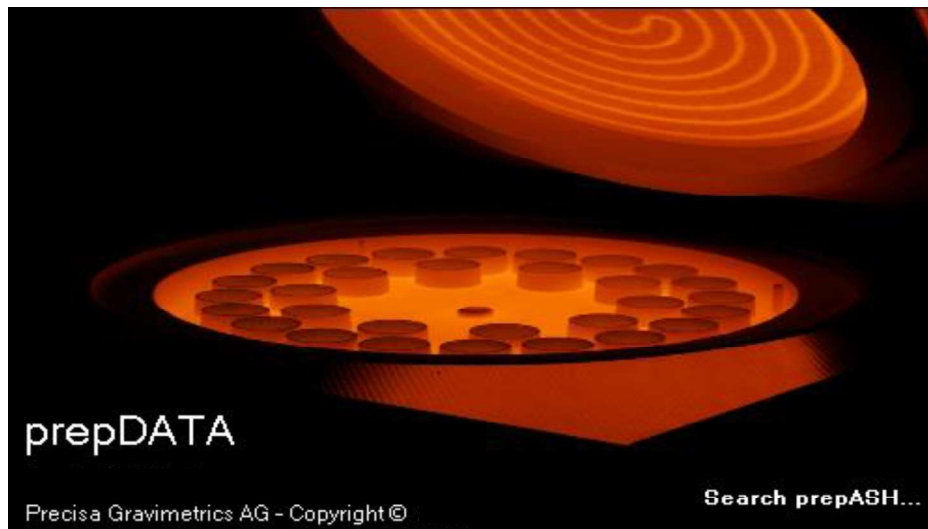


# prepDATA

PC Software for  
prepASH Series 340

User Manual



350-8136-000a8

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# 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

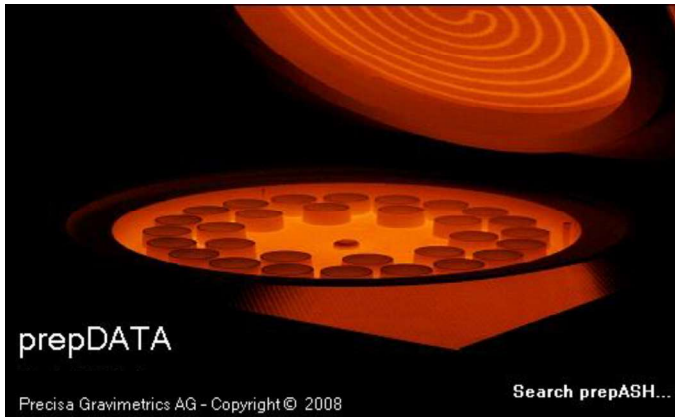
1. Select < **Startmenu** > **Programs** > **Precisa** > **prepDATA** > **Uninstall** >
2. Follow the instructions on the display

## 2 Start prepDATA

Open the Program by double-clicking on the desktop link



prepDATA is started.



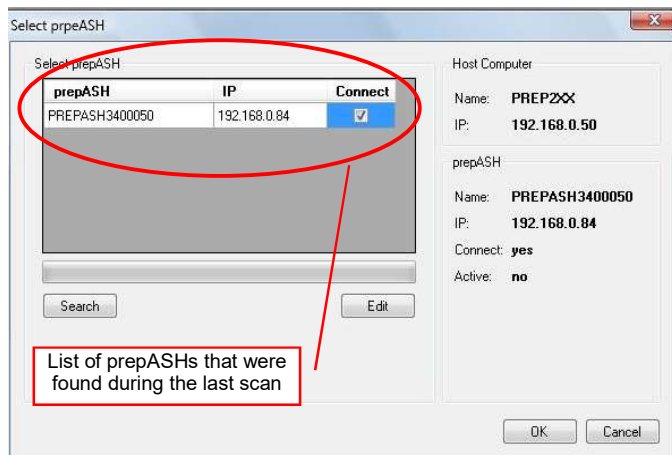
**Note:** Checking the network may take several minutes.

