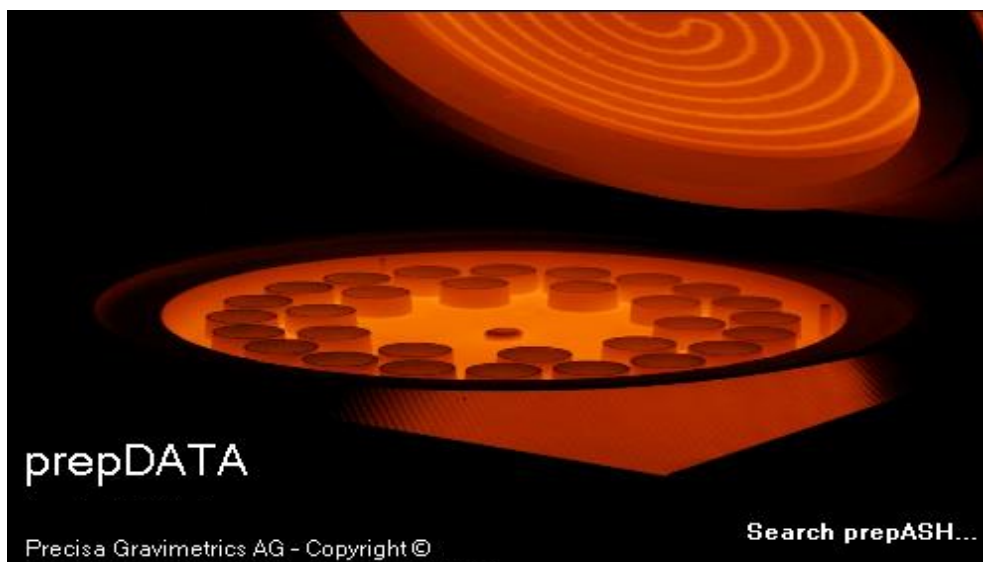


prepDATA

PC Software for
prepASH Series 340

User Manual



350-8136-000a8

Content

| | | |
|----------|--|-----------|
| 1 | Installation | 3 |
| 1.1 | <i>Hardware.....</i> | 3 |
| 1.2 | <i>Software.....</i> | 3 |
| 2 | Start prepDATA | 4 |
| 2.1 | <i>Select prepASH.....</i> | 4 |
| 3 | Program Operation..... | 6 |
| 3.1 | <i>Overview main menu.....</i> | 6 |
| 3.2 | <i>Status of analysis</i> | 7 |
| 3.3 | <i>Measurement files</i> | 7 |
| 4 | Create/Modify the Sample list | 8 |
| 4.1 | <i>New sample list</i> | 8 |
| 4.2 | <i>Modify existing sample list.....</i> | 9 |
| 5 | Registers of the measurement file | 11 |
| 5.1 | <i>Sample (Sample list)</i> | 11 |
| 5.2 | <i>Method</i> | 11 |
| 5.3 | <i>Remote.....</i> | 12 |
| 5.4 | <i>Results and statistics.....</i> | 13 |
| 5.5 | <i>Report</i> | 14 |
| 6 | Export and save files..... | 16 |

Installation

1.1 Hardware

1. prepASH and PC are connected individually to the network with a standard network cable.
- or
2. prepASH and PC are connected directly, omitting the network.
Use the cross over cable delivered with the prepASH.

1.2 Software

prepDATA is designed for Windows 2000 / XP / Vista / 7 / 8 and Windows 10 all with 32 or 64 bit.

Windows Office (Excel) is required.

1.2.1 Installing prepDATA

1. Start the installation by double-clicking on 'prepDATA.msi'.
2. Follow the instructions on the display

1.2.2 Uninstalling prepDATA

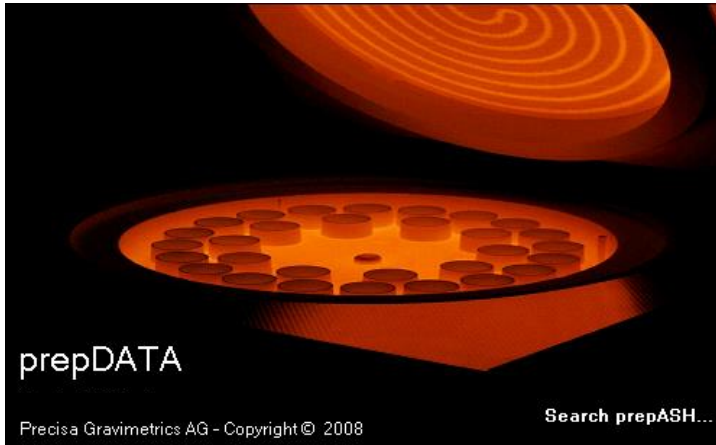
1. Select < **Startmenu** > **Programs** > **Precisa** > **prepDATA** > **Uninstall** >
2. Follow the instructions on the display

2 Start prepDATA

Open the Program by double-clicking on the desktop link



prepDATA is started.



