



Technical Brief

TEMPERATURE

Compliance in food processing and retort processes

Background:

Thermal processing of food in various types of pressure retorts is regulated by the Food and Drug Administration through the establishment of rules for equipment, and temperature indicating, recording and controlling devices. A major food processing industry trade association also recommends voluntary guidelines for food processors to test and document the temperature distribution within their retorts.

Requirements:

FDA Rule 21 CFR 113.40 specifies that each retort must be equipped with at least one temperature-indicating device, a temperature recording device, and a temperature controller. These instruments must be checked with a reference device that is directly traceable to National Institute of Standards and Testing (NIST) "to ensure accuracy during processing." FDA Rule 21 CFR 113.100 defines the required record keeping for reference devices including: identification of the device; a Certificate of Calibration; date and results of the test; and date of the next test. The Institute for Thermal Processing (IFTPS) recommends voluntary guidelines for operators of retorts in food processing plants to test the thermal efficiency of their retort equipment.



- All temperature instruments conform to applicable Federal Regulations and are tested against an accurate and traceable reference device.
- A calibration process is recommended before and after testing to assure that the temperature indicators and sensors on the retort and on an external monitoring system are consistent and accurate.

Compliance:

Meeting these requirements can easily be accomplished with a dry block calibrator such as the Tel-Tru Check-Set Calibrator. Check-Set calibrators are accurate and certified temperature reference devices that meet the requirements of the FDA and the recommendations of the IFTPS for verifying the accuracy of temperature instruments in food processing plants. Tel-Tru Check-Set features include a unique serial number, a certificate of accuracy traceable to NIST, and available annual recertification and maintenance service.

If you have any questions, please feel free to contact one of our experts us at 800.232.5335 or info@teltru.com.



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