



SpeedExtractor Record 1.3

Operation Manual



Imprint

Product Identification:
Operation Manual (Original), SpeedExtractor Record 1.3

093266 en

Publication date:
12.2015, Version D

BÜCHI Labortechnik AG
Meierseggstrasse 40
Postfach
CH-9230 Flawil 1

E-Mail: quality@buchi.com

BUCHI reserves the right to make changes to the manual as deemed necessary in the light of experience; especially in respect to structure, illustrations and technical detail.

This manual is copyright. Information from it may not be reproduced, distributed, or used for competitive purposes, nor made available to third parties. The manufacture of any component with the aid of this manual without prior written agreement is also prohibited.

Table of contents

About this manual and general information	5
About this manual	5
Reference documents	5
Trademarks	5
Abbreviations	5
Safety	6
Warning notices and messages used in this manual	6
Software-related hazards	6
Technical data.	7
Minimum system requirements	7
Program limitations	7
Product feature list	7
Description of function	8
Program window	8
Program structure overview	10
Method handling	11
Status	11
Reporting	11
Visualization	11
Report handling	11
Logbook.	11
Configuration	12
Putting into operation	13
Step 1: Installing the program	13
Step 2: Connecting a SpeedExtractor	13
Step 3: Starting the program	13
Operation	14
Initial program view	14
Method handling	14
'Method handling' view in detail	15
Status	17
Reporting	18
Visualization	18
Report handling	19
Extraction report.	22
Logbook.	27
Configuration	28

Workflow	29
Software startup conditions	29
While recording	30
After recording.	30
Creating a report	30
Further report processing	32
Method handling	32
Method backup	33
Troubleshooting.	35
FAQ	35

Read this manual carefully before installing and running the software and note the safety precautions in section 2 in particular. Store the manual in the immediate vicinity of the instrument, so that it can be consulted at any time.

No technical modifications may be made to the software without the prior written agreement of BUCHI. Unauthorized modifications may affect the system safety or result in accidents.

This manual is copyright. Information from it may not be reproduced, distributed, or used for competitive purposes, nor made available to third parties. The manufacture of any component with the aid of this manual without prior written agreement is also prohibited.

1 About this manual and general information

1.1 About this manual

This manual is part of the product. It describes the SpeedExtractor Record software 1.3 and provides all information required for its use.

It is addressed to laboratory personnel and operators in particular.

- Read the operating instructions before use.
- Observe all the safety instructions.
- Keep the operating instructions during the product lifetime.
- Pass the operating instructions to every subsequent owner or user of the product.

1.2 Reference documents

For information about the SpeedExtractor E-914 / E-916, please refer to the corresponding manual.

Table of available language versions with their respective ordering numbers:

Language	Ordering number
English	93218
German	93219
French	93220
Italian	93221
Spanish	93222

1.3 Trademarks

The following product names and any registered and unregistered trademarks mentioned in this manual are used for identification purposes only and remain the exclusive property of their respective owners:

- SpeedExtractor™ is a trademark of BÜCHI Labortechnik AG
- Windows® is a registered trademark of Microsoft Corporation

1.4 Abbreviations

PC: Personal Computer

CD: Compact Disk

.csv: Comma-Separated Values (standard data-exchange format)

.pdf: Portable Document Format (software and hardware independent file format)

.xml: Extensible Markup Language

FAQ: Frequently Asked Questions

2 Safety

This section highlights the safety concept of the SpeedExtractor Record software and contains general rules of behavior and warnings from hazards concerning the use of the product.

The safety of users and personnel can only be ensured if these safety instructions and the safety related warnings in the individual sections are strictly observed and followed. Therefore, the manual must always be available to all persons performing the tasks described herein.

For further safety information and instruction about the SpeedExtractor, see section 1.2, Reference documents for related documentation.

2.1 Warning notices and messages used in this manual



ATTENTION

With the general „read this“ symbol, ATTENTION indicates the possibility of software damage, malfunctions or incorrect process results, if instructions are not followed.

NOTE

Useful tips for optimal use of the software.

2.2 Software-related hazards



ATTENTION

When the SpeedExtractor Record software is installed, the computer standby mode must be deactivated within the power options to avoid loss of data during the use of the program.

3 Technical data

3.1 Minimum system requirements

Operating System	Requirements
Windows 7 Professional/Enterprise/Ultimate, (32-bit/64-bit, SP1)	Intel Core i3 or higher and 1.4 GHz or faster
Windows 8.1 Pro/Enterprise, (64-bit)	>5 GB of free hard disk space
Windows 10 Pro/Enterprise, (64-bit)	2 GB RAM
	CD- or DVD-ROM drive
	USB 1.1 or higher
	Recommended display resolution: 1280×1024
	Minimum display resolution: 1024×768

3.2 Program limitations

The SpeedExtractor Record software is a recording, method handling and report generating program only. Thus, performing remote actions at the SpeedExtractor itself are not possible.

Due to software limitations, the program can only be used in configuration of a single SpeedExtractor connected to a PC.

- Linking one PC to several SpeedExtractors will not be possible.
- Do not connect another SpeedExtractor to the PC, while the application is still running.

3.3 Product feature list

The SpeedExtractor Record software provides the following features:

- Managing and storage of methods
- 'Status' view to visualize system, leak test and extraction status
- Graphical visualization of parameter chart
- Process reporting
- Electronical logbook for reporting the number of extractions and performed leak tests
- Automatic SpeedExtractor firmware update

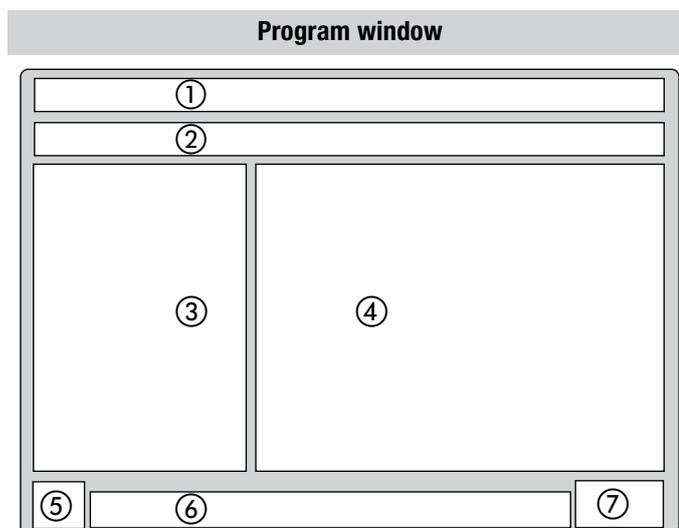
4 Description of function

This section will introduce all basic functions provided by the software and its structure.

4.1 Program window

The concept drawing below displays the segmentation of the program window and the general icons. The icon status depends on the actual program view:

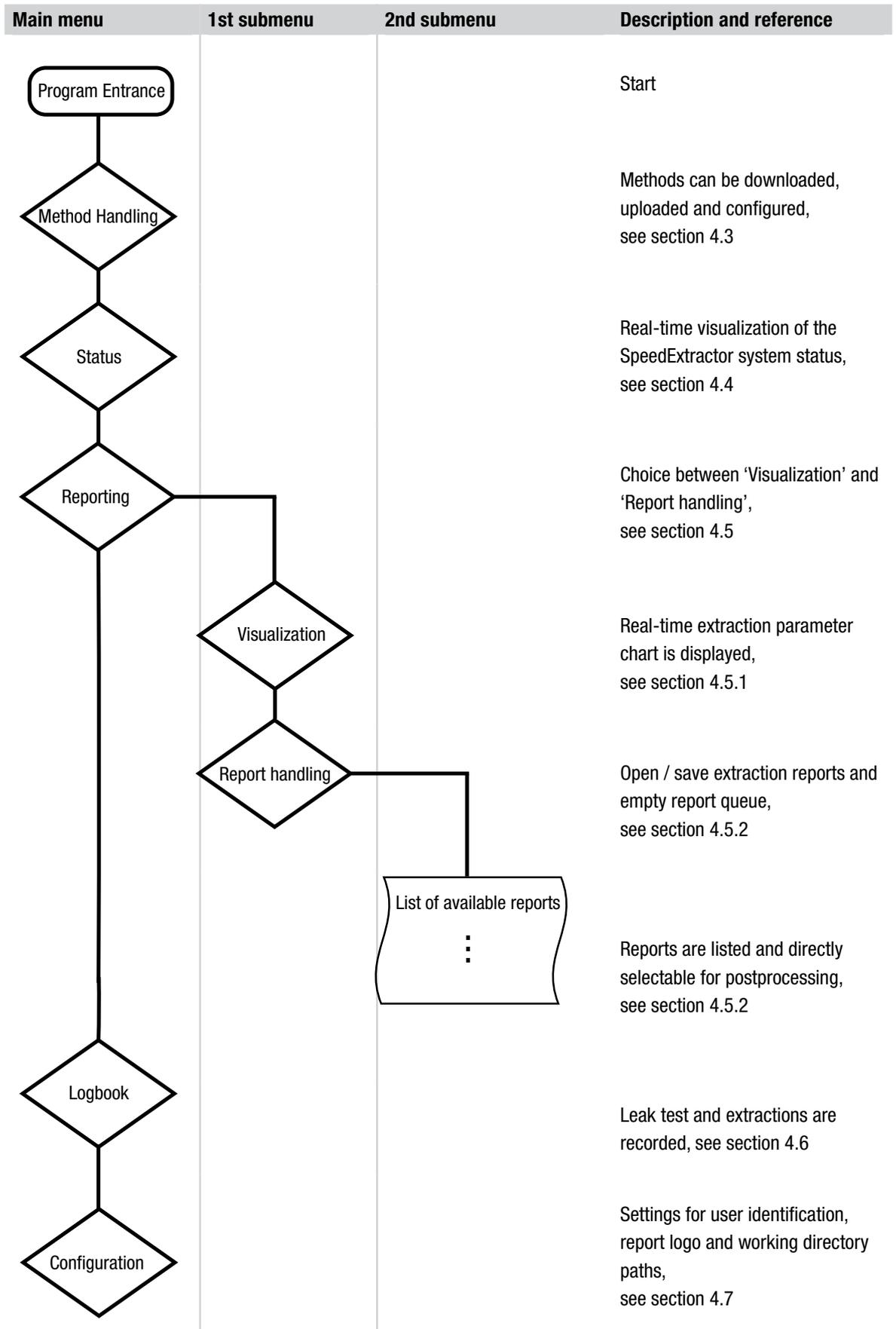
- Greyed-out icons are inactive and not operable
- Colored icons are active and operable



