



Standard Specification for Bun Slicing Machines¹

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1. Scope

1.1 This specification covers commercial, electrically operated, bun slicing machines.

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

A240/A240M Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications
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:³

Z1.4 Sampling Procedures and Tables for Inspection by Attributes

2.3 BISSC Standards:⁴

ANSI/BISSC/Z50.2-2003 Sanitation Standard for the Design of Bakery Equipment

2.4 NEMA Standards:⁵

MG 1 Motors and Generators

2.5 NSF/ANSI Standards:⁶

NSF/ANSI No. 8 Commercial Powered Food Preparation Equipment

2.6 ANSI/UL Standards:⁷

ANSI/UL 763 Motor-Operated Commercial Food Preparing Machines

ANSI/UL 969 Marking and Labeling Systems

2.7 Federal and Military Documents:⁸

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

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

MIL-STD-461 Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment

3. Terminology

3.1 Definitions:

3.1.1 *bun slicing machine, n*—machine with a motor-driven knife for slicing buns and having a chute to position and feed the whole bun by gravity for slicing; it may have a discharge table for holding the buns awaiting manual removal from the machine.

3.1.2 *recovered materials, n*—materials that have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials.

¹ This specification is under the jurisdiction of ASTM Committee F26 on Food Service Equipment and is the direct responsibility of Subcommittee F26.04 on Mechanical Preparation 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 Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

⁴ Available from Baking Industry Sanitation Standards Committee (BISSC), P.O. Box 3999, Manhattan, KS 66505-3999.

⁵ National Electrical Manufacturers Association (NEMA), 1300 North 17th St., Suite 1752, Rosslyn, VA 22209.

⁶ Available from NSF International, P.O. Box 130140, 789 N. Dixboro Rd., Ann Arbor, MI 48113-0140.

⁷ Available from COMM 2000, 1414 Brook Drive, Downers Grove, IL 60515.

⁸ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

4. Classification

4.1 *General*—Bun slicing machines covered by this specification are classified by type, class, size and style.

4.2 Type:

4.2.1 *Type I*—Bun slicing machine, electrically operated, single knife.

4.2.2 *Type II*—Bun slicing machine, electrically operated, dual knife.

4.2.3 *Type III*—Cluster-bun slicing machine, electrically operated, dual knife.

4.3 Class:

4.3.1 *Class I*—Fixed chute.

4.3.2 *Class II*—Adjustable chute.

4.3.3 *Class III*—Automatic/conveyor feed.

4.4 Size:

4.4.1 *Size I*—Small; bun size up to 3-in. (76-mm) high by 4-in. (102-mm) wide.

4.4.2 *Size II*—Medium; bun size up to 3-in. (76-mm) high by 6-in. (152-mm) wide.

4.4.3 *Size III*—Large; bun size up to 3-in. (76-mm) high by 9¾-in. (229-mm) wide.

4.4.4 This specification does not purport to address all of the sizes that may be available, but it does provide an overview of the most common sizes used in the industry today.

4.5 Style:

4.5.1 *Style I*—Counter top or bench-mounted.

4.5.2 *Style II*—Floor-mounted.

4.5.3 *Style III*—Portable.

5. Ordering Information

5.1 *Ordering Data*—Purchasers shall select the bun slicing machine and any preferred options and include the following information in the purchasing document:

5.1.1 Title, number, and date of this specification.

5.1.2 Type, class, size and style of machine required.

5.1.3 Quantity to be furnished.

5.1.4 *Electrical Power Supply Characteristics*—Voltage, phase, frequency (see 7.2.1).

5.1.5 Accessory equipment, options, spare parts, and maintenance parts required,

5.1.6 When Federal/Military procurement is required, review and implement the applicable supplementary requirements (see Supplementary Requirements S1–S8).

5.1.7 When specified, the purchaser shall be furnished certification that samples representing each lot have been either tested or inspected as directed in this specification and the requirements have been met. When specified, a copy of the test results shall be furnished.

5.1.8 Level of preservation and packing required if other than as stated in Practice D3951 (see Section 18).

5.1.9 Labeling requirements (if different than Section 16).

5.1.10 Whether the equipment meets the requirements of NSF/ANSI, ANSI/UL, or BISSC standards, or a combination thereof.

6. Material

6.1 *General*—Materials used in the construction of bun slicing machines shall comply with the applicable requirements of NSF/ANSI No. 8 or ANSI/BISSC/Z50.2-2003, Parts 1 and 4.13, or both. Materials used shall be free from 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. None of the above shall be interpreted to mean that the use of used or rebuilt products are allowed under this specification unless otherwise specified.

7. Design and Construction

7.1 *General*—Bun slicing machines shall be delivered assembled, ready for mounting, connection to electricity, and use as applicable. The bun slicing machine shall be simple to disassemble and reassemble without special tools or equipment. It shall meet the then current requirements of NSF/ANSI No. 8, ANSI/BISSC/Z50.2-2003, Parts 4.13 and 4.28, or ANSI/UL 763, or a combination thereof.

7.1.1 The bun slicing machine shall consist of a feeding chute tilted at a 20 to 35° vertical angle with the machine base and a circular cutting knife or knives rotated by an electric motor or motors. The feed chute may have adjustments for bun width and height, and thickness and depth of cut. If so, the chute interior width shall be infinitely adjustable from a lower limit of no more than 1¼ in. (31.8 mm) to an upper limit of no less than 4½ in. (114 mm). The cutting knife height shall be infinitely adjustable from a lower limit of no more than ½ in. (12.7 mm) above the base of the chute to an upper limit of no less than 1⅝ in. (24 mm) above the base of the chute. Class I and III bun slicing machines shall be provided with 4 non-skid feet, and shall have envelope dimensions no greater than 24 in. (610 mm) wide, 34 in. (864 mm) deep, and 31 in. (787 mm) high. No tools or excessive force shall be required to make adjustments on the bun slicing, and during adjustment, there shall be no binding or jamming of moving parts. The bun slicing machine shall be capable of slicing both soft and hard buns and rolls without jamming or stalling, and without tearing or crushing the buns or rolls. When the machine is operating, the cutting knife shall rotate such that, within the chute, the cutting edge travels away from the bun inlet. The cutting teeth or serrations, as applicable, shall have cutting edges facing the same direction as the blade travel.

7.1.2 *Compliance with NSF/ANSI No. 8*—Acceptable evidence of meeting the requirements of NSF/ANSI No. 8 shall be the NSF certification mark on the bun slicing machine and listing in the current edition of the NSF Official Listing of Food Service Equipment, a certified test report from a recognized independent testing laboratory acceptable to the user, or a certificate issued by NSF under its special one time contract evaluation/certification service.

7.1.3 *Compliance with ANSI/BISSC/Z50.2-2003, Parts 4.13 and 4.28*—Acceptable evidence of meeting the requirements of ANSI/BISSC/Z50.2-2003, Parts 4.13 and 4.28 shall be a photocopy of the current BISSC certificate of authorization for