number format to exclude this character. This can be done in the Regional Options of Control Panel.

6 Distribution Media

Version 5.20 software is contained on a single self-installing CD-ROM. The installation process has been fully automated by the industry standard software installer InstallShield™. Any fault during the installation process will be detected and the user will be notified.

The installation process has been tested on all the supported configurations of operating system.

7 Installing the Software

7.1 Installing Mastersizer 2000 application software

The software comes on an auto-loading CD-ROM. Inserting the disc into a system configured to Auto-run a CD will run the installation program automatically. If your system does not support this feature, run the **lsetup.exe** program from the root directory of your CD drive.

Note: For Windows NT, the software will not allow an installation if the user does not have administrator access. This is in line with Microsoft's Logo policy and is standard practice.

Note: To make use of the new wash cycle, the firmware of the Hydro 2000G needs to be updated to the latest issue. The firmware of the Hydro 2000µP needs to be updated to the latest issue for additional diagnostics and some improvements to the Ultrasound control to be available.

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8 What new features are present and how do I use them?

8.1 Overview

A quick scan of section 3 above will show that a number of new features have been introduced to version v5.2x of the software for your Mastersizer 2000. Those features relating to 21CFR11 and the software security system are described in separate reference documents included on the software installation CD-ROM. Detailed descriptions of the additional functions included in this release are provided below.

Any feedback should be reported to Malvern Instruments via email to helpdesk@malvern.co.uk or by telephoning the Helpdesk directly on +44 (0)1684-891800 Please have all necessary details to hand before telephoning.

8.2 Importing results from older instruments.

It is now possible to import records created on Mastersizer S, Mastersizer X, Mastersizer Micro and Mastersizer Microplus version 2.15 software and later. This provides an ongoing means of viewing records without the need to retain the original instrument. This function has been available since v5.12.

Result source	Software version	d (0.1)	d (0.5)	d (0.9)	Measured on
Old Mastersizer result	2.15	1.350	4.125	10.168	Monday, December 08, 1997 9:53:17 AM
Old Mastersizer result	2.15	1.359	4.156	10.199	Monday, December 08, 1997 9:53:25 AM
Old Mastersizer result	2.15	1.350	4.123	10.119	Monday, December 08, 1997 9:53:32 AM
Old Mastersizer result	2.15	1.360	4.151	10.200	Monday, December 08, 1997 9:53:40 AM
Old Mastersizer result	2.15	1.350	4.131	10.160	Monday, December 08, 1997 9:53:47 AM
Old Mastersizer result	2.15	1.330	4.028	9.803	Monday, December 08, 1997 9:56:42 AM
Old Mastersizer result	2.15	1.338	4.045	9.808	Monday, December 08, 1997 9:56:49 AM
Old Mastersizer result	2.15	1.338	4.052	9.850	Monday, December 08, 1997 9:56:57 AM
Old Mastersizer result	2.15	1.336	4.042	9.813	Monday, December 08, 1997 9:57:04 AM
Old Mastersizer result	2.15	1.336	4.049	9.820	Monday, December 08, 1997 9:57:12 AM

Figure 1: Import results

8.3 Cleaning Cycle for the Scirocco 2000 Dispersion Unit

The SOP control settings for the Scirocco 2000 supplied in previous software versions assumed that the entire sample placed on the sample tray was measured during the specified measurement time. This assumption was based on the requirements within ISO13320-1:1999 (the international standard for laser diffraction measurements). This states that the entire sample loaded into the dispersion unit must be measured during a dry measurement. However, it is often the case that excess sample remains on the tray that must be removed manually. A new cleaning option has therefore been implemented to allow this excess sample to be fed through the system into the vacuum cleaner.

The cleaning cycle for the Scirocco 2000 is configured using the measurement options shown in figure 12.