### 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 appear 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.

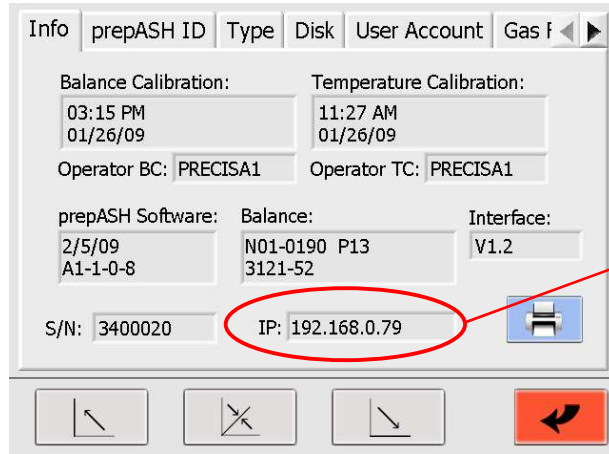
**Important advice:**

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

Contact your own network administrator for network problems.

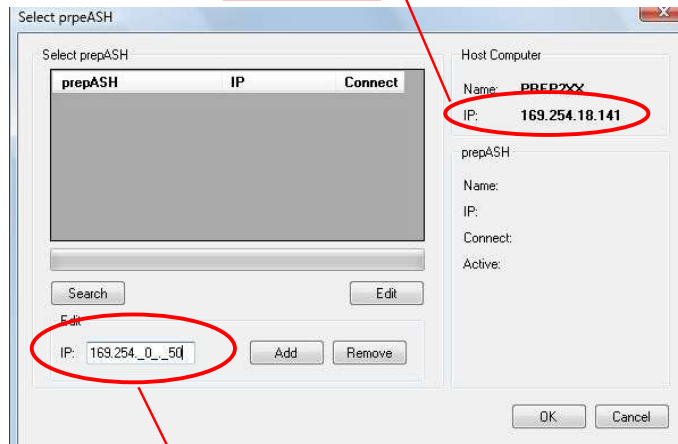
### 2.1.2 prepASH and computer are connected directly over a crossed network cable

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

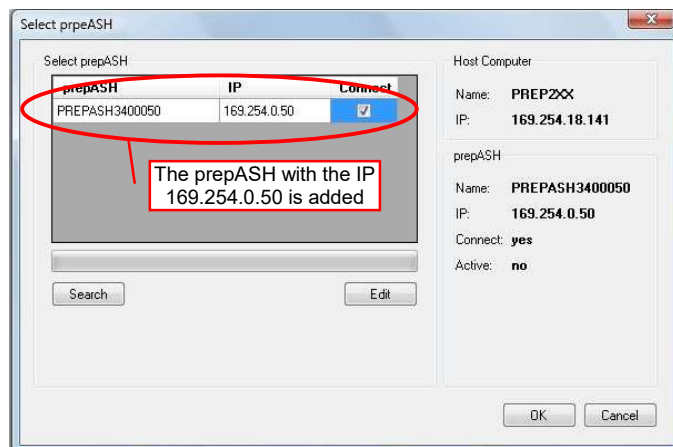


Enter here the prepASH IP address

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.



#### 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

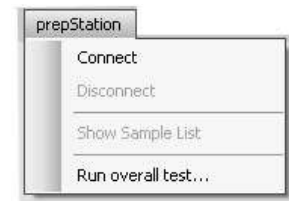
After the program starts the following main menu will appear.



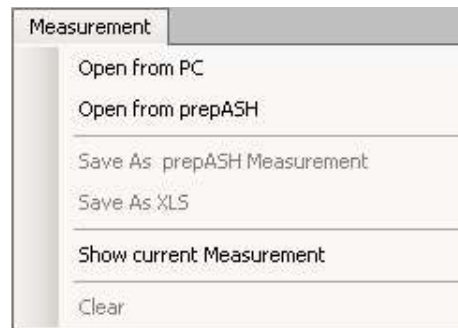
- **< Exit >**  
to finish the prepDATA program



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



- only available with prepSTATION connected
- Connect:** connect the prepSTATION
- **Disconnect:** Disconnect prepSTATION
- **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:

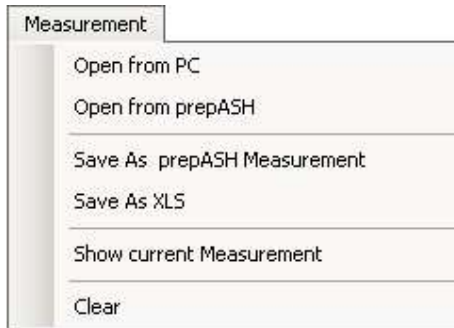


**ON:** Analysis is running



**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:

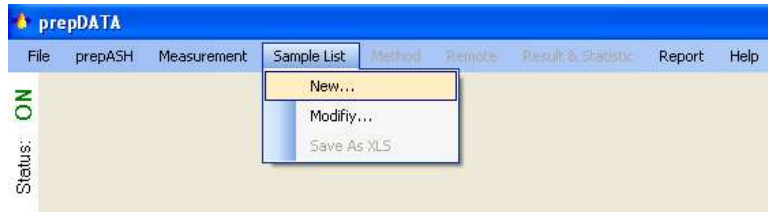


Select the file to be opened and press **< OK >** to confirm your entry.

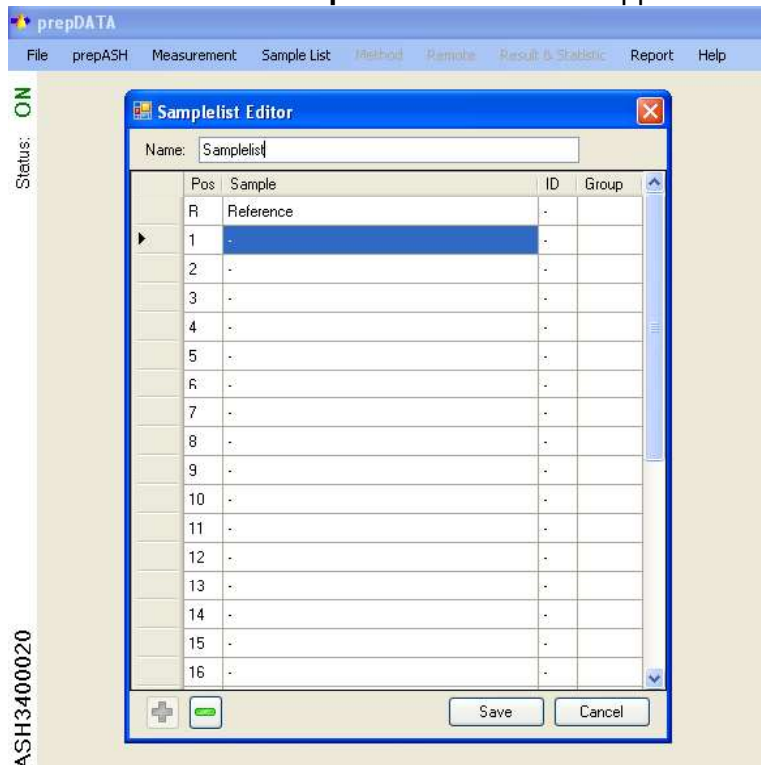
## 4 Create/Modify the Sample list

### 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.



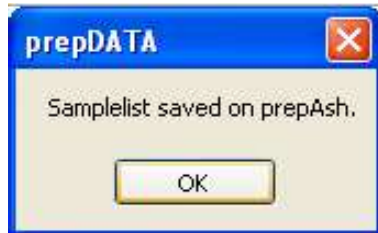
add or delete samples in the sample list

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



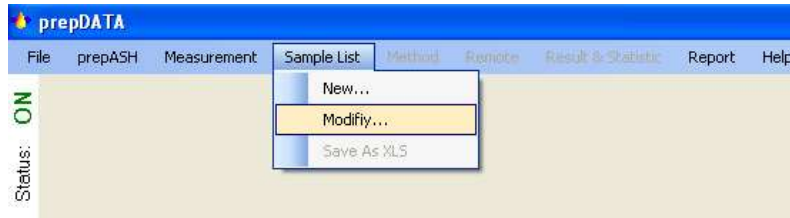


< **Save** > your sample list or < **Cancel** > the operation  
 After you pressed < **Save** > the program will confirm that the sample list was saved on the prepaSH

