

## Title

## System Power On/Off Procedure

<b>Document manager</b>	VP
<b>Component</b>	System
<b>System</b>	MCO based Systems
<b>Serial number</b>	all
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(Only list most recent modifications)

Send to log

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## 1.1 Explanation of symbols

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### **DANGER**

Indicates a hazardous situation, which, if the necessary safety precautions are not adhered to, will result in death or serious injury. This signal word is limited to the most extreme situations.

The **DANGER** safety label will include a hazard symbol specific to the nature of the hazard, such as high voltages.

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### **WARNING**

Indicates a hazardous situation, which, if the necessary safety precautions are not adhered to, could result in death or serious injury.

The **WARNING** safety label will include a hazard symbol specific to the nature of the hazard, such as high voltages.

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### **CAUTION**

Such instructions warn of a possible injury to personnel. The instructions regarding avoidance of any danger must be followed. The **CAUTION** safety label will include a hazard symbol specific to the nature of the hazard, such as irritant substances.

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### **NOTICE**

This symbol calls your attention to a potential danger.

Disregarding this warning can lead to damages of the system or the environment.

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Special notes and background information are marked by using the light bulb symbol, as shown in this paragraph.

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Such references refer to information in other documents, which will be clearly identified. Such documents may include system manuals or third party documentation.

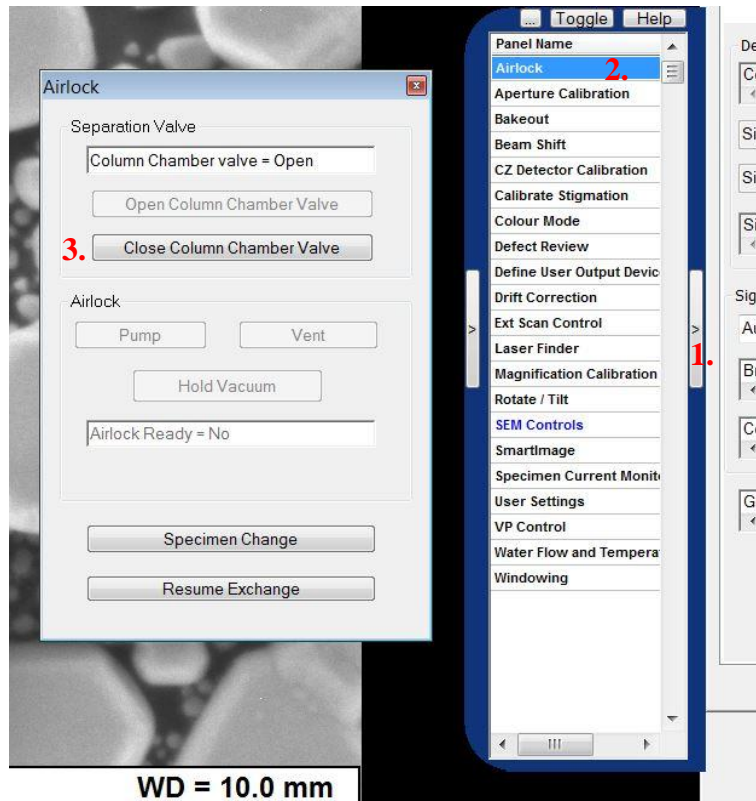
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## 2 Power OFF the System

- STEP 1 ►** Turn OFF EHT
- STEP 2 ►** Shutdown GUN
- STEP 3 ►** Close the column chamber valve (**Image 1**)

**Image 1**

- 1. Open the Panel
- 2. Open Airlock-Panel
- 3. Close Column Chamber Valve



- STEP 4 ►** Shutdown Raith SW
- STEP 5 ►** Shutdown SmartSEM SW
- STEP 6 ►** Shutdown EMServer
- STEP 7 ►** Close all running software on PC
- STEP 8 ►** Shutdown the PC
- STEP 9 ►** Switch OFF all other electronic in the rack
- STEP 10 ►** Press the “STANDBY” button
- STEP 11 ►** Wait until the yellow light stops blinking and is permanent glowing