Position	Icon	Actions behind buttons
Frame	none	The software name and version number is displayed in the frame of the program window.
① Menu bar	none	Click on text, to activate drop down menus
② Toolbar with icons		Click this icon to open an existing process report
		Click this icon to delete items
		Click this icon to save items
③ Program tree view		Click this icon to export items in .csv format
	none	To expand the tree-structure, click on the plus symbol
④ Main view	none	Displays program information and configuration screens
⑤ Program icon		Can be found on the desktop as a program shortcut and in the program window
⑥ Progress bar	none	Displays system status progress

Position	Icon	Actions behind buttons
⑦ Program status indication		PC is connected to the SpeedExtractor using the serial number of the connected device (communication established). In this manual the serial number in the figures is displayed with S/N as a placeholder. There you will find the serial number of your device.
		PC is not connected to the SpeedExtractor (communication failed)

4.2 Program structure overview



4.3 Method handling

Methods are processing procedures for the SpeedExtractor. They contain the extraction processing information like pressure, temperature, time and solvent.

Possible handling actions are:

Upload methods to the PC (e.g. for backup)

Download methods to the SpeedExtractor (e.g. for restore)

Configure or edit methods at the PC

4.4 Status

The system state of the SpeedExtractor is visualized by an interface view. This interface has been programmed to display the complex extraction cycles of the SpeedExtractor in terms of intuitive reading. The user can follow every system status like valve positioning, extraction temperature and pressure inside the extraction cells in real-time with ease.

4.5 Reporting

Gives access to the below submenus.

4.5.1 Visualization

The 'Visualization' screen displays a real-time temperature and pressure chart. The stages including stop, skip and error during a process are indicated in the chart as well. In addition, all extraction and method information are shown in a table. These information are used to generate the report.

4.5.2 Report handling

With every leak test and extraction, a report can be generated on the basis of previously recorded process data.

The 'Report handling' offers the following items:

- New generated, unsaved recordings, user entries not made (highlighted in red)
- Unsaved process reports (highlighted in red)
- Previously saved process reports

It is also possible to open a saved process report from file system and remove all reports in queue.

4.6 Logbook

The details of the leak tests and the used methods of the extractions are displayed. It is also possible to add comments to track service actions. The logbook can be saved and printed for documentation.

4.7 Configuration

The configuration item is used to configure the reports and to set working directories.

Available options are:

- User identification (name, first name)
- Batch-no. for identification
- Logo in process report can be set
- The storage path of the 'Methods', 'Process reports' and 'Process data' can be changed.

5 Putting into operation

This section contains all steps to a working setup in chronological order. If any errors occur, please check every step carefully again from the beginning.

5.1 Step 1: Installing the program

The program must be installed on the PC following the installation guide on the CD-booklet.

The following prerequisites must be fulfilled:

- For installation, the user must hold administrative rights on the computer
- The SpeedExtractor must be disconnected from the computer
- The PC must match the minimum system requirements for this software, see section 3.1

5.2 Step 2: Connecting a SpeedExtractor

To establish a connection, the following steps must be performed:

- Switch on the SpeedExtractor and wait for its bootup process to be finished
- Use the delivered USB cable to connect the extractor to the PC. Check the program status indication icon for connection.

NOTE

The maximum cable length for USB cables without repeater must not exceed 5m

5.3 Step 3: Starting the program

To start the recording software, go to:

- Windows start menu > Programs > Buchi > SpeedExtractor Record > SpeedExtractor Record
- Or double-click the program shortcut icon, which can be found on the desktop (see section 4.1)

NOTE

The software is triggered to start recordings synchronized by the SpeedExtractor. Thus, the software must be started before a leak test or an extraction is carried out! If a process is already running, the recording starts as soon as the software has booted up. In case of a record interruption (e.g. loss of mains power at the SpeedExtractor or broken communication) it is possible to store unfinished records.

If a new firmware version of the SpeedExtractor is available, the system proposes an automatic update. The firmware is updated automatically and without data loss after a confirmation of the user.

6 Operation

This section explains the different program views and handling steps.

6.1 Initial program view

After starting the program, the view below appears (Fig. 6.1). To expand the software tree in the program tree window, click on the plus symbol.

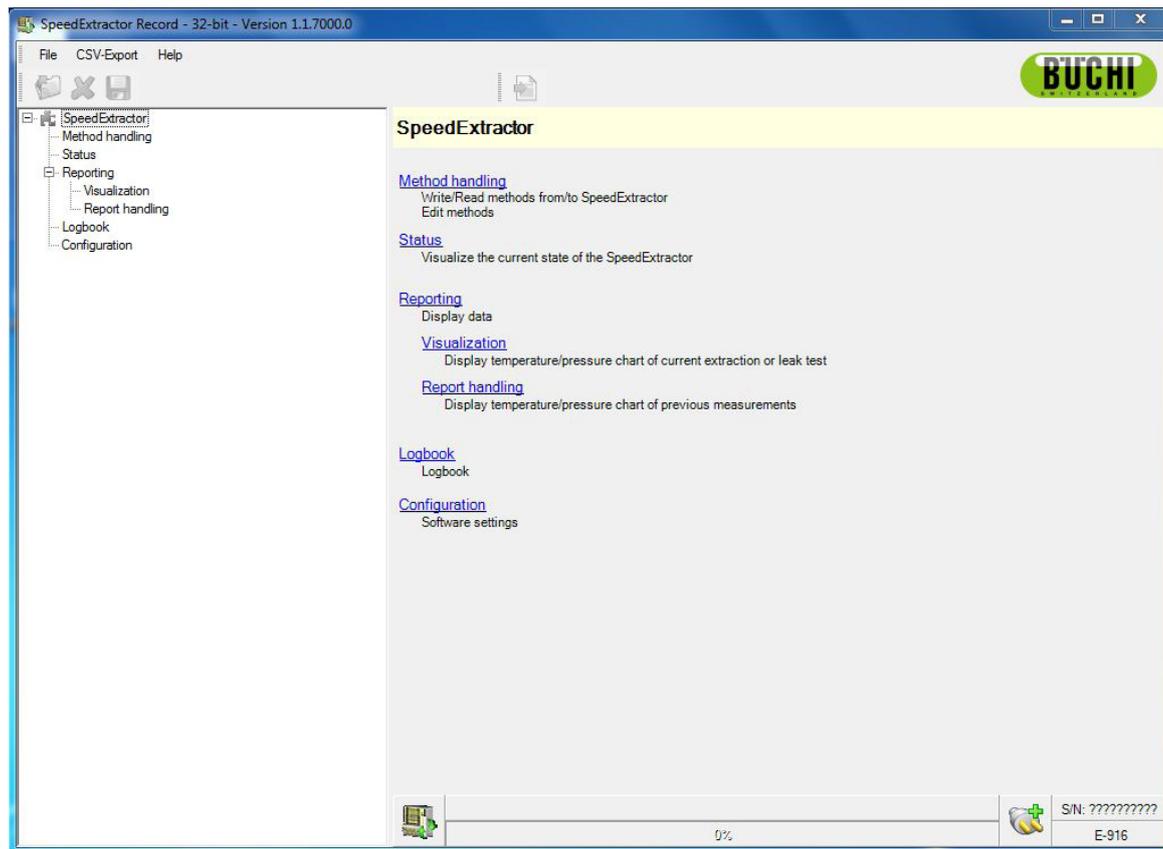


Fig. 6.1: Main screen

The user has the choice to use the program tree window on the left or the blue hyperlinks of the main view on the right to reach the different functions of the software.

6.2 Method handling

Fig. 6.2 shows the 'Method handling' view. This view offers an effective way to backup, add and modify methods via the PC mouse and keyboard. Section 6.2.1 gives detailed information about the handling possibilities in this view.