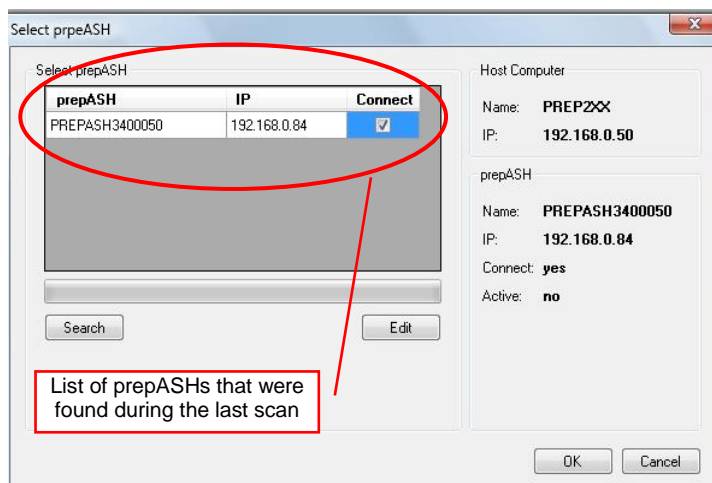
Note: Checking the network may take several minutes.

2.1 Select prepASH

Open the prepASH selection by choosing “prepASH -> Select” in the main menu bar.

If you start the prepDATA software for the first time, the window appears automatically. At the next software starting the window does not appears automatically (for the reason that you did select a prepASH at the last use), and your last prepASH selection is used.

2.1.1 prepASH and computer are connected over the local network



Click on “Search” for scanning your network for new connected prepASHs.

Choose a prepASH by setting a tick in the “Connect” field and press the “OK” button to confirm your entry.

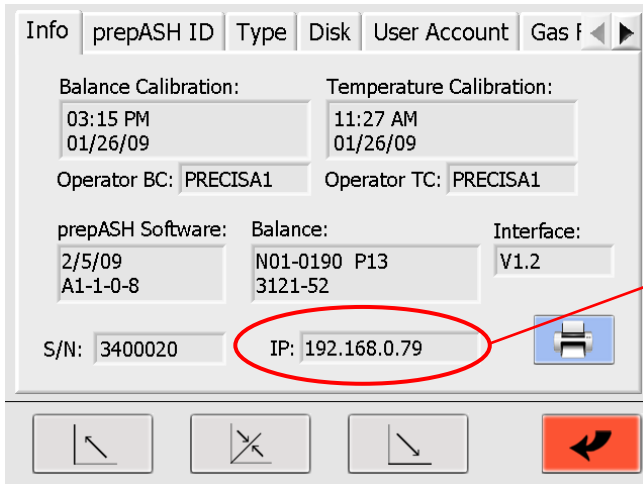
Important advice:

Your computer has to be on the same subnet as the prepASH.

Contact your own network administrator for network problems.

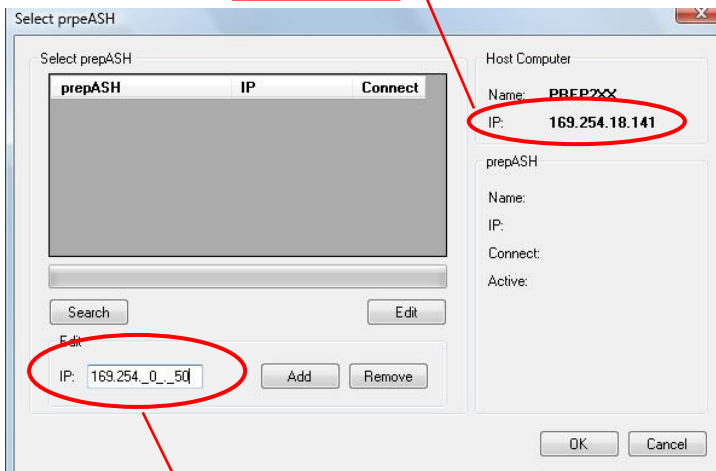
2.1.2 prepASH and computer are connected directly over a crossed network cable

In this network mode, your prepASH gets automatically a fix IP address. You will find the IP address in the prepASH in the register Info of the service page of prepASH:



IP address of prepASH

Your computers IP address

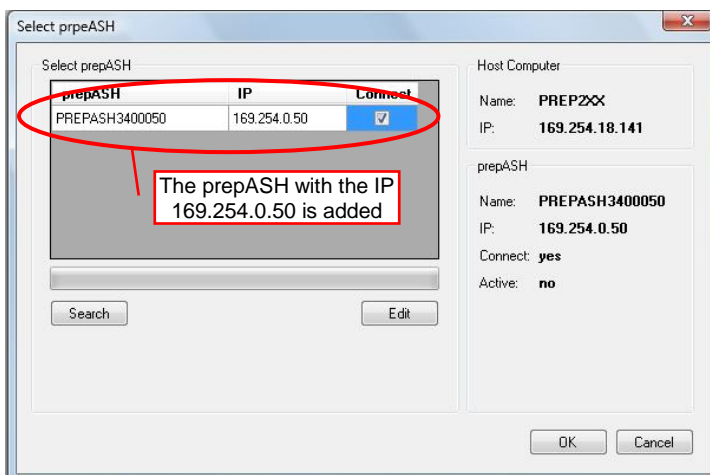


When the edit button is pressed, the IP address editing area appears.

Enter the IP address of the prepASH in the textbox and press "Add". The IP-Address is now included in the list.

Choose a prepASH by setting a tick in the "Connect" field and press the "OK" button to confirm your entry.