## Image 2

Front switches



### STEP 12 ►

Press the “**OFF**” button  
Wait until the red light stops blinking and is permanent glowing

### STEP 13 ►

Rotate the main switch, at the rear side, to **OFF** (**Image 3**, red arrow)  
All power to the system is now OFF

## Image 3

EMO-Box main switch



### STEP 14 ►

Switch off the chiller (for Raith150TWO you have two chillers)

### STEP 15 ►

Switch OFF UPS (if system has one)

### STEP 16 ►

If necessary switch off the house power supply fuse

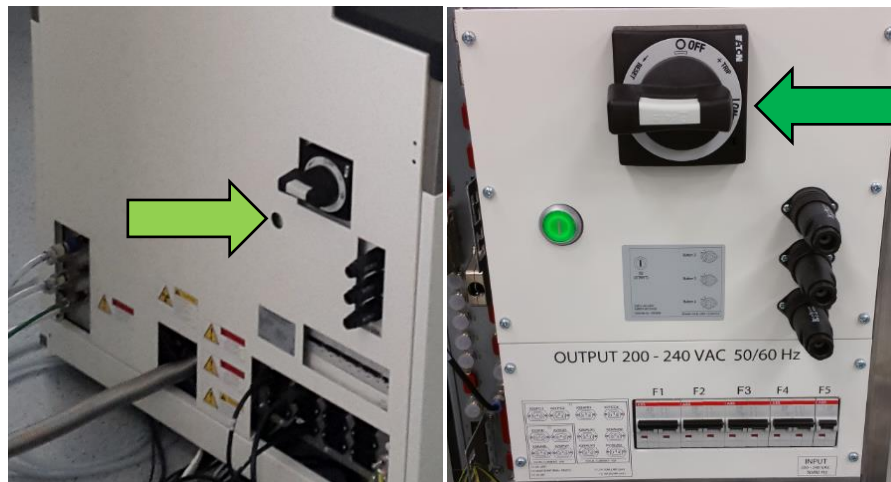
### STEP 17 ►

Close house supply for CDA and nitrogen

## 3 Power ON the system

- STEP 1 ►** If necessary switch on the house power supply fuse
- STEP 2 ►** Switch on UPS (if system has one), wait till the UPS is working in normal mode
- STEP 3 ►** Rotate the main switch, at the rear side, to **ON** (**Image 4**, green arrow)
- STEP 4 ►** Press the Green button at the rear EMO box (**Image 4**, light green arrow)  
Now the red OFF button at the front side should be glow

Image 4



- STEP 5 ►** Press the Yellow “STANDBY” button
- The vacuum pumps will start
  - The PC should start now
- STEP 6 ►** Start the chiller (for Raith150TWO you have two chillers)
- STEP 7 ►** Press the Green “ON” button  
Now all is on power
- STEP 8 ►** If PC doesn't start automatically, start the PC
- STEP 9 ►** Switch ON other electronics in the rack. Do this one after the other. Otherwise it may happen that the fuse at the back of the system shuts off.
- STEP 10 ►** Start the EM Server and the SmartSEM
- STEP 11 ►** Wait until the column chamber valve opens, at an chamber pressure from 2e-5mbar
- STEP 12 ►** If the gun vacuum is worse than 5e-9mbar perform an overnight bake out (please contact Raith Service first)

- STEP 13 ►** Turn ON the GUN
- STEP 14 ►** Turn ON the EHT
- STEP 15 ►** Start Nanosuite software
- STEP 16 ►** If the pattern generator doesn't found, close Nanosuite and start Device manager. Scan for new devices.
  
- STEP 17 ►** Start a find home procedure of X, Y and Z axis

### **3.1 Documentation change log**

19.03.2020 HJA

Revised