This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

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An American National Standard

Standard Specification for Hot Food Holding Tables[1]

This standard is issued under the fixed designation F2796; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification covers commercial hot food holding tables which utilize gas or electrical fuel sources, or both, for holding food in the commercial and institutional food service establishments.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

A167 Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip (Withdrawn 2014)[3]

A176 Specification for Stainless and Heat-Resisting Chromium Steel Plate, Sheet, and Strip (Withdrawn 2015)[3]

D3951 Practice for Commercial Packaging

F760 Specification for Food Service Equipment Manuals

F1166 Practice for Human Engineering Design for Marine Systems, Equipment, and Facilities

2.2 *ANSI Standards:*

ANSI B1.1 Unified Inch Screw Threads (UN and UNR Thread Form)[4]

ANSI/UL 197 Standard for Commercial Electric Cooking Appliances[5]

ANSI Z1.4 Sampling Procedures and Tables for Inspection and Attributes[4]

ANSI Z83.11/CSA-1.8 Gas Food Service Equipment[4]

ANSI/NFPA 54 National Fuel Gas Code[4]

ANSI/NFPA 70 National Electric Code[6]

NSF/ANSI 4 Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transport Equipment[7]

2.3 *Military Standards:*[8]

MIL-STD-167/1 Mechanical Vibrations of Shipboard Equipment, Type I—Environmental and Type II—Internally Excited

MIL-STD-461 Military Standard for Electromagnetic Emission and Susceptibility Requirements for the Control of Electromagnetic Interference

MIL-STD-1399/300 Interface Standards for Shipboard Systems Section 300A, Electric Power, Alternating Current

3. Terminology

3.1 *Definitions:*

3.2 *hold function, n*—operating mode for the hot food holding table and also the main function of the hot food holding table.

3.2.1 *Discussion*—The hold function allows holding a precooked product above a safe holding temperature as defined by the NSF guidelines (NSF/ANSI 4).

3.3 *holding cavity, n*—portion or area of the table in which food products are held at an elevated temperature.

[1] This specification is under the jurisdiction of ASTM Committee F26 on Food Service Equipment and is the direct responsibility of Subcommittee F26.02 on Cooking and Warming Equipment.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] The last approved version of this historical standard is referenced on www.astm.org.

[4] Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, http://www.ansi.org.

[5] Available from Global Engineering Documents, 15 Inverness Way, East Englewood, CO 80112-5704, http://www.global.ihs.com.

[6] Available from National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02169-7471, http://www.nfpa.org.

[7] Available from NSF International, P.O. Box 130140, 789 N. Dixboro Rd., Ann Arbor, MI 48113-0140, http://www.nsf.org.

[8] Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS OR Acquisition Streamlining and Standardization Information System (ASSIST) which is the official source of all documents listed in the DoD Index of Specifications and Standards. The ASSIST can be located at http://dsp.dla.mil.

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3.4 *hot food holding table (food warmer), n*—as used in this specification a device that can hold precooked food products to preset product holding temperatures.

3.4.1 *Discussion*—This type of table is a single level design with or without covers for food pans. In general, hot food holding table is a device by itself and has a typical maximum operating temperature of 200°F.

4. Classification

4.1 Hot food holding tables covered by this specification are classified by type, style, electrical class, and size.

4.1.1 *Type:*

4.1.1.1 *Type 1*—Table top units.

4.1.1.2 *Type 2*—Stand mounted.

(1) Type 2A—With plain adjustable legs.

(2) Type 2B—With flanged feet that allows the stand to be bolted to the floor.

(3) Type 2C—With casters.

4.1.1.3 *Type 3*—Flush mount installation (drop-in type).

4.1.2 *Styles:*

4.1.2.1 *Style 1*—Dry hot food holding table.

4.1.2.2 *Style 2*—Wet hot food holding table.

4.1.2.3 *Style 3*—Dry/wet hot food holding table.