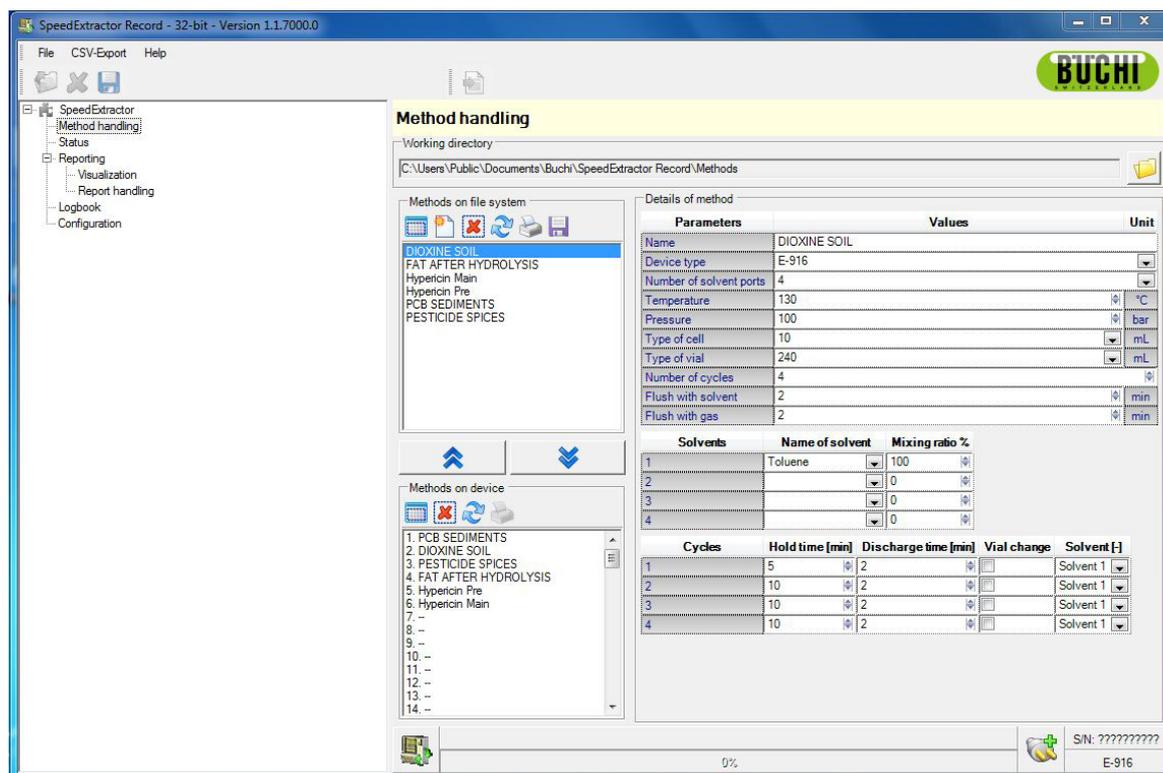


Fig. 6.2: 'Method handling' view

NOTE

To get a short description of the items in this view, hold the mouse pointer over.

6.2.1 'Method handling' view in detail

The view is separated into different areas, which are listed and described as followed.

Methods on file system:

Methods stored on the PC file system are listed in the box. To select the listed methods, mark one or more by mouse. It is also possible to start typing the first letters of a method for rapid access function. By clicking the program icons the user can manipulate and create methods as listed below.

Icon	Actions behind buttons
	Select all methods in list
	Create a new method
	Delete selected methods from list
	Refresh method list view
	Print selected methods
	Save a method (default system path can be changed in the configurations, see section 6.5)

Additional icons for method exchange:

Methods can be transferred between the SpeedExtractor and the PC. Simply mark one or more methods and click the corresponding icon to perform an upload or download action.

Icon	Actions behind buttons
	Upload selected methods from the SpeedExtractor to the PC
	Download selected methods from the PC to the SpeedExtractor

NOTE

The method storage of the SpeedExtractor is limited to 100 entries. The maximum number of methods to be stored on the PC is depending on the available hard disk space.

The methods on file system are listed in alphabetic order. If a method is downloaded to the Speed-Extractor, the position in the method list can be chosen in a pop-up window.

Methods On Device:

Methods stored on device are listed in the box. To select the listed methods, mark one or more by mouse. By clicking the program icons the user can manipulate and create methods as listed below. If no SpeedExtractor is connected, this area stays inactive (greyed out).

Icon	Actions behind buttons
	Select all methods in list
	Delete selected methods from list
	Refresh method list view (upload methods and solvent list from SpeedExtractor)
	Print selected methods

Details of method:

This area displays all parameters of selected methods **from the file system only**.

- To retrieve details from a method stored on the device, first upload this item to the local file system.
- All indications are listed with their corresponding unit, including the mixing ratio of solvents, cycles and cycle details.
- The list of solvents in the drop-down menu depends on the internal SpeedExtractor list. Due to technical limitations, adding new solvents will not update the solvent list on the SpeedExtractor.

Icon	Actions behind buttons
	Drop down arrow to select predefined options
	Up / down arrows to increase or decrease values in predefined steps

NOTE

For details about specific method parameters, please refer to the Operation Manual of the SpeedExtractor.

6.3 Status

The 'Status' view displays the SpeedExtractor system status in real-time. All important information are visualized at a glance, thus as:

- Number and position of active extraction cells
- System temperature, pressure and valve status

NOTE

No actions can be carried out here.

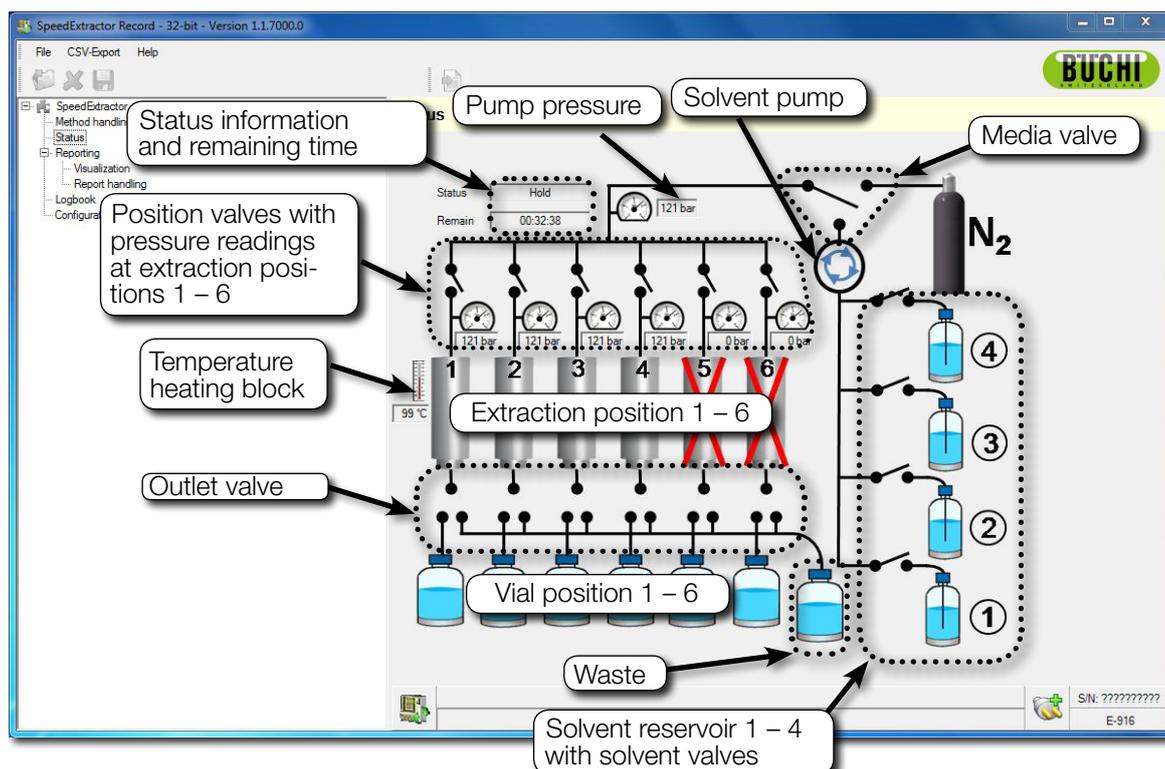


Fig. 6.3: 'Status' view (E-916)

NOTE

- *This view is only visible when an instrument is connected.*
- *Vials and extraction cells are arranged in pairs. The number of available pairs depends on the type of SpeedExtractor (E-914/E-916).*
- *Filling levels can not be read out here.*
- *No remaining time is indicated when performing a leak test.*

6.4 Reporting

The 'Reporting' view offers entries for 'Visualization' and 'Report handling'.

Description of offered program entry points:

- 'Visualization' to display temperature and pressure chart of the current measurement (see 6.4.1)
- 'Report handling' to display temperature and pressure chart of previous measurements (see 6.4.2)

To enter the program points, use the program tree or click the blue hyperlinks in the 'Reporting' view.