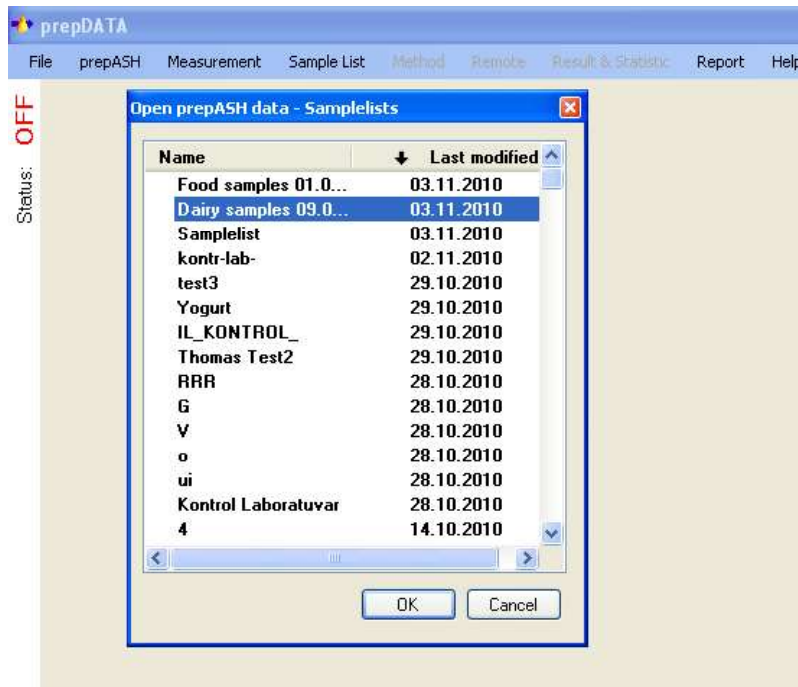


### 4.2 Modify existing sample list

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

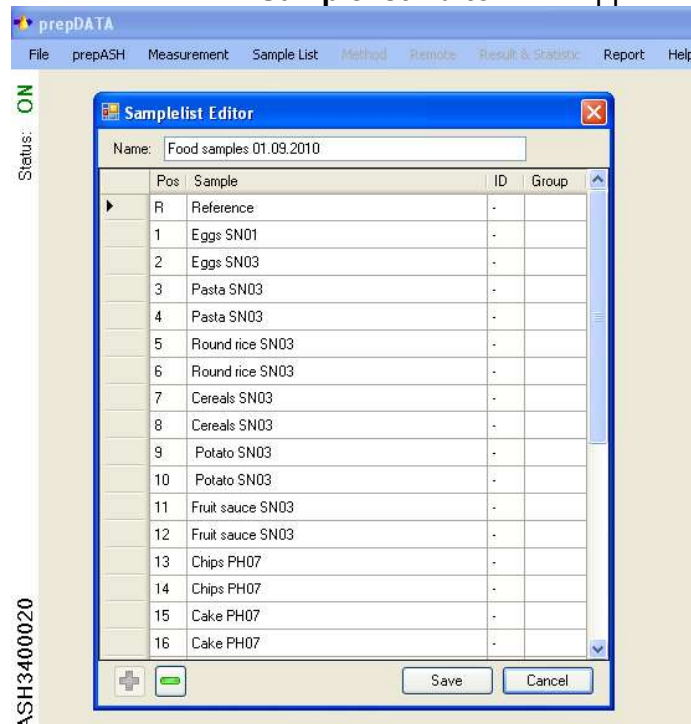



The window with register of existing sample lists will appear.



**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.



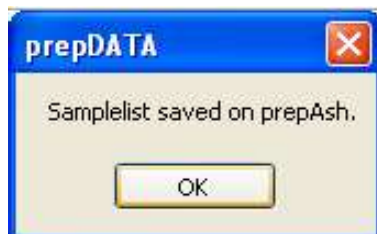
- **Name:** enter the name for your Sample List
- **Pos.:** Position of the sample on the disc
- **Sample:** enter the name for your sample
- **ID:** enter the ID for your sample
- **Group:** enter the group of your sample
-  with < +/- > you can add or delete samples in the sample list



