

This document shows you how to view data from your MARS 6 and how to access Activity Logs and User Levels.

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How to Update System Software on MARS 6

The MARS 6 system software should be updated when a revised version is released. The system software can be obtained from CEM's website <u>www.cem.com</u>. One user should be responsible for updating the software.

- 1. Create a CEM user account. If a CEM user account has been created previously, proceed with step 2.
 - a. Access the CEM website <u>www.cem.com.</u>
 - b. Locate "Account" in the blue bar located at the top of the screen.
 - c. Select "Create an Account."
 - d. Provide the applicable customer and product information. The serial # is located on the product tag on the left side panel of the instrument.
 - e. Once all information has been entered, select "Register."

NOTE: If the product tag cannot be located, contact the CEM Corporation Analytical Department at 800-726-3331 or 704-821-7015.

- 2. Log into the CEM website www.cem.com
 - a. Locate "Account" in the blue bar located at the top of the screen.
 - b. Enter Email Address and Password.
 - c. Click "Login."
- 3. Select "MARS 6" from the "Products" menu.
- 4. Select "Resource Library" then "Software." The most current version of system software will be available for download.
- 5. Download the software from <u>www.cem.com</u> onto a USB flash drive but do not place the file in a folder.

NOTE: The USB flash drive supplied with the MARS 6 is suitable for updating software

NOTE: Software files will follow the "mars6_xx.xx.cib" file format.

- 6. Install the USB flash drive containing the latest MARS 6 software into the USB port on the upper section of the right side panel of the instrument.
- 7. With the MARS 6 home screen displayed, select the System Menu icon at the bottom right corner of the screen.



8. Select "Tools."



9. Select "Update Manager."

Tools		
System	Status	
Diagnostics	Inner iWave Temperature (°C)	30
Power	Outer iWave Temperature (°C)	30
iWave	Vessel Detector (Inner)	ON
Turntable	Vessel Detector (Outer)	ON
Activity Log	Vessel Detector (Type)	ON
Update Manager	Flame Detector	OFF
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10. Select "Select Update>."

Tools		
System	Software	
Diagnostics	Available	[Select Update] >
Power	Storage Label	
iWave	Folder	
Turntable	Force Update	No
Activity Log		nstall
Update Manager		
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11. Select the software version from the pop-up menu and press "OK."



12. Press "Install."

Tools			
System	Software		
Diagnostics	Available		mars6_1.45.cib >
Power	Storage Label		USB DISK
iWave	Folder		Not in a Folder
Turntable	Force Update		No
Activity Log		Install	
Update Manager			
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CAUTION

Firmware update requires approximately 10 - 20 minutes for completion. The system will reboot several times and may display a blank screen. **DO NOT** turn the instrument off during the loading process.

13. Plug a keyboard into one of the USB ports on the right side of your MARS 6



14. Plug a USB stick into the port on the top right side. (Use the blue USB stick provided with the MARS 6 unit) It may take up to 30 seconds for the MARS 6 to recognize the USB stick.



15. Press "Ctrl + O" (letter "O") on the keyboard to save the screenshot to the USB stick. An onscreen notification will appear if you have installed v1.40 or later of the MARS 6 software. For previous versions of software the screenshot will be saved; however, an onscreen notification will not appear. Press "OK" to clear the notification.



- 16. Remove USB and plug into a computer.
- 17. The screenshot will be saved into the following folder: cem \rightarrow mars6 \rightarrow screenshots

How to View Run Data on MARS 6

Vessel temperatures are viewable in Run Data. Scroll down and a series of vessel positions are listed with either a " \checkmark " or an " \star " with temperature value. There are two ways to view run data on the MARS 6.

Method 1.

1. Load the method for which you wish to view data. This can be a Classic or One Touch method



2. Press the "i" button in the top right corner of the screen

Run - Plant	Material		(i) 🔇
	Time Temperature ^{Status} ^{Stage}	: °C Idle 	ĩŴ
			Start
A €		10	40 🌣

3. Press the date and time for the run you wish to view



4. Scroll up and down to view the Graph, Run Details, and Sample Information. A "✓" indicates that the vessel position reached the desired set point.



"*" with temperature value indicates the highest temperature that position obtained

Run Data - Pl	ant Material		
Summary	vessei iype		Apress
May 22 2017 2:58 PM	Vessel Count		24
May 17 2017 2:00 PM	Sample Information # Temp (°C)		
May 17 2017 12:33 PM	17 × -189		
May 17 2017 11:01 AM	18 🗸		
May 17 2017 10:58 AM	19 🗸		
Apr 27 2017 3:20 PM			
↑ €	4	:43 PM	1 🗘

Method 2

1. Select either Classic or One Touch Methods from the Home screen. Touch and perform long hold on the method whose run data you wish to view.



2. Touch the menu button for additional options

Meth	ods		\bigotimes	(i) (b)		⊕ ≡
CEM	CEM	CEM	CEM	CEM		CEM
Make-up, Liquid	Mill Tailings (Step 1)	Mill Tailings (Step 2)	Nickel- Chrome Alloy	Nylon	Oils Study	Paint - Water Based
Paint Chip	CEM	CEM	Platinum	Polyethylene	Polypropyler	CEM
	Ð	Material	Metal		10	(Step 1)

3. Touch View Run Data from the menu options



4. Press the date and time for the run you wish to view



5. Scroll up and down to view the Graph, Run Details, and Sample Information. A "✓" indicates that the vessel position reached the desired set point.

