



Standards Update Notice (SUN)

Issued: April 26, 2017

Standard Information

Standard Number: NSF 6

Standard Name: Dispensing Freezers

Standard Edition and Issue Date: NSF 6 – 2016 Dated March 1, 2016

Date of Previous Revision of Standard: NSF 6-2014, Dated February 1, 2015

Effective Date of New/Revised Requirements

Effective Date: April 26, 2018

Impact, Overview, Fees and Action Required

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

Overview of Changes: This revision affirmed changes to sections 5.23, 5.28, 6.1, 6.2, 7.2 and 7.3 covering Remote Product Supply (RPS) systems. Specific details of new/revised requirements are found in table below.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



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Description of New/Revised Technical Requirements

Clause	Verdict	Comment
5.23	Info	Temperature indicating devices
		<i>New clause added;</i>
5.23.2		Remote product supply systems (if provided) shall have a securely mounted temperature indicating device that clearly displays the temperature of the product. Sensors may be positioned to indirectly measure the product temperature if the temperature-indicating system is designed to display the actual product temperature. Temperature-indicating devices shall be accurate to $\pm 2^{\circ}\text{F}$ ($\pm 1^{\circ}\text{C}$) and shall be graduated in increments no greater than 2°F (1°C) in the intended range of product temperatures. The device shall be removable and easy to read. The sensing element of the device shall be easily cleanable and located to reflect the warmest representative temperature of the product.
5.28	Info	Remote product supply systems
		<i>Additions to existing requirements are <u>underlined</u> below.</i>
5.28.1		<u>When manual cleaning is intended</u> , sections of tubing for a remote product supply system shall not exceed 7.5 ft (2.3 m) in length and shall comply with requirements in <u>sections 4 and 5</u> applicable to direct food contact zones <u>intended for manual cleaning</u> .
		<i>New clause added;</i>
5.28.2		When in place cleaning is intended, the overall length of the tubing shall not exceed 50 ft (15.2 m) and shall comply with the requirements in sections 4 and 5 applicable to direct food contact zones intended for in place cleaning.
6.1	Info	Cleaning and sanitization procedures
6.1.2	Info	Test method
		<i>Additions to existing requirements are <u>underlined</u> below.</i>
6.1.2.1		The equipment shall be filled with <i>the E. coli</i> and product mix suspension. <u>If a remote product supply system is being tested, the product supply lines shall be configured to the manufacturer's recommended installation restrictions (see 7.3) indicated in the manual prior to testing.</u>

Clause	Verdict	Comment
6.1.2.2		<p><i>Additions to existing requirements are <u>underlined</u> below.</i></p> <p>The equipment shall be operated so that food contact surfaces are exposed to the <i>E. coli</i> and product mix suspension. <u>If a remote product supply system is being tested, the remote line set shall be filled with <i>E. coli</i> and product mix suspension so all food contact surfaces are exposed (i.e. no air in remote line set).</u> The equipment shall then be cleaned in place according to the manufacturer's instructions and refilled with sterile buffered dilution water (SBDW). The SBDW shall be dispensed and five 100-mL samples shall be collected at intervals from the start of the dispensing until the unit is empty. When adequate sample volumes cannot be realized, more SBDW shall be added accordingly. The equipment shall then be operated so that food contact surfaces intended for in-place cleaning are exposed to the SBDW. Sufficient SBDW shall then be dispensed. The challenge organisms present in each sample shall be collected and enumerated using the Standard Total Coliform Membrane Filter Procedure in accordance with APHA's <i>Standard Methods for the Examination of Water and Wastewater</i>5.</p>
6.2	Info	<p>Product temperature</p> <p><i>Additions to existing requirements are <u>underlined</u> below.</i></p>
6.2.2		<p>Test method</p> <p>The ability of dispensing equipment to maintain the temperature of its contents at 41 °F (5 °C) or below shall be evaluated by monitoring the temperature in the product reservoir (hopper or refrigerated cabinet), in the product holding area of the dispensing head, <u>and in the remote product supply systems (if provided).</u> The equipment, while operated in accordance with the manufacturer's instructions, shall be evaluated in a test chamber in which the following conditions are maintained for the duration of the test:</p> <ul style="list-style-type: none"> – ambient air temperature of 86 ± 3 °F (30 ± 2 °C); and – no vertical temperature gradient exceeding 1.5 °F/ft (2.5 °C/m). <p>The product reservoir shall be filled with the intended product mix at 35 ± 1 °F (1.5 ± 0.5 °C) and the system shall be purged of entrapped air by dispensing approximately 1 qt (1 L) of product. Prior to starting the test, the equipment shall be allowed to establish thermal equilibrium according to the manufacturer's instructions, or the compressor shall be allowed to cycle on and off at least two full times at room temperature. At the start of the test period, the temperature of the product shall be 41 °F (5 °C) or below. Remote temperature sensors with an accuracy of ± 0.5 °F (± 0.3 °C) shall be used to monitor the product temperature. A sensor shall be placed 1 ± 0.1 in (25 ± 2 mm) below the product level in the middle of the product reservoir. A sensor shall be placed in the product holding area of at</p>