Enter here the prepASH IP address



The prepASH with the IP 169.254.0.50 is added

Important advice:

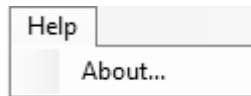
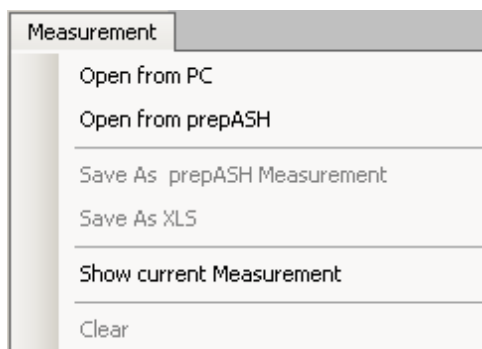
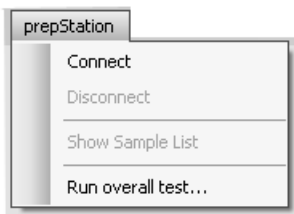
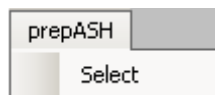
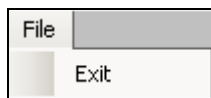
For a successful connection it is important that your computer and the prepASH are on the same subnet. prepASH subnet mask: 255.255.0.0

Contact your own network administrator for network problems.

3 Program Operation

3.1 Overview main menu

After the program starts the following main menu will appear.



- **< Exit >**
to finish the prepDATA program
- **< Select >**
press to choose the prepASH unit from the list or change to another one.

only available with prepSATION connected

- **Connect:** connect the prepSATION
- **Disconnect:** Disconnect prepSATION
- **Show Sample List**
Show the sample list which is actually be processed in prepSTATION
- **Run overall test...**
Test all connections of prepSTATION and all sample positions

- **< Open from PC >**
press to open stored measurements from PC:
- **< Open from prepASH >**
press to open measurement files directly from prepASH:
- **< Show current Measurement >**
press to see current measurement

- **< Help >**
Information about prepDATA Program

3.2 Status of analysis

Status of the device:

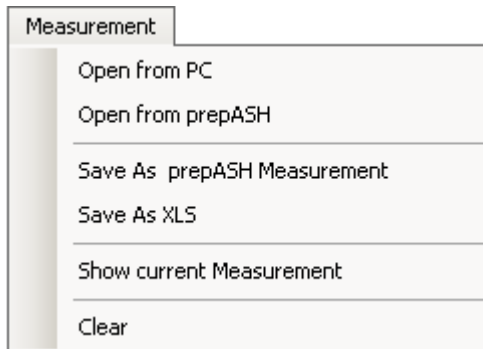


ON: Analysis is running



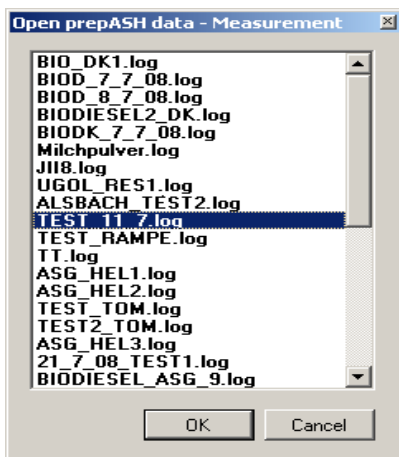
OFF: no analysis is running at the moment

3.3 Measurement files



- **< Open from PC >**
to open files directly from PC
- **< Open from prepASH >**
to open measurement files directly from prepASH.
- **< Save As prepASH Measurement >**
to save Measurement as .log file
- **< Save As XLS >**
to save Measurement as excel file
- **< Show current measurement >**
to open the actual measurement
- **< Clear >**
close the measurement

< Open from prepASH > press to open measurement files directly from prepASH:

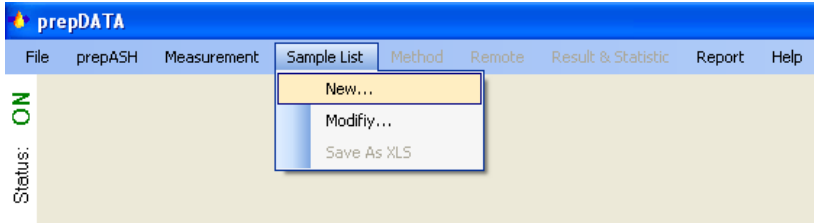


Select the file to be opened and press **< OK >** to confirm your entry.

