

FROM: dominguez, luis  
DATE: 11/13/2006  
TO: qian, nancy x  
SUBJECT: Re-4: FW: GSH and Smoking machine{F}

Nancy,

Please check this out.

LUIS

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From: Crumpler, Linda  
Sent: Monday, November 13, 2006 8:30 AM  
To: Dominguez, Luis; Qian, Nancy X  
Subject: FW: Re-4: FW: GSH and Smoking machine

Linda A. Crumpler

Sr. Director Tobacco & Smoke Chemistry

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Mobile: +1 336-682-9910

email: crumpll@rjrt.com

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From: schade@borgwaldt.de [mailto:schade@borgwaldt.de]  
Sent: Monday, November 13, 2006 8:05 AM  
To: Crumpler, Linda  
Cc: klauck@borgwaldt.de  
Subject: Re-4: FW: GSH and Smoking machine

Dear Linda,

please find enclosed the Operating Instructions of LM1 which is the new name for the RM1 plus. It has not been changed since 1999 and the exhaust rate function is not included.

Best regards

Katrin

Katrin Schade

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Manager Technical Application

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<<http://www.borgwaldt.de/>> <http://www.borgwaldt.de>

Original Message

processed by David InfoCenter

Subject:

RE: Re-2: FW: GSH and Smoking machine (08-Nov-2006 18:33)

From:

Crumpler, Linda <<mailto:CRUMPLL@RJRT.com>> <[CRUMPLL@RJRT.com](mailto:CRUMPLL@RJRT.com)>

To:

[schade@borgwaldt.de](mailto:schade@borgwaldt.de)

Dear Katrin,

Thanks so much for your help. I have one more request please. We have located a RSM1/Plus with appropriate software, but we don't have an operations manual. Do you have an electronic version that you can send me?

Thanks,

Linda

Linda A. Crumpler

Sr. Director Tobacco & Smoke Chemistry

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From: schade@borgwaldt.de [mailto:schade@borgwaldt.de]  
Sent: Tuesday, November 07, 2006 10:46 AM  
To: Crumpler, Linda  
Cc: Dominguez, Luis; Qian, Nancy X  
Subject: Re-2: FW: GSH and Smoking machine

Dear Linda,

When switching on the RM1, the version is displayed immediately.

Best regards,

Katrin

Katrin Schade

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Manager Technical Application

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Original Message

processed by David InfoCenter

Subject:

RE: FW: GSH and Smoking machine (07-Nov-2006 16:01)

From:

Crumpler, Linda <mailto:CRUMPLL@RJRT.com> <CRUMPLL@RJRT.com>

To:

[schade@borgwaldt.de](mailto:schade@borgwaldt.de)

Dear Katrin,

Yes thank you that is very useful information. How do I tell which version of software we have?

Linda

Linda A. Crumpler

Sr. Director Tobacco & Smoke Chemistry

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From: [schade@borgwaldt.de](mailto:schade@borgwaldt.de) [mailto:[schade@borgwaldt.de](mailto:schade@borgwaldt.de)]

Sent: Tuesday, November 07, 2006 6:46 AM

To: Crumpler, Linda

Cc: [ibriel@borgwaldt.de](mailto:ibriel@borgwaldt.de); [degenhard@borgwaldt.de](mailto:degenhard@borgwaldt.de); [klauck@borgwaldt.de](mailto:klauck@borgwaldt.de); [naruga@borgwaldt.de](mailto:naruga@borgwaldt.de)

Subject: Re: FW: GSH and Smoking machine

Dear Linda,

it depends on the software version of the RM1/Plus whether it works or not. With the following software versions the "outblow time " can be set:

R72\_10;

R72\_11;

R72\_13;

R72\_15;

R72\_17;

R72\_18

To set to "out-blow" time proceed as follows: Activate the function "out-blow" in the parameter's menu. If it is activated, the out-blow time can be set in puff parameters.

The software allows a out-blow time of 2 to 99 seconds in general. The time which can be set depends of course on the puff pause and the puff volume. The maximum out-blow time is always 1 second smaller than the puff pause.

Which out-blow time is best for which puff volume should be checked by experiment, to avoid too high or too low piston speeds. Unfortunately we presently do not have any RM1/plus here to check it for you.

If you have a software version which is not on the list, it is also possible to modify the software.

I hope this information help you to continue with this project.

Best regards

Katrin

Katrin Schade

\*\*\*\*\*

Manager Technical Application

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Original Message

processed by David InfoCenter

Subject:

FW: GSH and Smoking machine (06-Nov-2006 19:04)

From:

Crumpler, Linda <mailto:CRUMPLL@RJRT.com> <CRUMPLL@RJRT.com>

To:

schade@borgwaldt.de

Hi Katrin,

Please see the message below. One of my chemists is trying to duplicate the work described in Dr. Scherer's poster. Gerhard told us he used on old RM 1/G to do the work. We do not have a RM 1/G, but we do have a couple of RM1/Plus. Nancy called Richmond and was told the RM1/Plus could not be used to replicate Gerhard's work, but I thought I would double check with you to make sure it couldn't be made to work.

Thanks,

Linda

Linda A. Crumpler

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From: Qian, Nancy X  
Sent: Wednesday, October 25, 2006 4:24 PM  
To: Crumpler, Linda  
Subject: GSH and Smoking machine

Hi, Linda:

I wonder if I could use a few minutes of your time to talk to you about the Glutathione (GSH) project that I have been working on since last month. I might also ask for help from you in finding the right smoking machine for us.

In this proposed method, I have already developed a LC procedure to study GSH consumption by products of cigarette smoke (CS)---mainly acrolein and crotonaldehyde. The smoking part is very similar to the current carbonyl method by the use of impingers with GSH trapping solution in it. We performed both FTC and ALT puff smoking in lab 207 using the linear smoking machines for the carbonyl method. So far we have identified a problem, especially with the ALT puff (60/30/2) smoking, that the 2 second puff duration is not long enough for the reaction between GSH and CS. I did a lot of literature search and found Dr. Gerhard Scherer from Germany (you probably know him) had done similar work and presented a poster at a Coresta meeting. What they did was to use a one-channel smoking machine (model RM 1/G, Borgwaldt) and performed the regular 35cc/60/2 smoking, then the 35 ml puff is then pressed from the syringe through the GSH solution over 10 seconds. In this way, they seemed to have achieved very good trapping efficiency and reproducibility.

I have looked around in this building to try to find any single-port machine that might fit the above criteria, but not successful. Could you help me find a smoking machine that can perform satisfactorily? Attached is the poster that Dr. Scherer sent to me last month. It has a picture of the smoking machine.

Thank you very much. <<GSH\_Poster.pdf>>

Nancy

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