4.1.3 *Fuel Class:*

4.1.3.1 *Electrical Class:*

(1) Class 1—120 V, 60 Hz, 1 phase.

(2) Class 2—208 V, 60 Hz, 1 phase.

(3) Class 3—208 V, 60 Hz, 3 phase.

(4) Class 4—240 V, 60 Hz, 1 phase.

(5) Class 5—240 V, 60 Hz, 3 phase.

(6) Class 6—480 V, 60 Hz, 3 phase.

(7) Class 7—208 V, 50 Hz, 1 phase.

(8) Class 8—208 V, 50 Hz, 3 phase.

(9) Class 9—230 V, 50 Hz, 1 phase.

(10) Class 10—240 V, 50 Hz, 1 phase.

(11) Class 11—240 V, 50 Hz, 3 phase.

4.1.3.2 *Gas Class:*

(1) Natural gas.

(2) Propane gas.

(3) Other gas (specify gas composition, heating value, and specific gravity).

4.1.4 *Size (Capacity)*—Number of steam pans of open or individual well construction (inside dimensions of the steam pan are 19 ⅞-in. length by 11 ⅞-in. width by 6 ⅛-in. depth) that the table is designed for holding.

4.1.4.1 *Size 1*—1 pan.

4.1.4.2 *Size 2*—2 pans.

4.1.4.3 *Size 3*—3 pans.

4.1.4.4 *Size 4*—4 pans.

4.1.4.5 *Size 5*—5 pans.

4.1.4.6 *Size 6*—6 pans.

4.2 This standard does not purport to address all of the sizes that may be available, but it provides an overview of the most common sizes used in the industry.

5. Ordering Information

5.1 Orders for hot food holding tables in accordance with this specification shall include the following information:

5.1.1 ASTM specification number and date of issue,

5.1.2 Quantity of units to be furnished,

5.1.3 Type,

5.1.4 Style,

5.1.5 Fuel class, and

5.1.6 Size (Capacity).

5.2 The following options should be reviewed, and if desired they should be also be included in the order:

5.2.1 When federal/military procurement(s) is involved, refer to the supplemental pages.

5.2.2 When other than manufacturer's standard, commercial, and domestic packaging is required, specify packaging requirements.

5.2.3 When special or supplemental requirements, or both, such as inspections, options, accessories, modifications, changes for correctional facilities use, additional nameplate data, etc. are required.

5.2.4 When specified, a certification to ensure that samples representing each lot have been either tested or inspected as directed and the requirements have been met. When specified, a copy of the certification or test results, or both, shall be furnished to the purchaser.

5.2.5 When specified, a number of cavities which the food pans are contained in need to be specified during the ordering of the unit.

5.2.6 When specified, the unit has a means to display or indicate table cavity temperature and able to set holding interval-timer or an internal product probe.

6. Materials and Manufacture

6.1 *General*—Hot food holding tables shall conform to the applicable documents listed in Section 2. Materials used shall be free of defects that would affect the performance or maintainability of individual components or of the overall assembly. Materials not specified herein shall be of the same quality used for the intended purpose in commercial practice. The use of used or rebuilt products is not allowed under this specification unless otherwise specified.

6.2 *Hardware and Fittings*—Unless otherwise specified, all hardware and fittings shall be corrosion-resistant to Specifications A167 or A176 or suitably processed to resist corrosion in accordance with the manufacturer's standard practice.

6.3 *Threaded Parts*—All threaded parts shall conform to ANSI B1.1.

7. Physical Requirements

7.1 *Design and Manufacture*—The hot food holding tables shall consist of a table cavity, heating elements/heating coil or gas burner, area physically supporting the steam pans, and provision to limit condensate drippings on the floor or tabletop surface. The tables may include vents, product probe, and product monitoring system, if specified.

7.1.1 *Heating System*—The heaters should be attached in a recessed location so no accidental contact can be made. If open resistive coil type heaters are used, it should be electrically insulated from all metal contacts and should be protected from condensate/water dripping.

7.1.2 *Controls:*

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