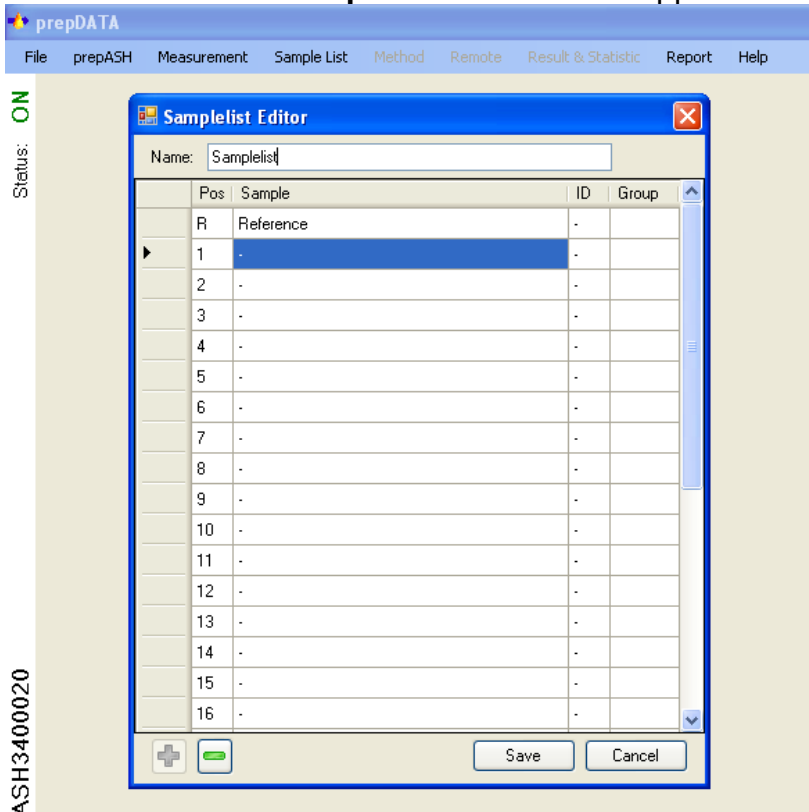
4 Create/Modify the Sample list

4.1 Create new sample list

You can create the sample list on the prepASH or with prepDATA program. To create the new sample list choose in the main Menu < **Sample List**> and then click on the < **New**>



The window with < **Samplelist Editor** > will appear.



- **Name:** enter the name of your Sample list
- **Pos.:** Position of the sample on the disc
- **Sample:** enter the name for your sample, max 16 digits.
- **ID:** enter the ID for your sample
- **Group:** enter the group of your sample. In the report of the analysis the Standard deviation, relative standard deviation and mean would be calculated for the group of samples.

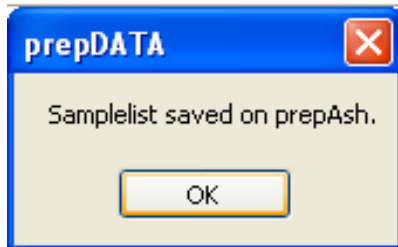


add or delete samples in the sample list

Attention: as soon as a position is set it is counted as sample (even if the sample name is not filled)

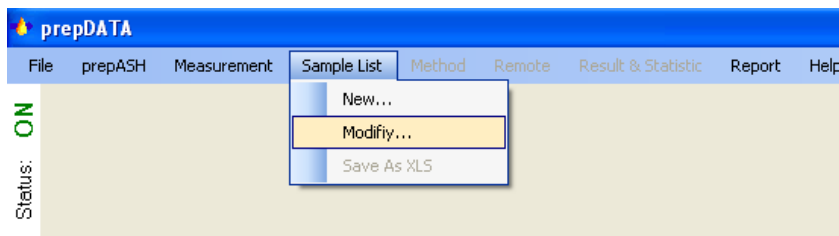


< **Save** > your sample list or < **Cancel** > the operation
 After you pressed < **Save** > the program will confirm that the sample list was saved on the prepASH

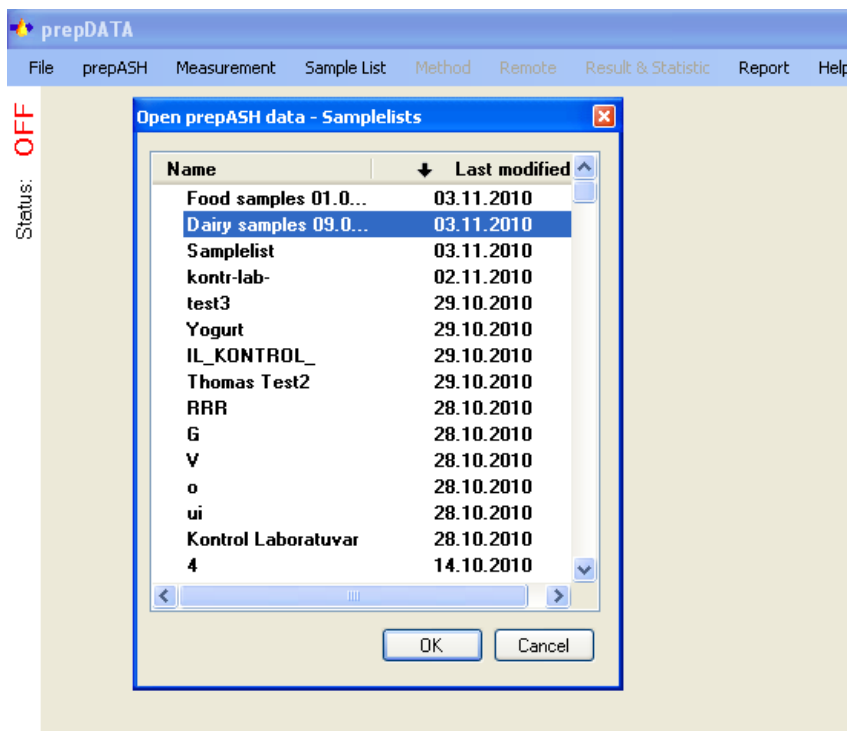


4.2 Modify existing sample list

To modify an existing sample list choose in the main Menu < **Sample List**> and then click on the < **Modify**>



The window with register of existing sample lists will appear.