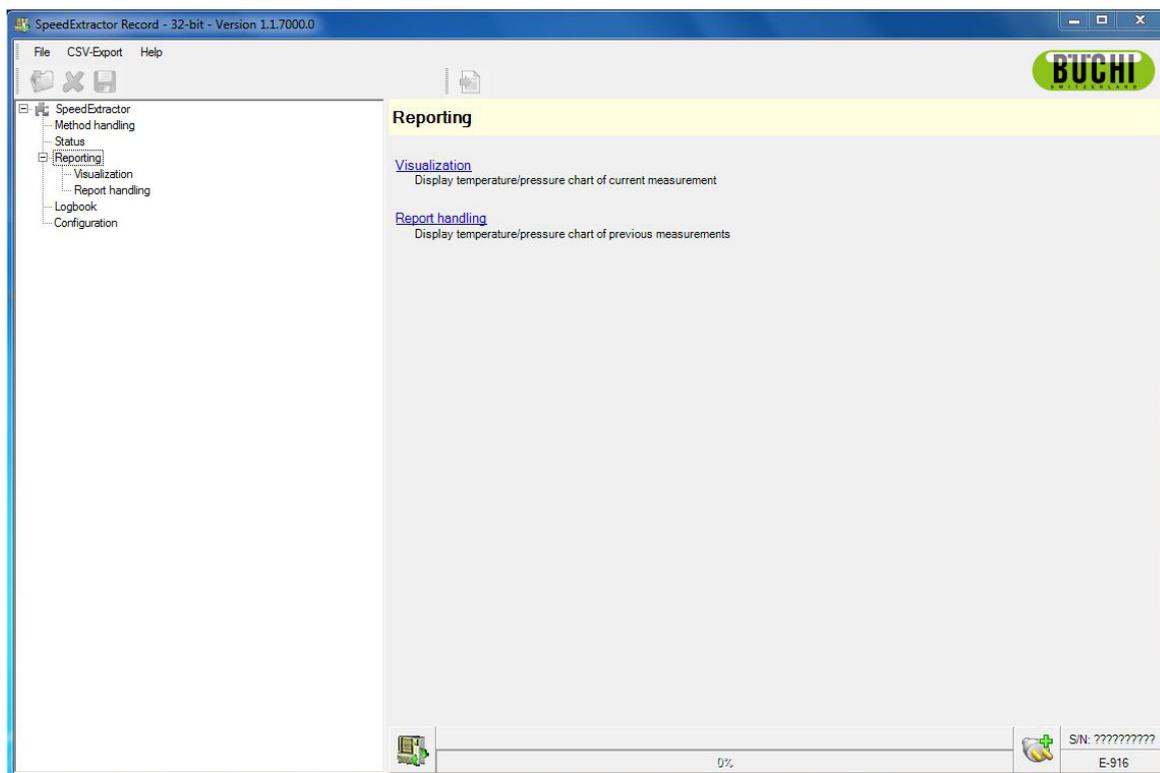


Fig. 6.4: 'Reporting' view

6.4.1 Visualization

The 'Visualization' view displays a real-time pressure and temperature chart of the running process for recording. This includes any process interruption. It also shows details about the ongoing process and its parameters.

Temperature and pressure chart

The legend in the upper right gives the corresponding colors and curve descriptions.

Additional chart features

Zoom-in feature:

- Hold down the left mouse button and mark an area on the chart in a left-to-right, downwards directed movement.
- Release the left mouse button, the previously marked area will appear zoomed.

Zoom reset:

- Hold down the left mouse button and drive the mouse-pointer in a right-to-left movement. This will reset the zoom.

Scrolling feature:

- Hold down the right mouse button and move the mouse pointer on the chart area to move the chart freely.

Explanation

The chart (Fig. 6.5) shows all possible events, highlighted by colors. Use the checkboxes at the chart legend on the left to show or hide the different curves or events.

Chart legend

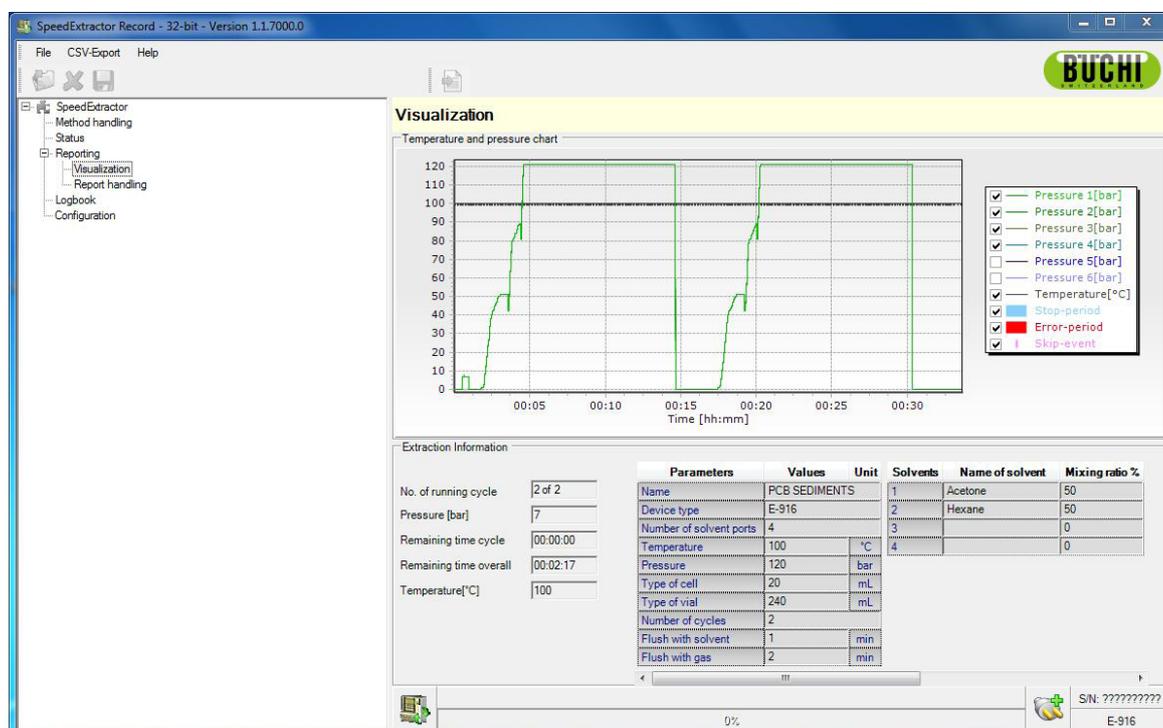
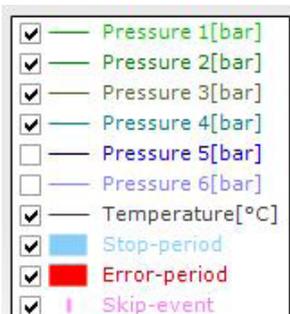


Fig. 6.5: 'Visualization' view

NOTE

This view is only visible when an instrument is connected and an extraction or a leak test is in process.

Extraction/Leak test information

The current process parameters and the detailed method information are displayed here. Changing parameters is not possible here.

6.4.2 Report handling

The 'Reporting handling' view offers three program entry points:

- Click 'Select Process Report', to select a new generated or previously opened report via a drop-down menu

- Click 'Open Process Report', to open saved reports from the file system
- Click 'Remove all reports in queue', to empty the report queue

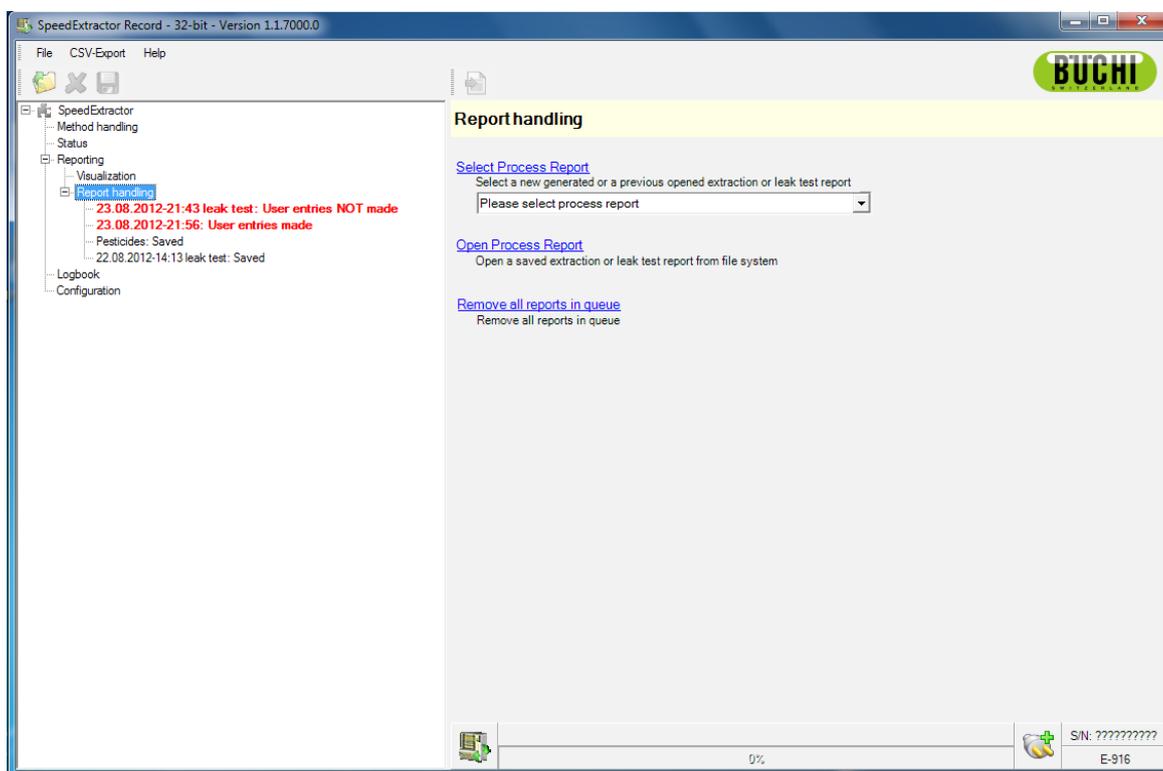


Fig. 6.6: 'Report handling' view

Select Process Report

Use the drop-down menu for a listing of all reports created since the last software start-up and all reports recently opened. Alternatively, use the list of reports in the program tree view. Click, to select a specific report.

-

'Extraction Report' form

This pop-up window appears after opening a red marked extraction record entry, saying "user entries NOT made". To create a usable extraction report entry, fill in the form fields.

NOTE

Input fields marked with an asterisk () are mandatory and must be filled out.*

It is only possible to make entries in the ,Extraction Report' form when it is opened for the first time. Later only the notes can be changed by using the ,Edit Report' option (see section 6.4.3).

