

Benchmark

HC-24™

Hematocrit Centrifuge

Operation Manual (Item: C3450-H)



Introduction:

Thank you for purchasing the HC-24 Hematocrit Centrifuge. Please read this manual thoroughly prior to operating the instrument.

The HC-24 is designed for the determination of hematocrit counts in capillary tubes for testing and analysis. It includes a 24-place capillary tube rotor and a built-in reading disc in the lid for fast and easy analysis.

Specifications:

- Maximum Speed: 12,000 rpm
- Maximum RCF: 14,328 x g
- Capacity: 24 capillary tubes (75mm)
- Timer Range: 0 – 99 minutes, Continuous
- Acceleration: <20 seconds to max speed
- Deceleration: <30 seconds to stop

- Noise Level: ≤65 dB(A)
- Power Supply: AC 230V / 110V, 50-60Hz, 8A
- Dimensions: 11 (L) x 14.2 (W) x 9.8 (H) in.
28.0 (L) x 36.0 (W) x 25.0 (H) cm.
- Weight: 16 kg (35 lbs)

Installation:

Place the centrifuge on a flat, stable, and level surface away from heat sources and direct sunlight. Ensure at least 10–15 cm of clearance around the unit for ventilation. The instrument must be connected to a properly grounded power outlet.

Operation:

- Connect the power cord to the centrifuge and to an outlet of the appropriate voltage. Place the power switch into the on "I" position.
- Open the lid and load your samples into the included rotor. Always ensure a balanced load (Please see the following section, **loading the Rotor**, for details.)



NEVER Attempt: to remove samples until the rotor has come to a complete stop.

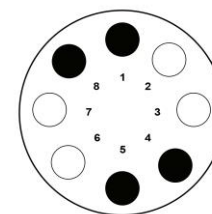
- Close the lid and set the desired time and speed (in rpm or rcf) on the digital display.
- To set the time use the ▲▼ buttons on the bottom of the control panel and select the desired time (from 20 seconds to 99 minutes)
- To set the speed, use the ▲▼ buttons on the bottom of the control panel. The default speed is in rpm, to toggle the speed to the rcf setting, press the "RPM/RCF" key.
- To start the centrifuge, first ensure that the rotor is fully tightened and that the lid is fully closed, then press the "START/STOP" key.
- When the time has expired, the rotor brakes to a stop, the lid will automatically open, and the samples can be retrieved. At any point during the run, the centrifuge can be stopped by pressing the "START/STOP" key.
- By pressing and holding the "QUICK" key, you perform the quick spin. The centrifuge

will run as long as you hold the key pressed. Time of run is displayed on the time display. When you release the key, the braking procedure of the rotor is activated, and the centrifuge stops.

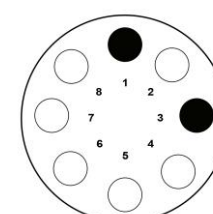
Loading the Rotor:

Always load samples in a balanced configuration. Tubes must be placed opposite each other with equal volumes of liquid. Unbalanced loads may cause excessive vibration and damage the centrifuge.

Properly Balanced



NOT Properly balanced



Emergency Lid Release

In the event of a power failure or lid malfunction, use the emergency release cord located at the bottom rear of the unit. Pull the cord downward to manually open the lid. Never attempt to open the lid while the rotor is spinning.

Cleaning and Maintenance:

The centrifuge rotor can be removed for cleaning by hand or by using a small wrench to loosen the center set screw. Once removed, the rotor can be cleaned with isopropyl alcohol or can be sterilized in an autoclave at 121°C for 20 minutes.

Service and Contact:

In the event that service or technical support is required, please contact Benchmark Scientific by email: info@benchmarkscientific.com or phone at 908-769-5555