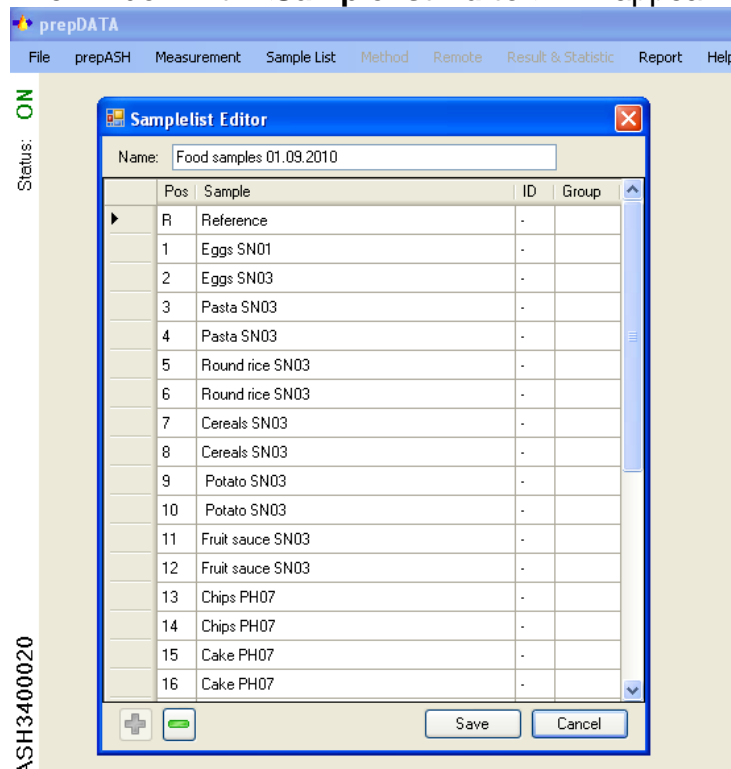


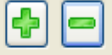
Name: you can sort the sample lists alphabetically

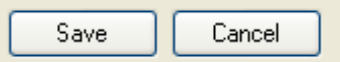
Last modified: you can sort the sample list by the last modification.

Choose the sample list which you would like to modify and press < **OK**>

The window with **<Samplelist Editor>** will appear.



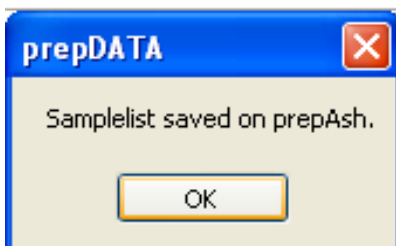
- **Name:** enter the name for your Sample List
- **Pos.:** Position of the sample on the disc
- **Sample:** enter the name for your sample
- **ID:** enter the ID for your sample
- **Group:** enter the group of your sample
-  with < +/- > you can add or delete samples in the sample list



add or delete samples in the sample list

Attention: as soon as a position is set it is counted as sample (even if the sample name is not filled)

After you pressed **< Save >** the program will confirm that the sample list was saved on the prepASH



5 Registers of the measurement file



5.1 Sample (Sample list)

| File prepASH prepStation Measurement Sample List Method Remote Result & Statistic Report Help | | | | |
|---|-------------|----|----------|------------|
| Sample | | | | |
| Sample List: MILCHPULVER29.log | | | | |
| Pos. | Sample Name | ID | Tare [g] | Weight [g] |
| R | Reference | - | 25.2368 | 25.2368 |
| 1 | MILCHPULVE | - | 21.6561 | 2.0965 |
| 2 | - | - | 26.4102 | 1.9671 |

- **Sample List:**
- **Pos.:** Position of the sample on the disc
- **Sample name:** Name of the sample
- **ID:** (second identification of the sample)
- **Tare [g]:** Tare weight (g)
- **Weight [g]:** Weight in g (sample weight)

5.2 Method

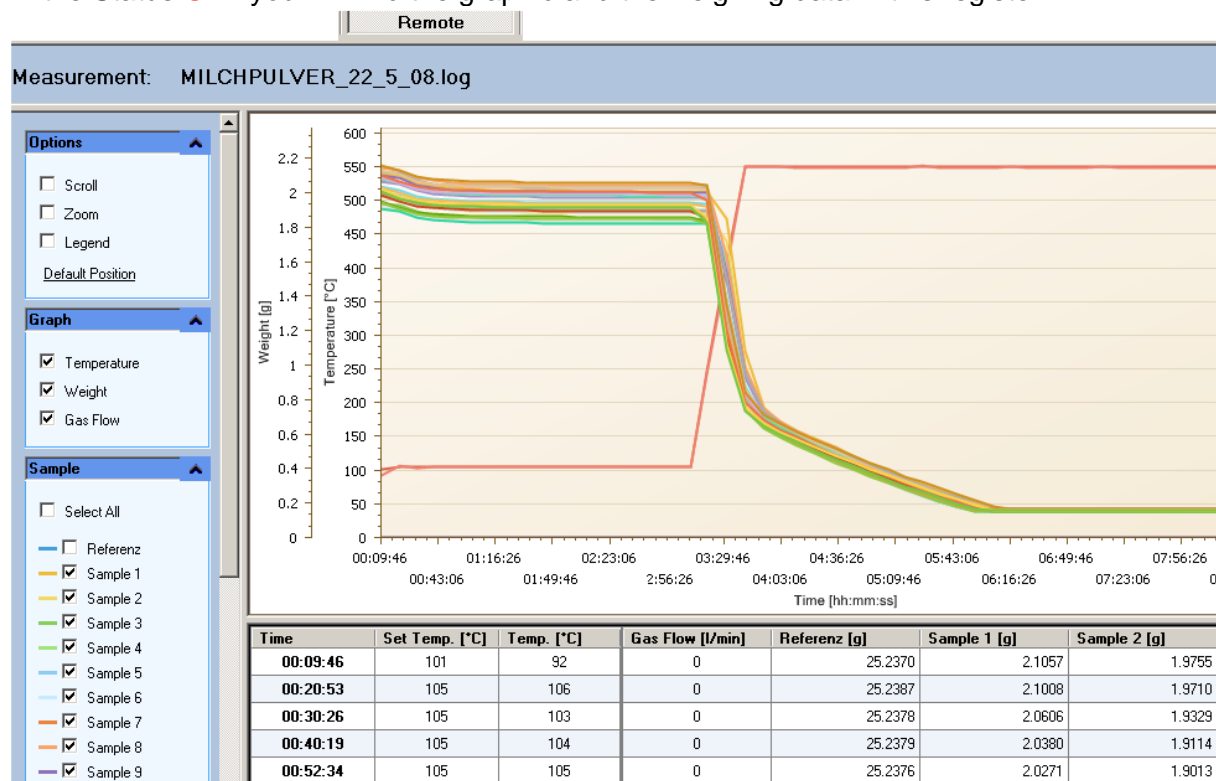
| Method | | | | | | | | |
|-------------------------|-------------|-------------|-----|------------------|------------|-------------------|-------------|---------------------|
| Method: MILCHPULVER.log | | | | | | | | |
| Step | Temp 1 [°C] | Temp 2 [°C] | Gas | Gas Flow [l/min] | Time [min] | Auto Stop [l/min] | Manual Stop | Result |
| 1 | 20 | 105 | | | 10 | | | |
| 2 | 105 | 105 | | | 180 | | | Residue [%] / Start |
| 3 | 105 | 550 | | | 30 | | | |
| 4 | 550 | 550 | | | 180 | | | Residue [%] / Start |
| 5 | 550 | 550 | | | 180 | 0.1 mg/10 | | Residue [%] / Start |