Position	Sample	Initial Weight	Cell ID
1	blank		067
2	cm_88	2.0432	125
3	soil_z66_1	1.4312	042
4	soil_z66_2	1.3984	007
5			
6			

Fig. 6.7: 'Extraction Report' form

Time: Date and time are automatically set according to the time set at the computer.

Title: Define a title of the report.

Particulars: Fill in the user's data. The 'Batch Number' is a sample identification number.

Identification of the device: The device 'Serial Number' is set automatically.

Sample information: The sample name, initial weight and the cell ID can be filled in. If no entries are made, this part will not appear on the report.

Notes: Use the 'Notes' box for any kind of extraction related information.

Define chart parameters for report: To hide or show the graphical view of temperature and pressure, use the check boxes. If the pressure parameters of the active cells are hidden (not ticked), the report will still define that these specific cells were used.

'Leak Test Report' form

As for the 'Extraction Report', this pop-up window appears after a red marked leak test record entry was opened. Fill in the forms. Only user information, notes and chart parameters for report can be entered. The time and serial number are set automatically.

NOTE

A red record entry in the program tree view indicates a newly recorded data. To confirm the entry and add a set of unique meta data, perform the following steps:

- Click on the red entry “user entries NOT made” (Fig. 6.6) and fill out the pop-up window ‘Extraction Report’ form (Fig. 6.7) or ‘Leak Test Report’ form, respectively.
- Subsequently, the process report is automatically created.
- Click on the red entry “user entries made” (Fig. 6.6) and save the report to the file system by using the “save report” icon. For leak test reports, the system proposes the date and time as file name (e.g. 20120822 1413 leak test). For extraction reports, the title of the report is proposed.
- The ‘Extraction Report’ now appears in black with the previously chosen ‘Title of Report’. The ‘Leak Test Report’ has no specific title, but the date and time are indicated instead.

Open Process Report

To access reports stored on the file system, click ‘Open Process Report’ for an explorer window (Fig. 6.8). Choose the desired report by a mouse click and click ‘Open’ subsequently.

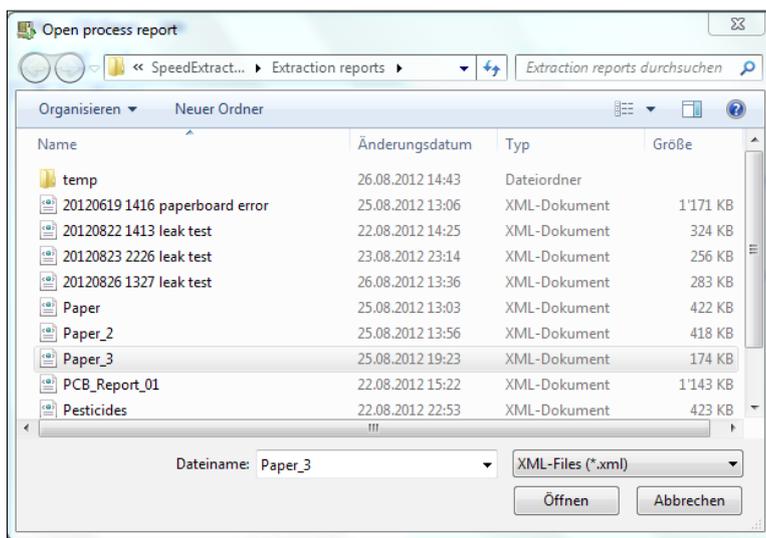


Fig. 6.8: Open ‘Process Report’

NOTE

If no reports appear in the explorer window, use the drop-down menu to set the correct path.

Remove all reports in queue

Click on the program entry link ‘Remove all reports in queue’ to remove all saved reports as well as all non-saved reports created since the last software start-up.

**ATTENTION**

Make sure to save the reports you want to keep before you click on ‘Remove all reports in queue’ as **this function will unrecoverable delete all recently created reports and recordings.**

6.4.3 Extraction report

After opening up a report, the view shown in Fig. 6.9 appears. This view offers comprehensive editing and handling possibilities that can be accessed via different program icons (see list of program icons below).

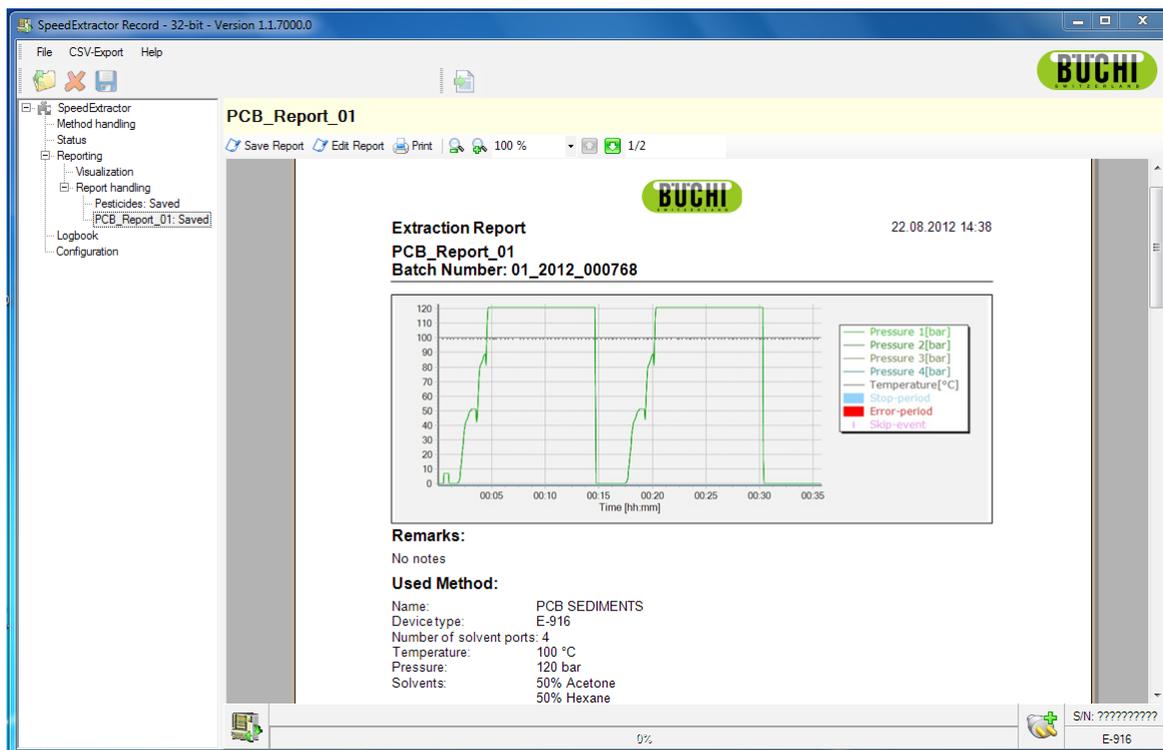


Fig. 6.9: Extraction Report

Program icon table (main window)

Icon	Actions behind buttons
	Open process reports folder to select a saved report
	Delete the selected report from the report queue
	Save the selected report on the file system
	Export the selected report as .csv data for third party applications (see also section 1.4 for list of abbreviations)

NOTE

All functions are available in the menu bar as well.

Program icon table ('Process Report' view)

Icon	Actions behind buttons
 Save Report	Save the selected report on the file system
 Edit Report	Edit the open report (only the notes can be changed later)
 Print	Print the selected report
	Zoom out of the displayed report
	Zoom into the displayed report
	Go to the previous page of the displayed report
	Go to the next page of the displayed report

About 'Extraction Reports'

An 'Extraction Report' can have several pages, depending on the amount of available information.

The report head contains details for its identification such as date and time, report title and the batch number of the sample.

The report body contains:

- the process chart
- space for optional remarks
- a detailed list of the used method
- a list of the used cells
- sample information (if entered in the 'Extraction Report' form, see Fig. 6.7)
- the device serial number
- the event list

NOTE

If the extraction has been aborted, the heat-up times of the non completed cycles are not displayed correctly but as 0 min due to technical limitations.

About 'Leak Test Reports'