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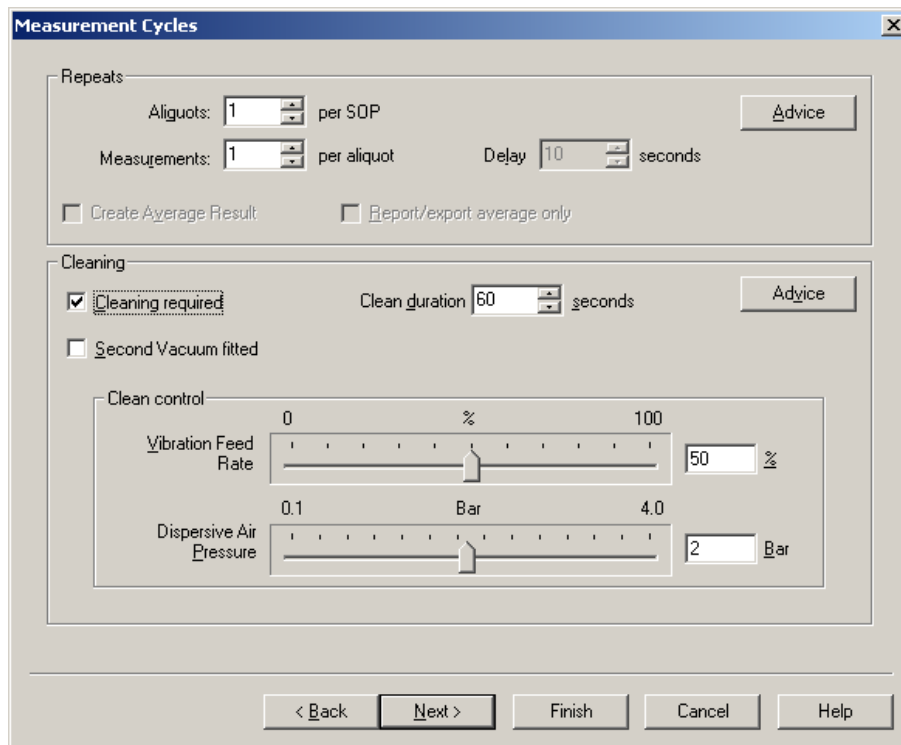


Figure 2 - Scirocco 2000 Cleaning Options.

The cleaning cycle becomes active when the “**Cleaning required**” check box is enabled. Users must then set:

- The **Clean Duration**. This is the time beyond the measurement period during which the vibrating tray, compressed air supply and vacuum cleaner are left running in order to clear the sample from the tray.
- The **Vibration Feed Rate** that should be used during the clean cycle.
- The **Dispersive Air Pressure** required to convey the sample through the cell during cleaning.

In addition, users can specify whether a second vacuum cleaner has been installed to remove the excess sample directly from the sample tray during cleaning. This is common in automated lab installations. If the “Second Vacuum fitted” check box is enabled the second vacuum will be switched on during the clean cycle. This functionality was initially released in software version v5.13.

8.4 Changes to Screen and Printed Report Formats

In the past the Mastersizer 2000 software was configured such that the printed report format could be different to the screen view. This allowed users to include several parameters on printed reports without causing the screen view to become cluttered. However, it is often the case that users require changes made to the graphs and tables within the screen view to be reflected in any printed reports. In version v5.2x the print function has been modified to allow this to occur. This functionality was initially released in software version v5.13.

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8.5 Editing Results

In previous versions of the Mastersizer 2000 software it was not possible to reanalyse results with the blue light data removed if the measurements were acquired with the blue light enabled. Users were therefore required to decide at the point of measurement if the blue light data should be included.

In v5.2x a new feature has been added to the result editor function to allow the blue light data to be ignored when reanalysing results. This is provided as an aid for method development. This function is available within the Advanced Result Calculation dialogue box (figure 3), which is access from within the result calculation section of the result editor. When the **“Remove blue light from analysis”** check box is enabled the analysis will carry out a size calculation based on the red light data alone.

