# A Baseline For Food Safety

Using the correct tools, including accurately calibrated thermometers, is an essential component of any basic HACCP plan. Cooper-Atkins believes that every foodservice professional should implement a regular routine to ensure their thermometers are accurate and ready to use.

Calibration is a formal comparison of any item to a known standard that is of higher accuracy. The comparison is normally conducted under controlled environmental conditions and typically not done on-site. It is traceable to a known standard through an unbroken chain of comparison to the National Institute of Standards and Technology (NIST).

Validation is a quick, less formal comparison of any item against a single temperature point, most commonly an ice bath. It is performed regularly, can be performed on-site, and is a confirmation that the instrument is accurate to within acceptable tolerance.

When validating thermometers, it is usually by means of a single test point such as an ice bath\* (32°F / 0°C). If the thermometer is validated by such means and reads 32°F / 0°C (± accuracy tolerance of the instrument) it now meets the FDA Guidelines.

> \*NOTE: Use crushed, not cubed, ice to make the ice bath. Tests show that using cubed ice can result in an ice bath with a baseline temperature higher than 32°F / 0°C, resulting in a false reading.



U.S. Food and Drug Administration Center for Food Safety & Applied Nutrition Food Code

#### CHAPTER 3 FOOD

3-501.19 Time as a Public Health Control (B) The FOOD shall have an initial TEMPERATURE of 41°F (5°C) or less if removed from cold holding temperature control, or 135°F (57°C) or greater if removed from hot holding temperature control.

#### CHAPTER 4 EOUIPMENT, UTENSILS AND LINENS 4-502.11 Good Repair and Calibration.

(A) UTENSILS shall be maintained in a state of repair or condition that complies with the requirements specified under Parts 4-1 and 4-2, http://www.fda.gov/Food/FoodSafety/RetailFoodProtection/ FoodCode/FoodCode2009/default.htm or shall be discarded.

#### (B) FOOD TEMPERATURE MEASURING DEVICES shall be calibrated in accordance with manufacturer's specifications as necessary to ensure their accuracy.

(C) Ambient air temperature, water pressure, and water TEMPERATURE MEASURING DEVICES shall be maintained in good repair and be accurate within the intended range of use.

#### MAX Pen-Style, Digital Pocket Test (DPP800W)

- Temperature Range: -40° to 450°F (-40° to 232°C) • Accuracy:  $\pm 1^{\circ}F(\pm 0.5^{\circ}C)$
- Resolution: 0.1°
- <6 second response time</li>
- IPX7 Waterproof rated (dishwasher-safe)
- EZ-Read large LCD
- 4" (102 mm) stainless steel stem with ultra-fine tip
- Min / Max & Hold modes
- Anti-microbial additive\*
- CE certified, NSF listed, WEEE marked and RoHS compliant

#### Digital Pocket Test with Temperature Alarm (DFP450W)

- Temperature Range: -40° to 450°F (-40° to 232°C) Accuracy: ±2°F (±1°C)
- Resolution: 0.1°
- <6 second response time</p>
- IPX7 Waterproof rated (dishwasher-safe)
- Adjustable temperature alarm setting
- 4.75" (121 mm) stainless steel stem
- Min / Max & Hold modes
- Anti-microbial additive\*
- CE certified, NSF listed, WEEE marked and RoHS compliant

#### Digital Refrigerator / Freezer Thermometer (2560)

- Temperature Range: -22° to 122°F (-30° to 50°C)
- Accuracy:  $\pm 1^{\circ}F(\pm 0.5^{\circ}C)$
- Resolution: 0.1°
- Water resistant
- Stands or hangs
- Min / Max & Reset features
- Anti-microbial additive\*
- CE certified, NSF listed, WEEE marked and RoHS compliant

#### Pen-Style, Digital Pocket Test (DPP400W)

- Temperature Range: -40° to 392°F (-40° to 200°C)
- Accuracy: ±2°F (±1°C)
- Resolution: 0.1°
- <6 second response time</p>
- IPX7 Waterproof-rated
- 2.75" (70 mm) stainless steel stem
- Min / Max & Hold modes
- Anti-microbial additive\*
- CE certified, NSF listed, WEEE marked and RoHS compliant

#### **Coolit-Rite**<sup>®</sup>Cooling Validator (TTM41-0 / TTM41-10) (not shown)

- Temperature Range: -4° to 302°F (-20° to 150°C)
- Accuracy: ±2°F (±1°C)
- Timer Range: 6 hours : 59 minutes
  - Water resistant
  - 15" (381 mm) / 10" (254 mm) stainless
- steel stem with adjustable vessel clip
- Min / Max & Hold modes
- Anti-microbial additive\*
- CE certified, NSF listed, WEEE marked and RoHS compliant

\*The anti-microbial additive in the ABS plastic housing inhibits the growth of bacteria on the unit. It does not protect users or others against bacteria. Always wash, rinse and sanitize products thoroughly before and after each use.



Guarantee

GET ACCURATEL GO DIGITALL

#### LIFETIME WARRANTY: Any AFL instrument that proves to measure temperatures out of the specified accuracy range or be defective in material or workmanship, will be replaced, without charge, upon receipt of the unit prepaid.

# **OUICK RESPONSE**

ACCURACY **GUARANTEED** 

EZ-READ









### **GET ACCURATE!**

The same innovative technology applied in our popular thermocouple instruments is now available in select digital thermometers. With calibration settings stored in a non-volatile memory chip, field adjustment has become a thing of the past. And there's no risk of introducing error into the instrument. Digital thermometers are used in all aspects of a well-designed HACCP management program.

## **GO DIGITAL!**





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LIFETIME WARRANTY: Any AFL instrument that proves to measure temperatures out of the specified accuracy range or be defective in material or workmanship, will be replaced, without charge, upon receipt of the unit prepaid.

> We are so committed to ensuring the accuracy of our products, that we guarantee them!

## **Always Validate** Your Thermometer

Validate the accuracy of your thermometer with our NEW, easy-to-use ValCup<sup>™</sup> (9325). Just fill with crushed ice, add water, insert thermometer and validate.

# MAX Pen-Style, Digital Pocket Test Thermometer

# DPP800W

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20000

• EZ-READ LCD

• EXTRA-LONG STEM WITH ULTRA-FINE TIP FOR <6 SECOND RESPONSE TIME

• USE TO TEST DISHWASHER RINSE TEMPERATURE



•EXTRA-LONG

Digital Pocket Test with

Temperature Alarm

STEM WITH ULTRA-FINE TIP FOR <6 SECOND RESPONSE TIME

• USE TO TEST DISHWASHER RINSE TEMPERATURE

ADJUSTABLE
TEMPERATURE
ALARM SETTING

Digital Refrigerator / Freezer Thermometer

2560



See back cover for all Accurate for Life instrument specifications

# Pen-Style, Digital Pocket Test Thermometer

## DPP400W



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- ULTRA-FINE TIP FOR <6 SECOND RESPONSE TIME
- MIN / MAX & HOLD FEATURES
- WATERPROOF