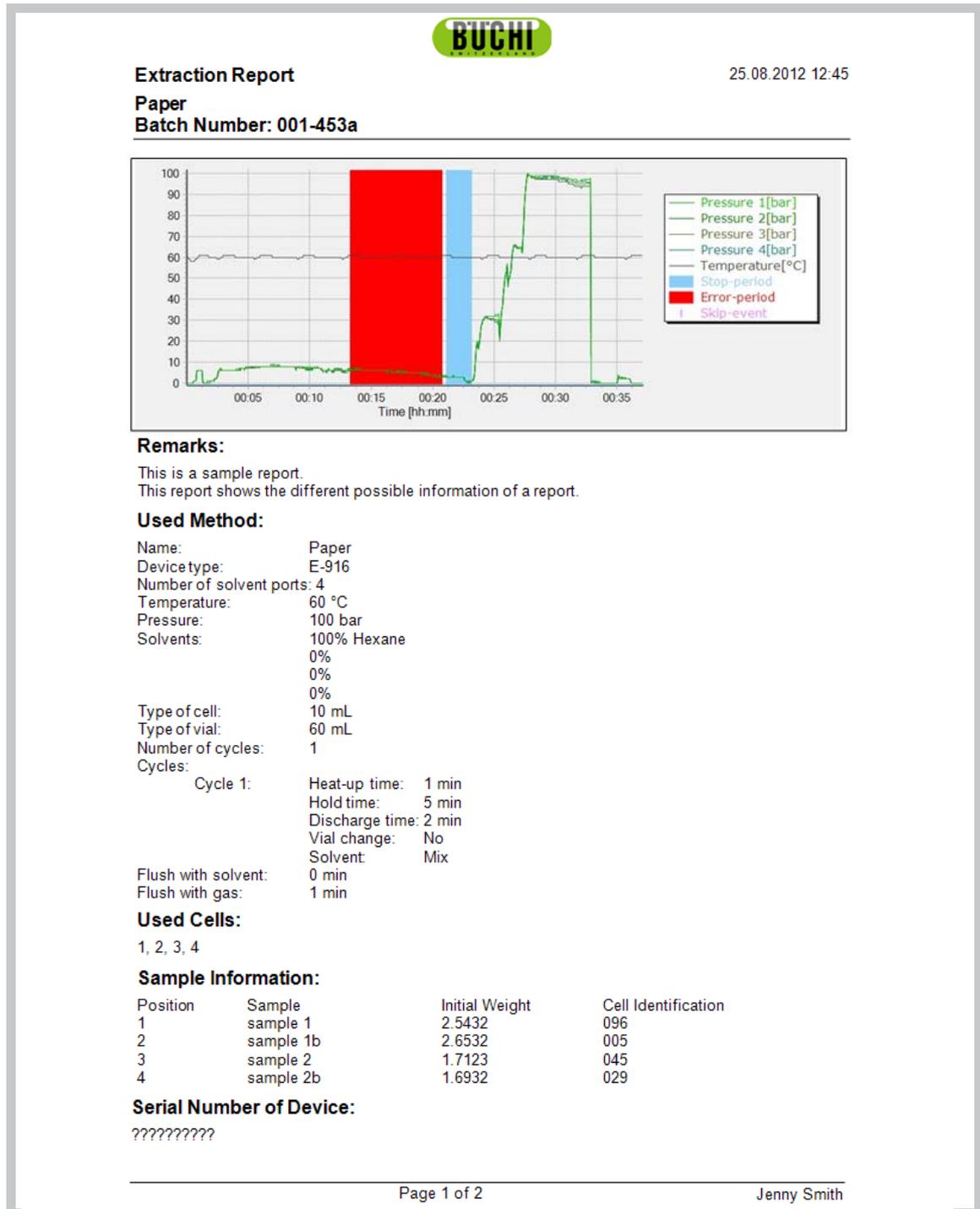
The report head contains details for its identification such as date and time and report title.

The report body contains:

- the process chart
- space for optional remarks
- leak test information (e.g. temperature, used solvent, pressure of each position)
- a list of the used cells
- the device serial number
- the event list

For an example 'Extraction Report', see following pages.

Example report page 1 of 2



6.5 Logbook

The logbook serves as maintenance tool and offers the following information and possibilities:

- Number of extractions and leak tests
- Name of completed extraction methods
- Leak test information
- Possibility to enter comments, e.g. about service actions

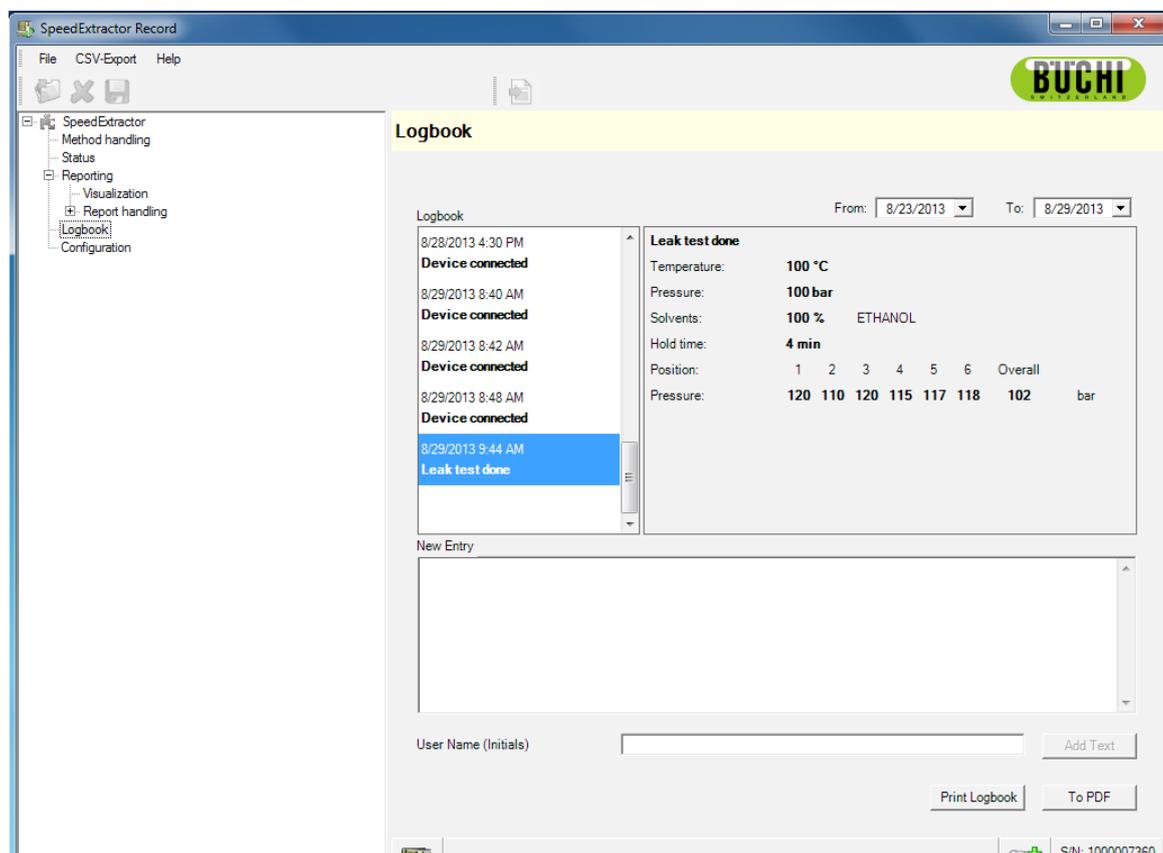


Fig. 6.10: 'Logbook' view

'Logbook' view

Every time the SpeedExtractor Record software is booted, the number of extractions and leak tests as well as the Serial Number of the device is synchronized with the SpeedExtractor firmware. For this functionality, a SpeedExtractor needs to be connected.

NOTE

The software is synchronized with the device. Thus, if the operating hours and the number of extractions are reset in the firmware, the counter in the logbook will be set to 0 as well.

If extractions and/or leak tests were running without the PC connected, no details of the extraction method or leak tests will be displayed in the logbook.

New Entry

Use this field to make remarks, e.g. about service actions or unusual events. Fill in the user name or the initials for documentation. Confirm your entry by pressing the "Add Text" button. To add an entry to the logbook it is mandatory to fill in a user name.

Save the logbook

The logbook can be saved as pdf file. For this purpose, use the “to PDF” button. The logo defined in ‘Configuration’ (see section 6.6) will be used in the header of the document.

NOTE

With regard to data integrity it is not possible to clear entries in the logbook.

6.6 Configuration

At the ‘Configuration’ view, program default settings can be adjusted.

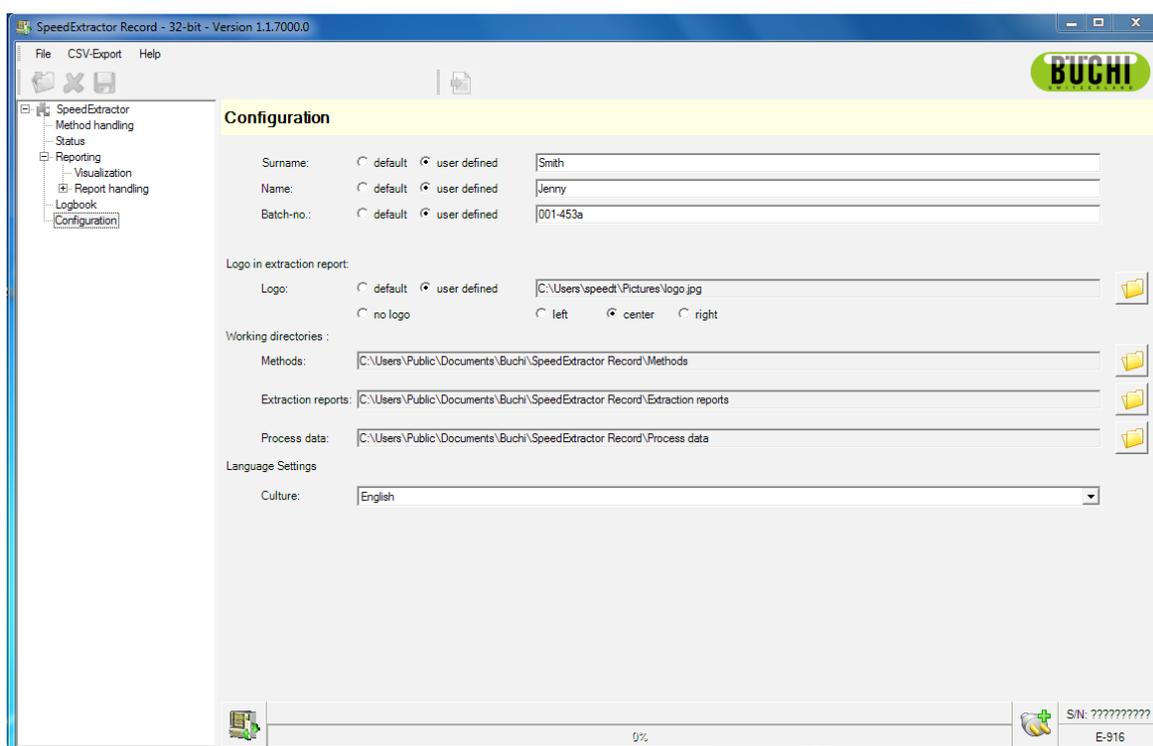


Fig. 6.11: ‘Configuration’ view

Possible configuration settings

- Activate the user defined radio buttons to change name, first name of the user and batch number or use default settings instead.
- At ‘Logo in extraction report’, use the radio buttons to change the report logo between the default company and a user defined one. When using a user defined logo, its position on the report can be adjusted.
- The ‘Working directories’ can be set independently for ‘Methods’, ‘Extraction reports’ and ‘Process data’. Use the folder button at the end of each directory path to open an explorer window. This window allows for choosing a folder at will.

