Checking a Sinar AP 6060 portable moisture analyser using a calibration sample (1900-6352)

Calibration samples are accurately weighed, and the capacitance checked & recorded by Sinar Technology before the sample bag is sealed. Calibration samples form the basis of all calibration work and check routines. Calibration samples should be stored in an airtight container in a cool dark place once opened. If stored well the sample will typically have a shelf life of two to three months dependent upon use. Remember that the sample is pre-weighed and great care should be taken to ensure that none of the sample is lost as this will render the sample useless. This information is intended for use with the Sinar AP6060. If you own a different instrument, then please contact us for details.

Checking the Weight-Balance using 180g sample:

1. Turn the instrument ON.

2. Using the loading hopper, pour the 180g sample into the instrument. Remove the hopper.

3. Press the Kg/hl key. After approximately six seconds the result is displayed.

4. Result should be 64.5 Kg/hl (+/- 1Kg/hl). If result is outside this tolerance, the balance is either out of calibration OR non-functional. Proceed to the instructions on calibrating the instrument overleaf.

5. If weight results are inconsistent, i.e. if with a known weight sample (180g) readings drift between tests considerably (more than $\pm$ 0.5) then the balance itself may be non-functional. In this case contact Sinar Technology.

Checking "Code 0" (capacitance) and/or Moisture Content (%H_2O) readings:

1. Place the calibration standard into the analyser using the loading hopper. Remove the hopper. Turn the instrument ON and press 0 key followed by the %H_2O key. The analyser will then take a reading on channel 0 (capacitance). The result should be within $\pm$ 0.5 of the known value written on the sample bag.

2. If code 0 result falls outside of acceptable tolerances the analyser must be re-calibrated. See Calibration Document Sheet 2.

3. To check the predicted moisture content (%mc) select the appropriate calibration on the analyser e.g. "wheat". Press the %H_2O key and the result will be displayed in six seconds. The result should be within ±0.3%mc of the value on the sample pack.

If the 'code 0' reading or the weight reading falls outside the tolerances stated, then the unit should be re-calibrated following the recalibration procedure overleaf.

Using the180g sample (1900-6352) to recalibrate a Sinar AP 6060 portable unit

You will require a calibration sample (part no. 1900-6352) provided by Sinar Technology, a calibrated (certified if necessary) temperature probe or thermometer and the sample loading hopper.
This information is intended for use with the Sinar AP6060. If you own a different instrument then please contact us for details.

1. Turn the instrument ON.

2. With the instrument empty: Press and hold the CAL/AUTO key. When the instrument says `CAL' enter the password using the calibration keys on the left side of the keypad, this is factory set to 123 or 226. Press the P key to confirm the password – unit should display P. If the machine double beeps and does not accept the password, please contact Sinar Technology for details on resetting the password.

3. Press and hold the CAL/AUTO key. The instrument will display H.CAL (Hardware Calibration) after approximately 3 seconds.

4. Press and hold the AVE (Average) key until the unit starts to take a reading - approximately 3 seconds. The unit will display `⊃1' when complete.

5. Using the sample loading hopper, load the calibration sample into the silver bowl. Now enter the 'Code 0' (capacitance or C0) value written on the sample packet. Use the number keys down the left hand side of the keypad. If you require a number greater than 7, use the UP/DOWN arrow keys to adjust. Press the KG/HLW button to enter this value into the analyser's memory.

6. Place a temperature probe/thermometer into the grain at the front of the cell near the black thermistor block. Once the temperature reading has stabilised, enter the value into the instrument using the number keys on the keypad. If you require a number greater than 7, use the UP/DOWN arrow keys to adjust. Press the TEMP key once to enter the temperature into the unit's memory.

7. Press and hold the %H_2O key until the unit starts to take a reading – you will hear it pulse. When the unit displays `⊃2' calibration is complete.

8. Retest the analyser using the procedure overleaf. If any of the readings are out of tolerance after recalibration, contact Sinar Technology for assistance.