Clause	Verdict	Comment
		<p>least one dispensing head. If a dispensing freezer has a remote product supply system, a sensor shall be placed in <u>the product tubing, 5 ± 0.25 in (127 ± 6.35 mm) from each end and in the middle of</u> the remote product supply line(s). The temperature at each sensor location shall be recorded every 5 min during a 4-h test period. This test shall be performed while the freezer is operated in the standby (night) mode, if available.</p> <p><u>Units that are designed with a temperature-indicating system that indirectly measures product temperature in the remote product supply system, as permitted in 5.23.2, shall be permitted to reach a steady state temperature for the purpose of comparing the temperature reading of the temperature indicating device to the temperature sensed by the test sensor located in the product tubing. This comparison can be made at any point in time during the test and does not need to be made through the entire test duration.</u></p>
6.2.3		<p><i>Additions to existing requirements are <u>underlined</u> below.</i></p> <p>The product temperature at each sensor location shall not exceed 41 °F (5 °C) for the duration of the test.</p> <p><u>Units that are designed with a temperature-indicating system that indirectly measures product temperature in the remote product supply system, as permitted in 5.23.2, shall be capable of displaying a temperature within ±2 °F (±1 °C) of the temperature sensed by the test sensor located in the product tubing.</u></p>
7	Info	<p>Product literature</p>
7.2		<p><i>New clause added;</i></p> <p>For machines with pre-packaged product</p> <p>The dispensing freezer shall have a label affixed in a readily accessible location on the equipment that reads:</p> <p>"This equipment is specifically designed for use with an exclusive single use product and package container combination. The product container is single use and must be discarded once the product container is emptied. The use of a product container not recommended by the manufacturer may result in consumer illness."</p> <p>The label shall also identify the single use product container(s), including part number(s), for which the equipment is approved, or shall direct the operator to consult the manufacturer of the equipment for appropriate product container(s).</p>



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7.3		<p><i>New clause added;</i></p> <p>Remote product supply systems intended for in-place cleaning</p> <p>If a remote product supply system is used that is intended for in-place cleaning, the manual shall indicate the following information regarding the manufacturers recommended installation restrictions for the remote product supply lines:</p> <ul style="list-style-type: none">– Maximum overall length of the product supply line;– Maximum number of line bends;– Minimum bend radius;– Minimum bend angle;– Maximum number of vertical deflections;– Maximum peak-to-peak vertical deflection height;– Maximum overall end-to-end vertical elevation change;– Remote Product Line Diameter; and– Clean In-Place Pump Specification – Manufacturer Model Number. <p>Instructions shall provide provisions for Remote Line Set installation such that they remain in their intended configuration and prevent sagging.</p>
		<p>CUSTOMERS PLEASE NOTE: This Table and column “Verdict” can be used in determining how your current or future production is or will be in compliance with new/revised requirements.</p>