

Grim-2 Calibration Procedure

Calibration of the B oils will be performed annually Calibration of A and C oils will be calibrated upon use or annually whichever is longest. A standard will be run and recorded for each case . See Grim-2 instrumental procedure for step by step instructions for standard calibration.

I. Start up and Calibration procedure

1. Turn "ON" the amber switch.
2. Turn "ON" the red switch (this powers up the Grim-2).
3. Turn "ON" the power source to the phase contrast microscope.
4. Turn on the computer.
5. Allow the system to warm up and stabilize for one (1) hour before taking readings.
6. Open the software by double clicking on the Grim-2 icon.
7. Go to the menu bar and select:

File/open

From the dialog box select:

Sbi/gfw, then click on ok

8. Return to the menu bar and select:

Recalibrate

From the dialog box select:

Oil	Wave
B	589

9. Enter password and operator id.
10. The calibration page will appear and it will have a previously entered data. You can replace this data with current data as you proceed with calibration.
11. Crush a sample of B1 glass and immerse in B liquid.
12. Click on first match temperature box and then click on **Measure B1**.
13. This will bring you to the hotstage screen. Choose an edge with sufficient contrast and select **F9 Setup**. Position the analysis box over the edge of sharp contrast.
14. Adjust temperature to 5 degrees above previous mean temperature.
15. Click on **F4 Auto** to record match temperature.

Note: Edge count is a measure of contrast. The edge count should always be above 10 and optimally be at 99.

16. If analysis is acceptable select **F10 Accept**.
17. If not acceptable, select **F9 Setup** to reposition analysis box.
18. In calibration dialog select **Save** to save value.
19. Repeat steps 12-18 for fragments 2-5.
20. Repeat steps 11-19 for glass standards B2-B12.

Note: During analysis should you decide to exit the calibration box **you must** select **Calibrate** in order to save the current values. This command will adjust the match temperature values to the current entries.

II. Shut-down

1. Allow the system to cool.
2. Turn "OFF" all instruments in reverse order of the turn "ON" procedure.

III. Safety Concerns

- A. Glass slides have sharp edges and can cut.
- B. High Temperature may be produced.

IV. Other Information-consult the Manufacturer's manuals.