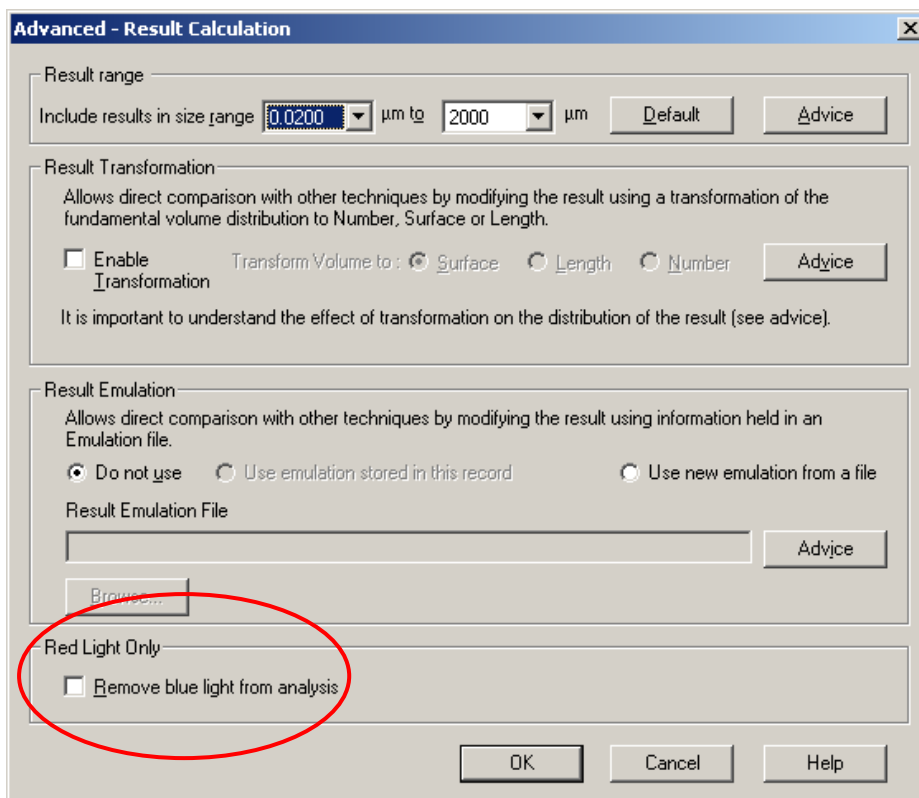


Figure 3 – Remove blue light advanced analysis option.

8.6 Viewing Locked-out accounts in 21CFR11 Mode

In previous versions of the Mastersizer software it was not possible for administrators to easily identify when user accounts had been disabled or locked out due to possible fraudulent activity. The Security Configuration display has therefore been updated in v5.2x such that locked-out users are identified with a padlock icon whereas disabled users are shown with a red cross (Figure 4).

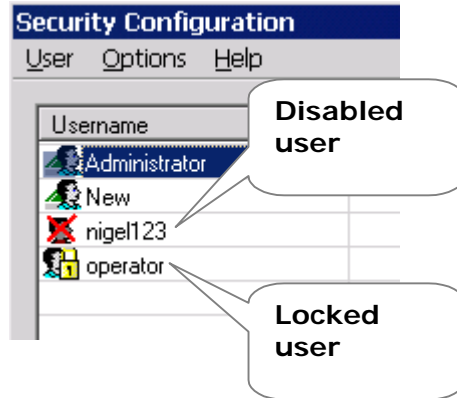


Figure 4 – Security configuration view for disabled and locked-out user accounts.

8.7 Support for new Scirocco 2000 variant

Support for a new hopper-fed Scirocco 2000 dry powder feeder has been provided within v5.20 of the Mastersizer 2000 software. This dry powder feeder variant has been specifically designed for the measurement of bulk materials (e.g. cement) and can be used in automated cement laboratories. The SOP system now contains a new listing for the Scirocco hopper system within the sampler selection dialogue (figure 5). The feed rate used for the hopper system can also be set within an SOP (figure 6).