Run Data - Plant Material		> (
10/31/2016 09:33	vessei iype	xpress
09/26/2016 10:08	Vessel Count	24
06/24/2016 14:14	Sample Information	
06/24/2016 09:59	# <u>Temp (°C)</u>	
06/23/2016 15:49		
06/23/2016 15:22		
06/23/2016 14:01	15 V	
\$ C		
		10:44 🌣

"*" with temperature value indicates the highest temperature that position obtained.

Run Data - Plant Material 🛛 🕞 🕞				(
Summary	vessei iype		Χ	press
May 22 2017 2:58 PM	Vessel Count			24
May 17 2017 2:00 PM	Sample Information			
May 17 2017 12:33 PM	# Temp (°C)			
May 17 2017 11:01 AM				
May 17 2017 10:58 AM	19 🗸			
Apr 27 2017 3:20 PM	ـــــــــــــــــــــــــــــــــــــ			
♠ €	4	:43	РМ	₽

How to Take a Screenshot of a Graph on MARS 6

- 1. Recall the graph according to the "How to View Run Data on a MARS 6" procedure above (Method 1: steps 1-3, or Method 2: steps 1-4)
- 2. Follow steps 1-5 of the "How to take a Screenshot on MARS 6" procedure above

Run Data: Temp/ Power/ Pressure (if applicable) is exported in ".csv" format.

- 1. Plug a USB stick into the MARS 6
- 2. Load the method for which you want to export run data according to the "How to View Run Data on a MARS 6" procedure above.
- 3. Press ito *Export* Run Data.



4. The MARS 6 will display the message below during data export.



External Printers: Refer to MARS 6 Printer Selection Guide to select and install compatible external printer.

The internal printer provides the Power/Temp graph, vessel temperatures as well as other selectable items within <Settings/ Run>.

Graph - prints graph

Data - prints Power and Temperature data at time intervals. **Be careful**, this is a long printout due to time intervals in seconds. Default is "OFF".

Report - activates the selections that are made in the "Data Report" section below, example "Temperature".

These settings will print the temperatures and "✓" or "×" viewable in Run Data. Be sure to Save

vour settings before exiting this screen.

Settings		
General	Data Print	
System	Graph	On
Localization	Data	Off
Date/Time	Report	On
Users	Data Report	
Run	Temperature	On
Method	Sample ID	Off
		4:39 PM 🗘

Other parameters are selectable within "Data Report" for reference.

Settings		
	рата керогт	
General	Temperature	On
System	Sample ID	Off
Localization		
Date/Time	Description	Off
Users	Reagents	Off
Run	Mass	Off
Method	Volume	Off
♠ €		3:56 PM 🛱

1. To print data or a report or a screenshot of the graph load run data according to "How to View Run Data on a MARS 6" and touch the print icons accordingly.

This *Print* icon will print the selected Data Print and Data Report parameters to either printer.

This **Print** icon will print a screenshot of the graph only to either printer.

Run Data - P	lant Material		Data Print/Rep	ort
Summary	Graph			
12/13/2016 11:05	250 200	1,800	Screenshot	
10/31/2016 09:33	B 150			
09/26/2016 10:08				
06/24/2016 14:14		- 300	•	
06/24/2016 09:59	0 5 10 15 20 2 Time (min)	25 30 35		
06/23/2016 15:49	Run Details			
♠ €		10:39 🛱	£	

How to View the MARS 6 Activity Log

The Activity Log can be filtered by date range and user. The results can be exported to a ".pdf" file or printed using the internal printer.

1. From any screen select the gear icon.



4.

5.

Export to non-editable ".pdf" file. (Preferred Method)

User: Administrator
Date/Time: Jul 13 2017 8:28 AM
Action: Add/Create
Details: Method (njj)
User: Administrator
Date/Time: Jul 13 2017 8:28 AM
Action: Add/Create
Details: Method (bh)
User: Administrator
Date/Time: Jul 12 2017 3:35 PM
Action: Run
Details: Method (KOH Steg 1)

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6. *Print* **Note: Activity log has a lot of data and if it is not filtered to a specific user and date range, then the printout will be very long. (Be careful)

"Administrators" have the ability to create, edit, and delete any non-CEM method. "Users" have the ability to create, edit, and delete their individual methods only. "Basics" have the ability to run methods only, no create, edit, or delete capability.

Select Group		
Administrators		
Users		
Basics		
ок	Cancel	

Must "Logout" from one User ID before logging in as a different User ID <Settings/ Users>



Confirm Logout "Yes"



Select new User ID and enter Password

Administrator	
bob	Enter Password
ME guest	Login Clear

MARS 6 Desktop Applications Software = no longer supported for new instrument sales iLink = current offering for MARS 6 interface package

iLink Compatibility

- Window 8, 8.1 and 10 are compatible Operating Systems
- Operating system is in English
- Recommended controller is Microsoft Surface

iLink Functionality

- Access the Previous Run Data with filtering capabilities
- Add notes after the run is complete
- View individual vessel temperatures, graphs, method parameters, MARS 6 parameters.
- Export Method run report in non-editable format

A comprehensive iLink instruction manual is available, CEM PN 600764.