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

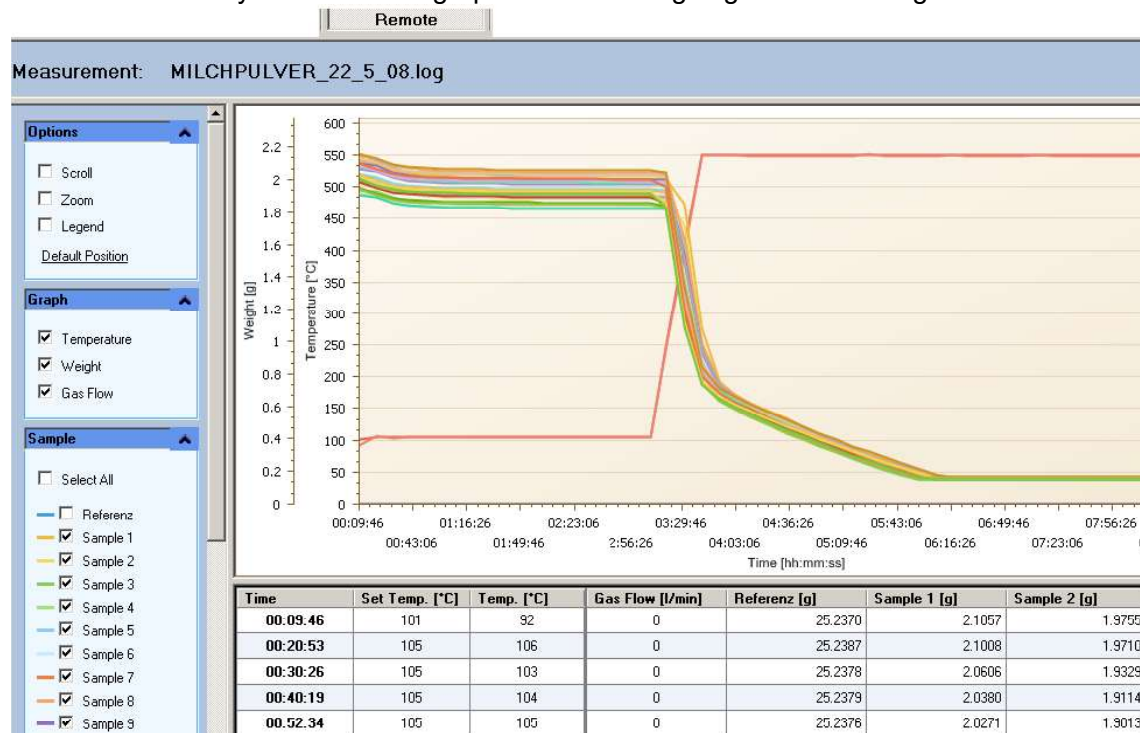
Method: MILCHPULVER.log								
Step	Temp 1 [°C]	Temp 2 [°C]	Gas	Gas Flow [l/min]	Time [min]	Auto Stop [1/min]	Manual Stop	Result
1	20	105			10			
2	105	105			180			Residue [%] / Start
3	105	550			30			
4	550	550			180			Residue [%] / Start
5	550	550			180	0.1 mg/10		Residue [%] / Start

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 %, %, 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	95.7533	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	7.89935	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 1<sup>st</sup> result calculation
- **A-Calc.:** calculation of the 1<sup>st</sup> result
- **B-Weight [g]:** weight of the sample at the 2<sup>nd</sup> result calculation
- **B-Calc.:** calculation of the 2<sup>nd</sup> result
- **C-Weight [g]:** weight of the sample at the 3<sup>rd</sup> result calculation
- **C-Calc.:** calculation of the 3<sup>rd</sup> result
- **D-Weight [g]:** weight of the sample at the 4<sup>th</sup> result calculation
- **D-Calc.:** calculation of the 4<sup>th</sup> 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).