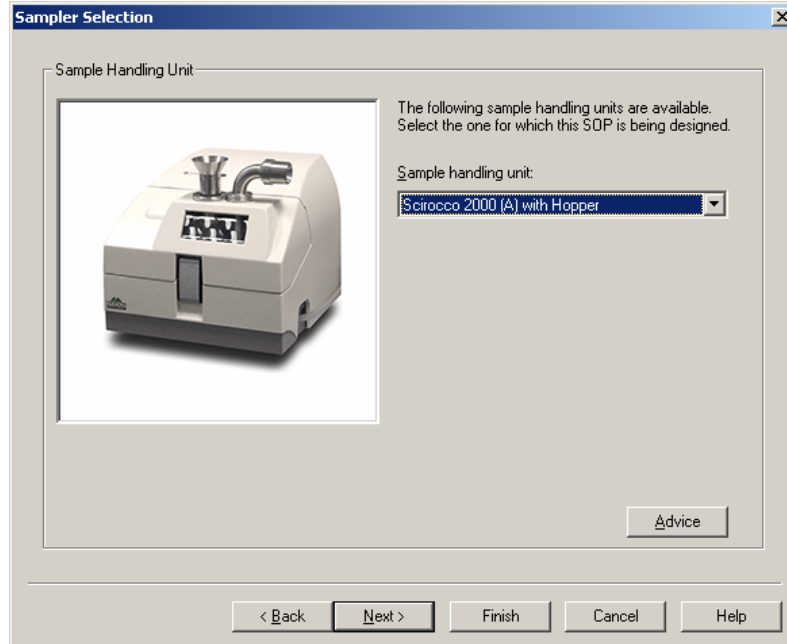


Figure 5 – Scirocco 2000 hopper system selection within the Mastersizer 2000 SOP editor.

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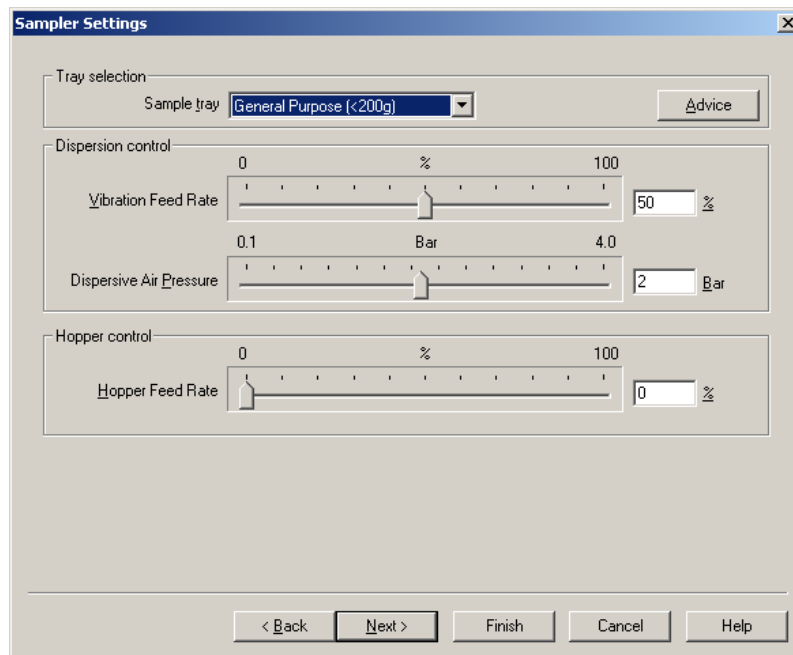


Figure 6 – Sample settings for the hopper-fed Scirocco variant including the hopper feed rate control.

9 Software Update History

The following section provides a brief description of the software changes implemented in all Mastersizer 2000 software versions starting from version 2.00. Details for the current release are given in sections 1 to 3 of this document.

9.1 PSS0002/15 Mastersizer 2000 v5.21

General

- General Release.
- This software will only run on Windows NT 4.0, Windows 2000 Pro, and Windows XP Pro.
- This software requires Microsoft Internet Explorer 4.1 or later to be installed before it will install.
- The French, German, Japanese, and Chinese versions require MDAC 2.5 to be installed.

New Features

- none.

Bug Fixes

- Automatic measurements on the Hydro 2000 S and Hydro 2000 G would no longer work.

