HLP ph: 1800 500 160

Calibration of Thermometers

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We often have enquiries about the need to have their thermometers re-calibrated periodically. We recommend the following:

1. The FSANZ (Food Standards Australia & New Zealand) Food Safety Standards do not require thermometers to be re-calibrated.

2. The food standards state in Standard 3.2.2, Division 6, Clause 22, states that:

- "a food business must, at food premises where potentially hazardous food is
 - handled, have a temperature measuring device that:
 - A) is readily accessible; and

B) can accurately measure the temperature of potentially hazardous food to +/-1°C." **NOTE:** All the digital thermometers from **HLP Controls** comply with the standards.

- 3. To ensure that the thermometer is accurate to the requirements of the standards we recommend a calibration check at least monthly. This check can be done by:
- A) Obtain a coffee mug & fill to $\frac{1}{4}$ with crushed ice.
- B) Fill the mug to $\frac{1}{2}$ full with cold water.
- C) Leave for 2 minutes & stir for 10 seconds -this is an ice slurry.
- D) Place probe of thermometer to be tested into the ice slurry & slowly stir & wait for the temperature reading on the display to stabilise.

<u>NOTE</u>: for infra-red thermometers point the sensor of the unit into the top of the coffee cup as close as possible (without touching the ice slurry) & note the reading.

- E) The temperature displayed should be 0°C +/-1°C (taking into account the written manufacturers specification for the unit).
- F) If the temperature is within -1°C to +1°C, then the thermometer meets the requirements of the standard & can be returned to service.

Please record this calibration check (time, date, reading attained & who completed the check). Eg: **Calibration Record for**(type of thermometer or where used)

Date	Time	Reading	Corrective action	Initialled

G) If the thermometer displays greater than -1°C to +1°C the unit should be repaired, re-calibrated or replaced.

- H) **Data Loggers:** to check the calibration of data-loggers the following can be done:
 - i) Check a probe thermometer as described above;
 - ii) Set up the data loggers to record at 1 minute intervals. Place all of the units face down in a carton (or any non-metal container) with the checked thermometer & place in a coolroom in an area away from the main door (an area where the temperature is most constant);
 - iii) Leave in the coolroom for 15 minutes, then, go back to the coolroom & upon reaching the box, immediately read the temperature displayed on the thermometer without touching the unit. Record this temperature & the time straight away. Take the loggers back to the office.
 - iv) Download all of the data loggers and check that the temperature displayed on the graph for the time at which you returned to the loggers is the same +/-1°C as that recorded for the temperature displayed on the thermometer.
- HLP Controls maintains a re-calibration facility and has NATA (National Association of Testing Authorities) certified equipment for checking calibration of our products. All HLP Controls' products are manufactured using the latest electronics and technical advances and do not require periodic re-calibration. It is not uncommon for our products to hold their accuracy for several years if stored and cared for correctly.

Re-calibration is an expensive process and HLP Controls' customers should not need to incur this cost.

Information Sheet From HLP Controls Registered Food Safety System Facilitators With Quality Society Of Australia. Ph: 1800 500 160 for information. Email: bsafe@hlpcontrols.com.au.