NOTE

Changing the logo will also affect all previously created reports in the xml. format, as soon as they are re-opened in the ‘Report handling’ view.

7 Workflow

The section 7 is a step-by-step user guide for the software and process report handling.

7.1 Software startup conditions

To start the SpeedExtractor Record software, double-click the program shortcut on the desktop. Alternatively, you can start the program via the Windows start menu under programs (see section 5.3).



No Connection to SpeedExtractor established

If the SpeedExtractor is switched off or a communication problem (e.g. USB connection failure) occurs, the program is limited to the following functions:

- 'Method handling' is only available for methods, stored on PC
- No SpeedExtractor system status is available in the 'Status' view
- No visualization of the processes in the 'Visualization' view
- Only manual entries can be made in the logbook



Connection to SpeedExtractor is established

When the connection has been established successfully, all software functionality is available to the user.

If the connection has been established while the SpeedExtractor is already running an extraction the software automatically recognizes this status.

If a new firmware version of the SpeedExtractor is available, the system proposes an automatic update. The firmware is updated automatically and without data loss after a confirmation of the user.

NOTE

Changes in the 'Configuration' view are possible with or without connection to the SpeedExtractor, but mostly require a restart of the program to be done.

7.2 While recording

The software automatically starts to record the system processing data once a new extraction has been started.

The following views can be used to supervise the extraction process at the computer:

Visualization

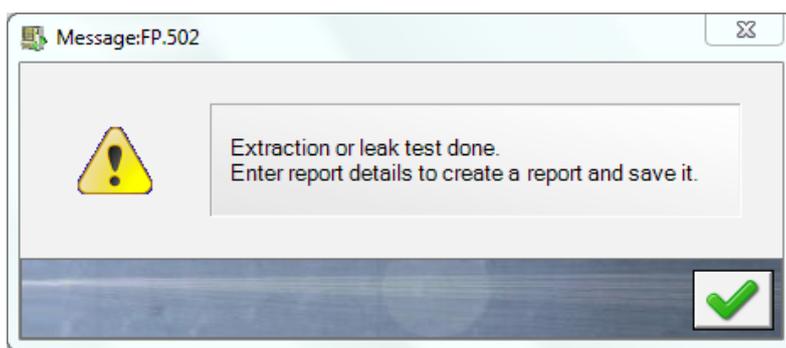
During the recording process, use this view to supervise the extraction details like pressure, temperature and progress, which are displayed in real-time.

Status

Use the 'Status' view for a real-time visualization of the technical status of the SpeedExtractor.

7.3 After recording

The recording is automatically stopped once the SpeedExtractor finished its process or the process has been interrupted (*e.g. loss of mains power at the SpeedExtractor or interrupted communication*). The user will be informed about it by a popup message.

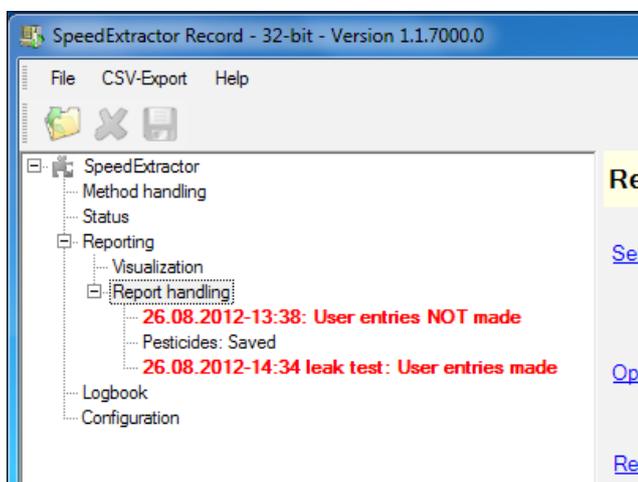


Click on the checkmark to confirm the message.

Fig. 7.1: Message 'Extraction or leak test done'

7.4 Creating a report

To create a report, some details have to be entered first, as displayed in the message shown in Fig. 7.1. Records with no user entries or which have not yet been saved are highlighted in red in the program tree area in the report queue.



New recordings are highlighted in red.

Fig. 7.2: 'Report handling' tree with new entries

Report details

In the report queue, click on a red recording entry 'user entries NOT made'. This action displays the 'Extraction Report' form window (Fig. 7.3) or the 'Leak Test Report' form respectively.

The screenshot shows the 'Extraction Report' form with the following data:

Position	Sample	Initial Weight	Cell ID
1	blank		067
2	cm_88	2.0432	125
3	soil_z66_1	1.4312	042
4	soil_z66_2	1.3984	007
5			
6			

Fig. 7.3: 'Extraction Report' form

Time: Date and time are automatically set according to the time set at the computer.

Title: Define a title of the report.

Particulars: Fill in the user's data. The 'Batch Number' is a sample identification number.

Identification of the device: The device 'Serial Number' is set automatically.

Sample information: The sample name, initial weight and the cell ID can be filled in. If no entries are made, this part will not appear on the report.

Notes: Use the 'Notes' box for any kind of extraction related information.

Define chart parameters for report: To hide or show the graphical view of temperature and pressure, use the check boxes. If the pressure parameters of the active cells are hidden (not activated), the report will still define that these specific cells were used.



Click on this icon to confirm the data (this will create a report, which has a red entry in the report queue, 'user entries made'). The report is not yet saved on the file system.

NOTE

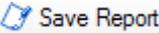
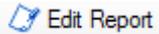
- All data-fields marked with an asterisk (*) are mandatory.
- Save the report on the file system (see next section).

'Leak Test Report' form

As for the 'Extraction Report', this pop-up window appears after opening a red marked leak test record entry. Fill in the form. Only user information, notes and chart parameters for report can be entered. The time and serial number are set automatically.

7.5 Further report processing

The new created report can be printed out, saved or exported as indicated by the table below.

Icon	Format	Description
 Save Report	.xml =	Click on this icon to save the report as a .xml or as a .pdf-file. Program internal data format (review will work with this program only)
	.pdf =	Portable document format (review is possible on computers, equipped with freely available pdf-reader software)
 Edit Report		Edit the open report (only the notes can be changed later). Reports must be in the .xml format in order to be edited. If you want to keep this option, save them not only in the .pdf but also in the .xml format.
 Print		Click on this icon to open the print dialog
		Click on this icon to export the report as a .csv-file
	.csv =	Comma separated export format, contains all measured values and can be processed e.g. by spreadsheet programs

7.6 Method handling

In the 'Method handling' view, creation or modification of methods can be performed.

Creating a new method

Three steps are necessary to create a new method:

- Step ①  Click on this icon to create a new, empty method
- Step ② Name the method and adjust all parameter to your needs
- Step ③  Click on this icon to store the new method

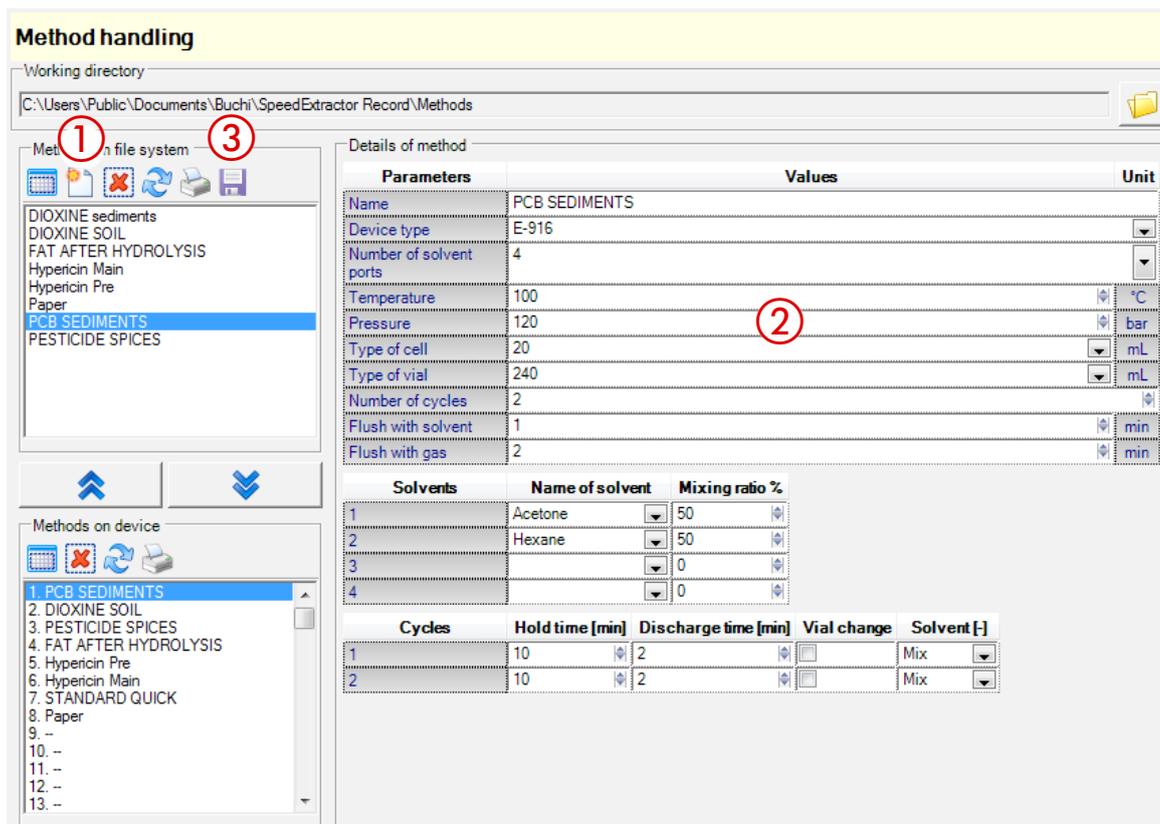


Fig. 7.4: Workflow to create a new method

7.7 Method backup

It is recommended to make periodical backups of all methods, stored on the SpeedExtractor.