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9.2 PSS0002/14 Mastersizer 2000 v5.20

General

- General Release.
- This software will only run on Windows NT 4.0, Windows 2000 Pro, and Windows XP Pro.
- This software requires Microsoft Internet Explorer 4.1 or later to be installed before it will install.
- The French, German, Japanese, and Chinese versions require MDAC 2.5 to be installed.

New Features

- Support for Scirocco 2000 with hopper feeder.
- Improvements to Autosampler schedule.

Bug Fixes

- Ultrasound could be left on when using Autosampler with Hydro 2000 S.
- The accessory control settings were not restored at the end of an Autosampler schedule.

9.3 PSS0002/13 Mastersizer 2000 v5.13

General

- General Release.
- This software will only run on Windows NT 4.0, Windows 2000 Pro, and Windows XP Pro.
- This software requires Microsoft Internet Explorer 4.1 or later to be installed before it will install.
- The French, German, Japanese, and Chinese versions require MDAC 2.5 to be installed.

New Features

- Support for a clean on the Scirroco 2000 accessory.
- Matching of screen and printed report settings.

Bug Fixes

- Recalculation prohibited on averaged and imported results.
- Report footer uses margin settings for placement.

9.4 PSS0002/12 Mastersizer 2000 v5.12

General

- General Release.
- This software will only run on Windows NT 4.0, Windows 2000 Pro, and Windows XP Pro.
- This software requires Microsoft Internet Explorer 4.1 or later to be installed before it will install.
- The French, German, Japanese, and Chinese versions require MDAC 2.5 to be installed.

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New Features

- Support for Adobe Acrobat version 6.0 in 21 CFR Enabled Systems.
- Localized versions of Mastersizer 2000 v5.12

Bug Fixes

- Obscuration limits below 1.0 were not supported.
- Translation errors on French version.

9.5 PSS0002/11 Mastersizer 2000 v5.10

General

- General Release.
- This software will only run on Windows NT 4.0, Windows 2000 Pro, and Windows XP Pro.
- This software requires Microsoft Internet Explorer 4.1 or later to be installed before it will install.

New Features

- None.

Bug Fixes

- The software installation failed on Japanese and Chinese systems.

9.6 PSS0002/10 Mastersizer 2000 v5.10

General

- General Release.
- This software will only run on Windows NT 4.0, Windows 2000 Pro, and Windows XP Pro.
- This software requires Microsoft Internet Explorer 4.1 or later to be installed before it will install.

New Features

- none.

Bug Fixes

- The Windows 95/98/Me compatible version of Mastersizer 2000 was missing off the previous.
- The QAS SOP settings for the Ceramic and Stainless Scirocco were transposed.
- The installer did not correctly upgrade 5.00 installations resulting in report designer not working correctly. All other areas of the system operated without error.

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9.7 PSS0002/09 Mastersizer 2000 v5.10

General

- General Release.
- This software will only run on Windows NT 4.0, Windows 2000 Pro, and Windows XP Pro.
- This software requires Microsoft Internet Explorer 4.1 or later to be installed before it will install.

New Features

- Improved installation program.
- An additional parameter lists the records that make up an average result.

Bug Fixes

- The Autosampler stirrer can be left spinning when the head moves to the clean pot.
- The prompt for reason to delete now only appears if 21 CFR Part 11 features are enabled.
- The user settings are now preserved. Logging in sets the files and record view settings to the users preferences.
- Editing a result no longer clears the accessory information from the edited record.
- The audit trail data is now encrypted.
- The fit table would appear blank if a red light only measurement was made.
- The date formatting used the system locale and not the users locale. This caused problems on systems with non-Gregorian calendars.
- If editing was allowed by the security settings then delete was also enabled even if prohibited by the security permissions.

9.8 PSS0002/08 Mastersizer 2000 v5.00

General

- General Release.
- This software will only run on Windows NT 4.0, Windows 2000 Pro, and Windows XP Pro.
- This software requires Microsoft Data Access Components (MDAC) 2.7 to be installed before it will install. This software is included on the distribution CD-ROM.
- MDAC requires Microsoft Internet Explorer 4.1 or later to be installed before it will install.