In this register the method is shown in table form

- **Method:** name of the method.
- **Step:** steps of the method.
- **Temp 1 [°C]:** set temperature in °C at the beginning of the step.
- **Temp 2 [°C]:** set temperature in °C at the end of the step.
- **Gas:** gas (oxygen, nitrogen or air), if used.
- **Gas Flow [l/min]:** gas flow in litres pro minute (3l/min, 6l/ pro min or 3+6l/min).
- **Time [min]:** set time of the step in minutes.
- **Auto Stop:** Auto Stop, if used (for example, 0.1 mg/10 min).
- **Manual Stop:** manual stop of the unite, if used.
- **Result:** calculation of the analysis results (Residue or Loss of weight in %, %o, g of the original weight or another result).

5.3 Remote

If a prepASH is in the Status **ON** the analysis can be monitored from the PC.
 In the Status **OFF** you will find the graphic and the weighing data in this register.



Options

- **Scroll:** Only available if you have zoomed in. Use the scrollbar or press the Left Mouse button and drag in a direction, to scroll
- **Zoom:** Press the <shift-key> and zoom holding the left mouse button or use The Mouse wheel to zoom
- **Legend:** Shows the legend

Graph

- **Temperature:** Display or hide the temperature curve from the graphic
- **Weight:** Display or hide the weighing curve(s) from the graphic
- **Gas flow:** Display or hide the gas flow curve from the graphic

Sample

- **Select all:** Display all samples
- **Sample:** Display or hide different samples

Temperature

- **Set temperature:** Display or hide the set temperature
- **Temperature:** Display or hide the actual temperature

Export & print Export the document in one of the mentioned document forms

5.4 Results and statistics

Click on the first column “Group statistics” in the result windows to allocate the data set to a group. For each group the statistic parameters are calculate and displayed in the “Statistic” window. They will be printed if chosen on the report register.

| Result & Statistic | | | | | | | | | | |
|---------------------------------|------|------------|----|----------|------------|--------------|----------|----------|--------------|--|
| Result: MILCHPULVER_22_5_08.log | | | | | | | | | | |
| Group Statistic | Pos. | Sample | ID | Tare [g] | Weight [g] | A-Weight [g] | A-Calc. | A-Time | B-Weight [g] | |
| | R | Reference | - | 25.2368 | 25.2368 | 25.2380 | 100.0048 | 03:10:12 | 25.2408 | |
| | 1 | MILCHPULVE | - | 21.6561 | 2.0965 | 2.0080 | 95.7773 | 03:10:12 | 0.1645 | |
| 1 | 2 | - | - | 26.4102 | 1.9671 | 1.8836 | 95.7574 | 03:10:12 | 0.1545 | |
| 1 | 3 | - | - | 22.3065 | 1.9267 | 1.8450 | 95.7616 | 03:10:12 | 0.1517 | |
| 2 | 4 | - | - | 26.1706 | 1.9079 | 1.8274 | 95.7784 | 03:10:12 | 0.1511 | |
| 2 | 5 | - | - | 27.1482 | 1.9835 | 1.8995 | 95.7655 | 03:10:12 | 0.1563 | |
| | 6 | - | - | 26.2824 | 1.9697 | 1.8863 | 95.7633 | 03:10:12 | 0.1554 | |
| | 7 | - | - | 0.0000 | -0.0004 | 0.0000 | 0.0000 | 03:10:12 | 0.0000 | |
| | 8 | - | - | 26.3664 | 2.1320 | 2.0412 | 95.7433 | 03:10:12 | 0.1676 | |
| | 9 | - | - | 23.3322 | 2.0891 | 2.0004 | 95.7537 | 03:10:12 | 0.1641 | |