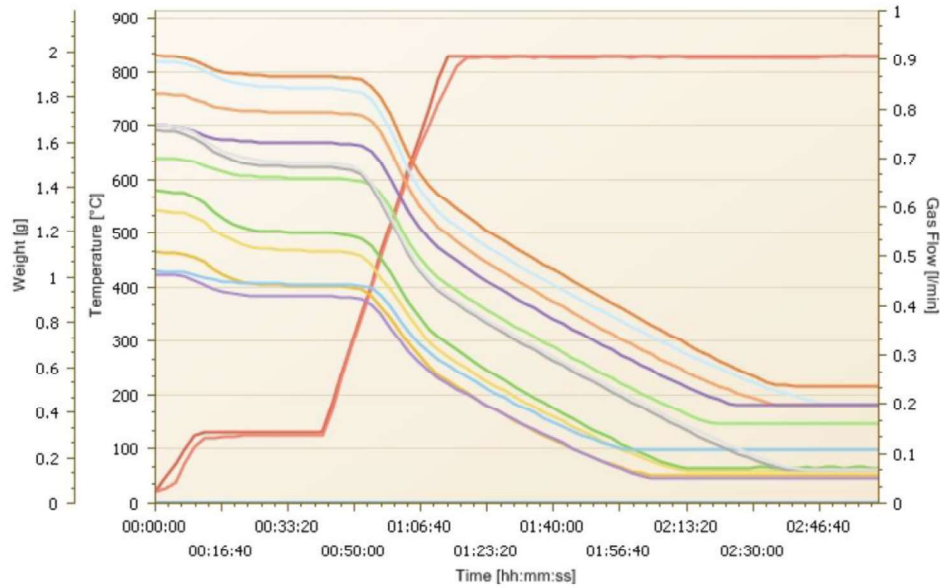


### ALSBACH\_212\_TEST\_5.log

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



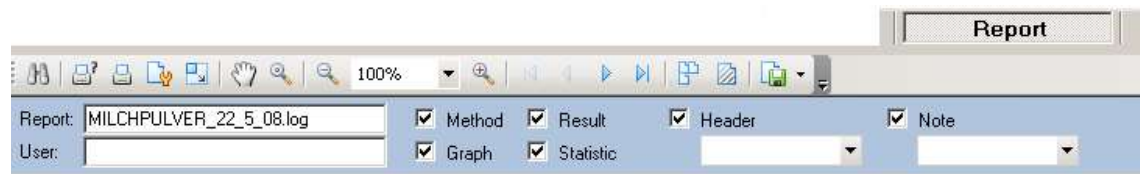
Result:








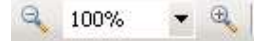




Group	Pos.	Sample	ID	Tare [g]	Weight [g]	Result	Weight [g]	Calc.	Time
	R	Reference	-	35.9926	35.9926	A	35.9940	100.0039	00:21:56
						B	36.0031	100.0253	01:32:48
1	1	62_A1	-	36.6316	1.1141	A	0.9606	86.2184	00:41:31
						B	0.1178	12.2651	02:16:49
1	2	62_A2	-	32.7758	1.2960	A	1.1154	86.0652	00:41:42
						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

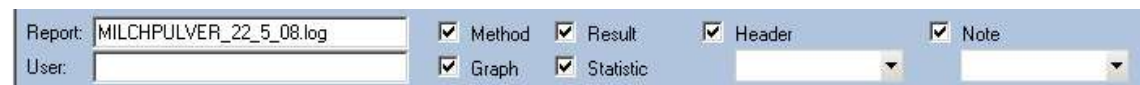
Statistic:

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



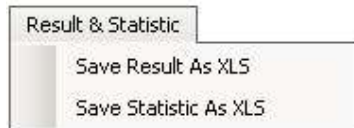
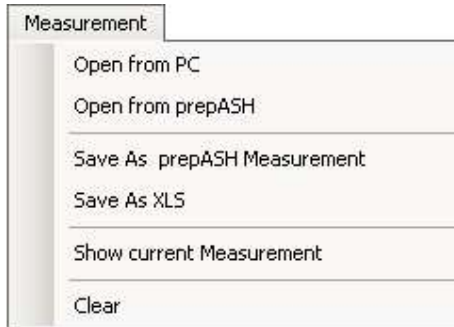
-  Search any words or numbers in the report
-  Print the report (by choosing the printer first)
-  Print the report (directly on the standard printer)
-  Page settings
-  Scale the page(s)
-  Hand tool to scroll up and down
-  Magnifier
-  Zoom out / Choose Page dimensions- / Zoom in
-  Change the page
-  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.