Ohio Administrative Code

Rule 901:3-3-09 Aseptic Processing and Packaging Systems-Product Sterilizer Equipment.

Effective: April 28, 2003

(A) Temperature-indicating device.

(1) Each product sterilizer shall be equipped with at least one mercury-in-glass thermometer or an equivalent temperature-indicating device.

(2) Mercury-in-glass thermometers shall have divisions that are easily readable to one degree Fahrenheit and whose temperature range does not exceed seventeen degrees Fahrenheit per inch of graduated scale.

(3) Thermometers and temperature-indicating devices shall be tested for accuracy against a known accurate standard thermometer upon installation and at least once a year to ensure their accuracy.

(4) A thermometer that has a divided mercury column or that cannot be adjusted to essential agreement with the standard shall be repaired or replaced.

(5) Thermometers and temperature-indicating devices shall be installed where they can be accurately and easily read.

(6) The temperature-indicating device shall be the reference instrument for indicating the processing temperature.

(B) Temperature-recording device.

(1) There shall be an accurate temperature recording device on each product sterilizer.

(2) The device shall be installed in the product at the holding-tube outlet between the holding tube and the inlet to the cooler.

(3) Temperature-recording devices shall have graduations that do not exceed two degrees Fahrenheit within a range of ten degrees Fahrenheit of the processing temperature.

(4) Each chart shall have a working scale of not more than fifty-five degrees Fahrenheit per inch within a range of twenty degrees Fahrenheit of the desired product-sterilization temperature.

(5) The temperature chart shall be adjusted to agree as nearly as possible with, but to be in no event higher than, a known accurate mercury-in-glass thermometer.

(6) A means of preventing unauthorized changes in adjustment shall be provided.

(C) Temperature recorder-controller.

An accurate temperature recorder-controller shall be located in the product sterilizer at the final heater outlet. It shall be capable of ensuring that the desired product sterilization temperature is maintained. The chart graduations shall not exceed two degrees Fahrenheit within a range of ten degrees Fahrenheit of the desired product sterilization temperature.

(D) Product-to-product regenerators.

When a product-to-product regenerator is used to heat the cold unsterilized product entering the sterilizer by means of a heat exchange system, it shall be designed, operated, and controlled so that the pressure of the sterilized product in the regenerator is greater than the pressure of any unsterilized product in the regenerator.

(E) Differential pressure recorder-controller.

(1) When a product-to-product regenerator is used, there shall be an accurate differential pressure recorder-controller installed on the regenerator.

(2) The scale divisions shall not exceed two pounds per square inch on the working scale of not more than twenty pounds per square inch per inch.

(3) The controller shall be tested for accuracy against a known accurate standard pressure indicator upon installation and at least once every three months of operation to ensure its accuracy.

(4) One pressure sensor shall be installed at the sterilized product regenerator outlet and the other pressure sensor shall be installed at the unsterilized product regenerator inlet.

(F) Metering pump.

(1) A metering pump shall be located upstream from the holding tube and shall be operated to maintain the required rate of product flow.

(2) A means of preventing unauthorized speed changes shall be provided.

(G) Product holding tube.

(1) The product-sterilizing holding tube shall be designed to give continuous holding of every particle of food for at least the minimum holding time specified in the scheduled process.

(2) The holding tube shall be designed so that no portion of the tube between the product inlet and the product outlet can be heated, and it must be sloped upward at least one-fourth inch per foot.