| Statistic: | | | | | | | | | |
|------------|-----------------|------------|--------------|----------|--------------|---------|--------------|---------|--|
| | Group Statistic | Weight [g] | A-Weight [g] | A-Calc. | B-Weight [g] | B-Calc. | C-Weight [g] | C-Calc. | |
| ▶ mean | 1 | 1.94690 | 1.86430 | 95.75950 | 0.15310 | 7.86330 | 0.15310 | 7.86365 | |
| std | 1 | 0.02857 | 0.02729 | 0.00297 | 0.00198 | 0.01188 | 0.00198 | 0.01308 | |
| rstd | 1 | 1.46731 | 1.46405 | 0.00310 | 1.29321 | 0.15107 | 1.29321 | 0.16635 | |
| n | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| mean | 2 | 1.94570 | 1.86345 | 95.77195 | 0.15370 | 7.89835 | 0.15375 | 7.90320 | |
| std | 2 | 0.05346 | 0.05098 | 0.00912 | 0.00368 | 0.02666 | 0.00361 | 0.03408 | |
| rstd | 2 | 2.74746 | 2.73591 | 0.00952 | 2.39229 | 0.33751 | 2.34552 | 0.43125 | |
| n | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |

mean: mean

$$\text{Average } \bar{x} = \frac{\sum_{i=1}^n x_i}{n}$$

std: standard deviation

$$\text{Standard deviation } \sigma = \sqrt{\frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n(n-1)}}$$

rstd: relative standard deviation

$$\text{Relative standard deviation } rstd = \frac{std}{\bar{x}} \cdot 100\%$$

n: number of samples

- **Group statistic:** number of the group
- **Weight [g]:** original weight of the sample
- **A-Weight [g]:** weight of the sample at the 1st result calculation
- **A-Calc.:** calculation of the 1st result
- **B-Weight [g]:** weight of the sample at the 2nd result calculation
- **B-Calc.:** calculation of the 2nd result
- **C-Weight [g]:** weight of the sample at the 3rd result calculation
- **C-Calc.:** calculation of the 3rd result
- **D-Weight [g]:** weight of the sample at the 4th result calculation
- **D-Calc.:** calculation of the 4th result

5.5 Report

Reports of your analysis with prepASH are produced automatically. You are free to modify your reports in the **Report** register (see page 15 of the User manual).

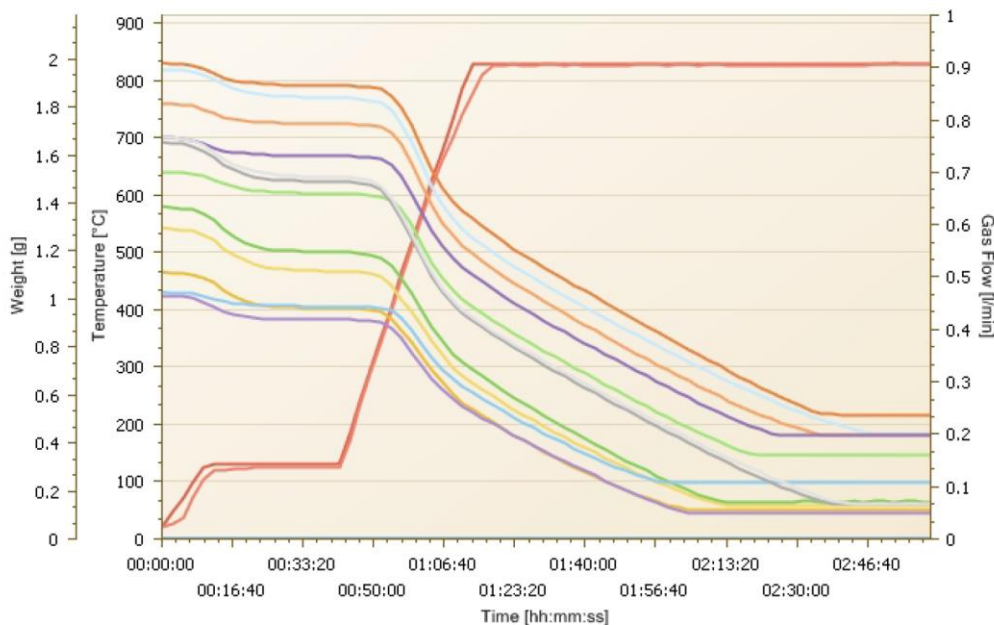


ALSBACH_212_TEST_5.log

Start Time: 7/30/2008 2:10:33 PM
 End Time: 7/30/2008 5:12:13 PM
 User prepASH: PRECISA1
 User:

Method: ALSBACH_UGOL_MET2.log

| Step | Temp 1 [°C] | Temp 2 [°C] | Gas | Gas Flow [l/min] | Time [min] | Auto Stop [mg/min] | Manual Stop | Result |
|------|-------------|-------------|-----|------------------|------------|--------------------|-------------|---------------------|
| 1 | 20 | 130 | | | 10 | | | |
| 2 | 130 | 130 | | | 180 | 0.5 %/10 | | Residue [%] / Start |
| 3 | 130 | 830 | | | 30 | | | |
| 4 | 830 | 830 | | | 480 | 0.5 mg/10 | | Residue [%] / W0 |



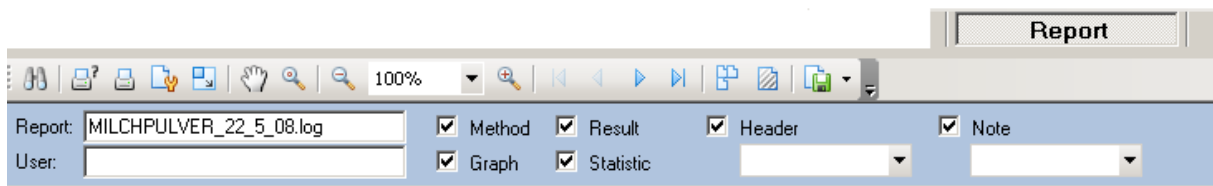
Result:








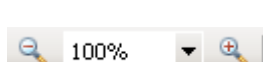




| Group | Pos. | Sample | ID | Tare [g] | Weight [g] | Result | Weight [g] | Calc. | Time |
|-------|------|-----------|----|----------|------------|--------|------------|----------|----------|
| | R | Reference | - | 35.9926 | 35.9926 | A | 35.9940 | 100.0039 | 00:21:56 |
| | | | | | | B | 36.0031 | 100.0253 | 01:32:48 |
| 1 | 1 | 62_A1 | - | 36.6316 | 1.1141 | A | 0.9606 | 86.2184 | 00:41:31 |
| | | | | | | B | 0.1178 | 12.2651 | 02:16:49 |
| 1 | 2 | 62_A2 | - | 32.7758 | 1.2960 | A | 1.1154 | 86.0652 | 00:41:42 |
| | | | | | | B | 0.1420 | 12.7342 | 02:24:23 |
| 1 | 3 | 62_A3 | - | 33.5372 | 1.3859 | A | 1.1958 | 86.2802 | 00:41:54 |
| | | | | | | B | 0.1559 | 13.0391 | 02:24:34 |

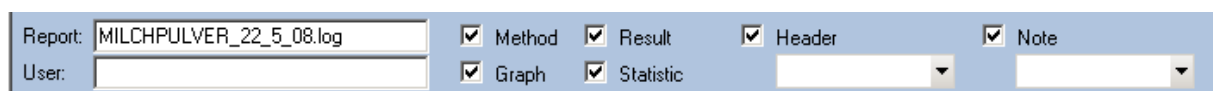
Statistic:

| Group: 1 | A-Result | A-Calc. | B-Result | B-Calc. |
|----------|----------|----------|----------|----------|
| mean | 1.09060 | 86.18793 | 0.13857 | 12.67947 |
| std | 0.11955 | 0.11069 | 0.01928 | 0.38989 |
| rstd | 10.96141 | 0.12843 | 13.91435 | 3.07499 |
| n | 3 | 3 | 3 | 3 |

5.5.1 Main menu of the report register



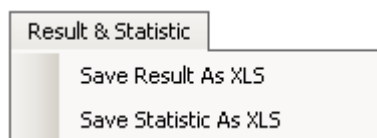
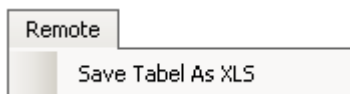
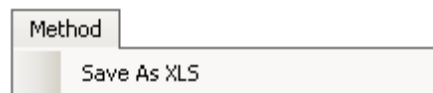
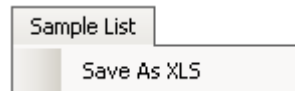
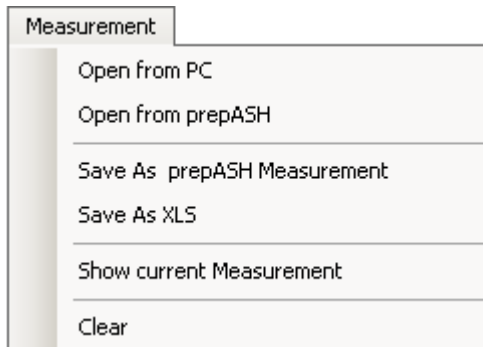
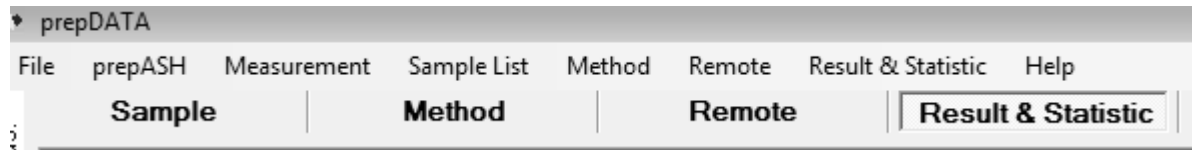
-  Search any words or numbers in the report
-  Print the report (by choosing the printer first)
-  Print the report (directly on the standard printer)
-  Page settings
-  Scale the page(s)
-  Hand tool to scroll up and down
-  Magnifier
-  Zoom out / Choose Page dimensions- / Zoom in
-  Change the page
-  Choose the presentation of the pages
-  Watermark of text or pictures
-  Export the report into another document



- **Report:** name of the report
- **User:** name of the user
- **Method:** display or hide the method
- **Graph:** display or hide the graphic
- **Result:** display or hide the results
- **Statistic:** display or hide the statistics
- **Header:** write your notes and display or hide them.
- **Note:** write your notes and display or hide them

6 Export and save files

The graphics and data of the registers can be exported into excel program:



- **< Save As prepASH Measurement >**
to save the whole measurement data in .log file
- **< Save As XLS >**
save the measurement as excel file
(only if Excel is installed on the PC)

- **< Save As XLS >**
to save the Sample list as excel file.

- **< Save As XLS >**
to save the Method as excel file.

- **< Save Tabel As XLS >**
to save information in the Remote register as excel file.

- **< Save Result As XLS >**
to save Results as excel file.
- **< Save Statistic As XLS >**
to save Statistic as excel file.