Performing a backup

Three steps are necessary to perform a method backup.

- Step ①  Click on this icon to select an appropriate file path for the backup
- Step ②  Click on this icon to select all methods at once
- Step ③  Click on this icon to transfer and store all methods on the file system

Method handling

Working directory
C:\Users\Public\Documents\Buchi\SpeedExtractor Record\Methods

Methods on file system

- DIOXINE sediments
- DIOXINE SOIL
- FAT AFTER HYDROLYSIS
- Hypericin Main
- Hypericin Pre
- Paper
- PCB SEDIMENTS**
- PESTICIDE SPICES

Methods on device

- 1. PCB SEDIMENTS**
2. DIOXINE SOIL
3. PESTICIDE SPICES
4. FAT AFTER HYDROLYSIS
5. Hypericin Pre
6. Hypericin Main
7. STANDARD QUICK
8. Paper
9. --
10. --
11. --
12. --
13. --

Details of method

Parameters	Values	Unit
Name	PCB SEDIMENTS	
Device type	E-916	
Number of solvent ports	4	
Temperature	100	°C
Pressure	120	bar
Type of cell	20	mL
Type of vial	240	mL
Number of cycles	2	
Flush with solvent	1	min
Flush with gas	2	min

Solvents	Name of solvent	Mixing ratio %
1	Acetone	50
2	Hexane	50
3		0
4		0

Cycles	Hold time [min]	Discharge time [min]	Vial change	Solvent [-]
1	10	2	<input type="checkbox"/>	Mix
2	10	2	<input type="checkbox"/>	Mix

Fig. 7.5: Workflow to backup methods from the SpeedExtractor

NOTE

After the backup has been performed, you may have to set the 'Working Directory' to the default path.

8 Troubleshooting

This section contains a list of frequently asked questions. Here you can find typical problems that might occur during operation, whereby this list does not claim to be exhaustive.

8.1 FAQ

- Is it possible to change any data in a stored record?
It is possible to change or to complete the notes. To avoid record manipulation, it is not allowed to change user or sample information.
- How many SpeedExtractor devices can be managed at the same time?
Due to technical limitations, only one device can be managed at a time.
- The software does not record any data! What is wrong with it?
Check the program status indication icon. Make sure the SpeedExtractor is connected to the PC (see also section 5).
- Why does the software forget its 'Working directory path' after a restart, when it was set in the 'Method handling' view?
The 'Method handling' view only allows a temporary change of the path. To change the path permanently, it must be changed in the 'Configuration' view.
- The liquid level in the Status view does not correspond with the real liquid level – why?
The liquid containers are dummy icons. Thus, these icons can not show the real liquid level.
- I can not remember the functions behind the buttons. Where can I get this information easily?
To get a short description of items in a view, hold the mouse pointer over a button for a second. This will work for most program elements.
- How can I delete reports?
Use the Windows Explorer and choose your local 'Working directory' path for the extraction reports. It can be found at the 'Configuration' view (see section 6.5).
- Methods with new solvents, created on the computer, have been transferred to the SpeedExtractor successfully. But at the SpeedExtractor, the new solvent does not show up in the solvent list – why?
Due to technical limitations, solvents programmed on computer are not added to the SpeedExtractors internal solvent list. They must be created in the menu of the SpeedExtractor's solvent list.

- The device is connected to the computer. Why is it not possible to select and transfer methods to or from the SpeedExtractor?

A transfer of methods is only possible when no extraction is being executed. Check, whether an extraction is running first.

- I entered a method name. Why is it not possible to proceed with entering other parameters? (The cursor remains in the entry field of the method name).

Method names are limited to 20 characters, check whether your method name has more.

- I printed the method details in the „method handling“ view. Why is the heat-up time indicated differently (0 min) comparing to the SpeedExtractor?

The heat-up time is an instrument parameter and dependant on the cell size, the temperature, the number of cycles and the instrument type. The calculation is carried out exclusively on the SpeedExtractor device. To retrieve the correct heat-up times refer to the instrument or to the extraction report (see section 6.4).

BUCHI Affiliates:

Europe

Switzerland/Austria

BÜCHI Labortechnik AG
CH – 9230 Flawil
T +41 71 394 63 63
F +41 71 394 65 65
buchi@buchi.com
www.buchi.com

Italy

BUCHI Italia s.r.l.
IT – 20010 Cornaredo (MI)
T +39 02 824 50 11
F +39 02 575 12 855
italia@buchi.com
www.buchi.it

Benelux

BÜCHI Labortechnik GmbH
Branch Office Benelux
NL – 3342 GT Hendrik-Ido-Ambacht
T +31 78 684 94 29
F +31 78 684 94 30
benelux@buchi.com
www.buchi.be

Russia

BUCHI Russia/CIS
Russia 127287 Moscow
T +7 495 36 36 495
F +7 495 98 10 520
russia@buchi.com
www.buchi.ru

France

BUCHI Sarl
FR – 94656 Rungis Cedex
T +33 1 56 70 62 50
F +33 1 46 86 00 31
france@buchi.com
www.buchi.fr

United Kingdom

BUCHI UK Ltd.
GB – Oldham OL9 9QL
T +44 161 633 1000
F +44 161 633 1007
uk@buchi.com
www.buchi.co.uk

Germany

BÜCHI Labortechnik GmbH
DE – 45127 Essen
T +800 414 0 414 0 (Toll Free)
T +49 201 747 49 0
F +49 201 747 49 20
deutschland@buchi.com
www.buechigmbh.de

Germany

BÜCHI NIR-Online
DE – 69190 Walldorf
T +49 6227 73 26 60
F +49 6227 73 26 70
nir-online@buchi.com
www.nir-online.de

America

Brazil

BUCHI Brasil
BR – Valinhos SP 13271-200
T +55 19 3849 1201
F +55 19 3849 2907
brasil@buchi.com
www.buchi.com

USA/Canada

BUCHI Corporation
US – New Castle, DE 19720
T +1 877 692 8244 (Toll Free)
T +1 302 652 3000
F +1 302 652 8777
us-sales@buchi.com
www.mybuchi.com

Asia

China

BUCHI China
CN – 200052 Shanghai
T +86 21 6280 3366
F +86 21 5230 8821
china@buchi.com
www.buchi.com.cn

India

BUCHI India Private Ltd.
IN – Mumbai 400 055
T +91 22 667 75400
F +91 22 667 18986
india@buchi.com
www.buchi.in

Indonesia

PT. BUCHI Indonesia
ID – Tangerang 15321
T +62 21 537 62 16
F +62 21 537 62 17
indonesia@buchi.com
www.buchi.co.id

Japan

Nihon BUCHI K.K.
JP – Tokyo 110-0008
T +81 3 3821 4777
F +81 3 3821 4555
nihon@buchi.com
www.nihon-buchi.jp

Korea

BUCHI Korea Inc.
KR – Seoul 153-782
T +82 2 6718 7500
F +82 2 6718 7599
korea@buchi.com
www.buchi.kr

Malaysia

BUCHI Malaysia Sdn. Bhd.
MY – 47301 Petaling Jaya,
Selangor
T +60 3 7832 0310
F +60 3 7832 0309
malaysia@buchi.com
www.buchi.com

Singapore

BUCHI Singapore Pte. Ltd.
SG – Singapore 609919
T +65 6565 1175
F +65 6566 7047
singapore@buchi.com
www.buchi.com

Thailand

BUCHI (Thailand) Ltd.
TH – Bangkok 10600
T +66 2 862 08 51
F +66 2 862 08 54
thailand@buchi.com
www.buchi.co.th

BUCHI Support Centers:

South East Asia

BUCHI (Thailand) Ltd.
TH-Bangkok 10600
T +66 2 862 08 51
F +66 2 862 08 54
bacc@buchi.com
www.buchi.com

Middle East

BÜCHI Labortechnik AG
UAE – Dubai
T +971 4 313 2860
F +971 4 313 2861
middleeast@buchi.com
www.buchi.com

Latin America

BUCHI Latinoamérica Ltda.
BR – Valinhos SP 13271-200
T +55 19 3849 1201
F +55 19 3849 2907
latinoamerica@buchi.com
www.buchi.com

We are represented by more than 100 distribution partners worldwide.
Find your local representative at: www.buchi.com