New Features

- Full support for 21 CFR Part 11 when the additional 'Feature Key' software is installed.
- New comprehensive security system.
- The Hydro 2000 clean resets the pump/stirrer speed to the previous set point.

Software Update Notification



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- Report pages can be password protected.
- Import of Mastersizer S/X/μ/μ+ records.

Bug Fixes

- Failure of the Blue light during measurement crashed the software.
- Pressing STOP during the measurement in version 3.2 does not work correctly.
- The wrong accessory name and type is stored in the measurement record.
- Batch number auto increment did not work correctly.

9.9 PSS0002/07 Mastersizer 2000 v4.00

General

- International Release.
- This software will only run on Windows NT 4.0, Windows 2000 Pro, and Windows XP Pro.
- This software requires Microsoft Data Access Components (MDAC) 2.5 to be installed before it will install. This software is included on the distribution CD-ROM.
- MDAC requires Microsoft Internet Explorer 4.1 or later to be installed before it will install.

New Features

- None.

Bug Fixes

- The file name for the Hydro 2000μP accessory firmware caused the install to crash on Japanese and Chinese systems. The file was renamed to not use the μ character.

9.10 PSS0002/06 Mastersizer 2000 v4.00

General

- General Release.
- This software will only run on Windows NT 4.0, Windows 2000 Pro, and Windows XP Pro.
- This software requires Microsoft Data Access Components (MDAC) 2.5 to be installed before it will install. This software is included on the distribution CD-ROM.
- MDAC requires Microsoft Internet Explorer 4.1 or later to be installed before it will install.

New Features

- Support for the Autosampler accessory has been added.
- Support for "Remote Control" using Double Agent software has been added to the Scirocco and Hydro 2000 S/G accessories.

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- QAS SOP files added to the CD-ROM.

Bug Fixes

- The reason for change dialogue does not force the user to enter a reason.
- The quick start dialogue is not displayed when the application is run.

9.11 PSS0002/05 Mastersizer 2000 v3.20

General

- General Release.
- This software is the last version to support Windows 95/98/Me.

New Features

- Limited support for 21 CFR Part 11. Full support planned for version 5.00.
- Improvements to the Hydro 2000 μ P manual control dialogue.
- Reduced clean cycle introduced for the Hydro 2000 G.

Bug Fixes

- The date was not correctly formatted to the localised settings.
- The ultrasound on the Hydro 2000 μ P did not time out if the manual control dialogue is displayed.
- The customer calculations always used the first result in the measurement file rather than the current result.
- Requested reports were not printed when a result is edited.
- The 21 CFR enabled software can only be run by users with Administrator rights.

9.12 PSS0002/04 Mastersizer 2000 v3.01

General

- General Release.

New Features

- Added translations of Mastersizer 2000 v2.00 to CD-ROM.

Bug Fixes

- None.

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9.13 PSS0002/03 Mastersizer 2000 v3.01

General

- General Release.

New Features

- None.

Bug Fixes

- Date format was fixed in American MM/DD/YY format. Corrected to pick up localised setting.

9.14 PSS0002/02 Mastersizer 2000 v3.01

General

- General Release.

New Features

- Hydro 2000 μ P ease of use features.
- Removed yellow as a first choice colour from graphs.

Bug Fixes

- Export of calibration data adds to many commas in header record.
- Customer calculations did not use the correct measurement data when calculating the result.
- Red light only setting not preserved between manual measurements.

9.15 PSS0002/01 Mastersizer 2000 v3.00

General

- Only released to customers with the Hydro 2000 μ P accessory.

New Features

- Added support for the Hydro 2000 μ P.
- The measurement display update rate was reduced to 10 times a second. This makes the display more stable on faster computers.
- User defined calculations in both the measurement and the report pages.
- Limited recovery tool for corrupted result files.
- A reduced sensitivity analysis mode was added.

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- Support for red only measurement for blue light absorbing pigments.

Bug Fixes

- The level sensor sensitivity check was removed for those accessories without a level sensor.
- The passwords were displayed in plain text in the secured layers access screen.
- Showing the data graph with no data caused an exception.