NEMIS Dry Block Heater-Check Protocol

Purpose

The NEMIS Dry Block Heater-Check protocol describes maintenance and temperature verification of the NEMIS Dry Block Heaterd DBH1-24-230V and DBH1- 48-230V.

Maintenance of dry block heaters

The NEMIS Dry Block Heaters do not need any scheduled servicing. The user should regularly inspect the device for obvious defects. Spills should be removed promptly after the unit has cooled down. DO NOT use a cleaning agent or solvent on the front panel which is abrasive or harmful to plastics, nor one which is flammable. Always ensure the power is disconnected from the unit prior to any cleaning.

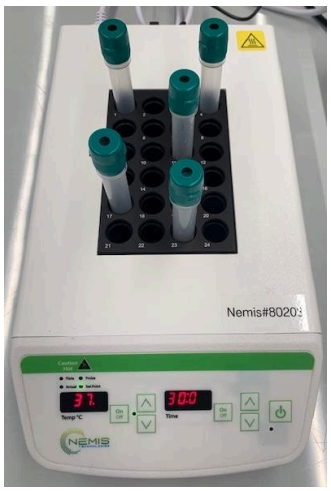
Calibration

Before shipping each Dry Block Heater DBH1-24-230V/DBH1-48-230Vis calibrated and tested according to internal standards and procedures of the manufacturer. No initial calibration by the user is required.

Temperature verification

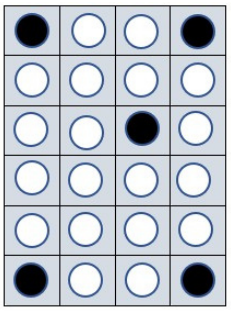
To ensure that a NEMIS Dry Block Heater works correctly, NEMIS recommends performing a temperature verification every six months or after each event that might negatively affect the functionality of the device (e.g., mechanical impact, transportation). The verification can be done by anyone in less than an hour.

To verify the NEMIS Dry Block Heater, you'll need 5 empty NEMIS N-Light™ tubes of which the cap and the enrichment broth have been discarded. In addition, a calibrated, standard digital reference thermometer is needed and Petrifilm for sealing the tubes. The thermometer should have a fine sensor tip (see example below).





Temperature verification procedure



1. Turn on the Dry Block Heater by pressing the power button.
2. Take the 5 empty N-Light™ tubes, fill them with 2 ml of tap water and seal the openings with Parafilm
3. Place the water-filled tubes in the Dry Block Heater according to the scheme on the right (upper left corner, upper right corner, center, lower left corner, lower right corner)
4. Use the same well positions for subsequent verifications in order to compare the measurement data and monitor any upward or downward trends.
5. Set a timer to 30 minutes (ATTENTION: do not use the timer on the incubator as this will switch off the heating mode after time
6. has elapsed).
   Set the temperature of the incubator to the desired temperature according to the NEMIS test used, then press “On”.
   After 30 minutes, put the reference thermometer in the first tube, make sure the tip touches the bottom of the tube, and seal again with Parafilm. Wait for approx. 1 min or until temperature does not change anymore, then note the temperature displayed on the digital thermometer. Measure the temperature inside the
7. other four tubes in the same way. It is important to use a reference thermomater which has been calibrated/verified at least once within the last 12 months.
   In case there is a temperature deviation of +/- 1.0°C between tubes and/or between the average measured temperature of the
8. tubes and the “actual” value displayed on the dry block heater, refer to the user manual of Dry Block Heater DBH1 and follow the
9, instructions for “Calibration Procedure”.
   In case there is still a temperature deviation, please contact NEMIS TEchsupport
   When finished, discard the water in the NEMIS tubes, dry the tubes with a paper towel and keep them for further verfications.

Contact Information

If you have any questions or require assistance, please refer to the Frequently Asked Questions (FAQ) and other online technical resources or contact NEMIS Techsupport under the email adress .techsupport@nemistech.com