Commercial powered food preparation equipment

NSF International Standard/ American National Standard

NSF/ANSI 8 – 2002

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NSF International Standard/
American National Standard
for Food Equipment —

Commercial powered food preparation equipment

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Foreword[2]

The purpose of this Standard is to establish minimum food protection and sanitation requirements for the materials, design, construction, and performance of commercial powered food preparation equipment.

This edition contains editorial and format changes intended to promote uniform interpretation of the Standard. Many changes reflect an effort to achieve consistency with other NSF food equipment standards.

A significant technical revision has been made to the Standard. In the previous edition of NSF/ANSI 8, the in-place cleaning (IPC) performance evaluation method prescribed two distinct methodologies and acceptance criteria to evaluate a manufacturer's IPC procedures, both of which had to be met for a unit to be deemed acceptable. These were 1) a pour plating technique using Violet Red Bile agar (VRB), which was used primarily for confirmation that the organisms recovered were, in fact, the challenge organisms, and 2) the Most Probable Number (MPN) method using Brilliant Green Bile media, which was used for enumeration of the organisms.

In this version of NSF/ANSI 8, the MPN evaluation method used for the IPC evaluation has been replaced with the Membrane Filtration (MF) technique. The MF method also serves as an alternative to both the MPN and the pour plate methodologies. The MPN method has been deemed outdated for this application.

MF is a more sensitive method of determination. The volume of sample analyzed post-IPC is equal to the volume collected (500 mL). Per this method, the entire slug of effluent collected is analyzed (as opposed to the MPN method which employs statistical interpolation to determine the amount of organisms *most probably* present in the entire slug from aliquots thereof). Also, the use of MF makes pour plating with VRB agar procedurally obsolete as the MF technique utilizes a media selective only for the enumeration of the challenge organism.

MF provides a more accurate assessment of the efficacy of the IPC procedure. As such, the NSF Joint Committee on Food Equipment and the NSF Council of Public Health Consultants recommends that NSF/ANSI 8 incorporate the most suitable methodologies and up-to-date techniques commonly available to microbiologists for these evaluations and that this methodology be utilized for the IPC performance evaluations.

This Standard was developed by the NSF Joint Committee on Food Equipment, using the consensus process described by the American National Standards Institute.

Suggestions for improvement of this Standard are welcome. Comments should be sent to Chair, Joint Committee on Food Equipment, c/o NSF International, Standards Department, PO Box 130140, Ann Arbor, Michigan 48113-0140, USA.

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NSF/ANSI Standard
for Food Equipment –

Commercial powered food preparation equipment

1 General

1.1 Purpose

This Standard establishes minimum food protection and sanitation requirements for the materials, design, and construction of commercial food preparation equipment that is power operated. This Standard does not apply to manually operated equipment. This Standard does not contain safety requirements.

1.2 Scope

Equipment covered by this Standard includes, but is not limited to, coffee grinders, grinders, mixers, pasta makers, peelers, saws, slicers, tenderizers, and similar equipment.

Section 5.31 pertains to food preparation equipment that has been modified for security purposes. Food equipment is often utilized in environments such as correctional facilities, mental health facilities, and some schools, where both sanitation and security are concerns. Section 5.31 contains exceptions and labeling requirements that shall only be applicable to the splash and nonfood zones of food equipment provided with a security package.

Equipment components and materials covered under other NSF or NSF/ANSI Standards or Criteria shall also comply with the requirements within. This Standard is not intended to restrict new unit design, provided such design meets the minimum specifications described herein.

1.3 Alternate materials, design, and construction

While specific materials, design, and construction may be stipulated in this Standard, equipment that incorporates alternate materials, design, or construction may be acceptable when such equipment meets the applicable requirements herein.

2 Normative references

The following documents contain provisions that, through reference, constitute provisions of this NSF/ANSI Standard. At the time this Standard was balloted, the editions listed below were valid. All documents are subject to revision, and parties are encouraged to investigate the possibility of applying the recent editions of the documents indicated below.

ANSI Z97.1 – 1984 (R1994), *Safety Performance Specifications and Methods of Test for Glazing Materials Used in Buildings*[3]

ANSI/ASSE 1001 – 2002, *Pipe Applied Atmospheric Type Vacuum Breakers*[4]

ANSI/ASSE 1020 – 1998, *Pressure Vacuum Breaker Assembly*[4]

ANSI/ASSE 1024 – 1998, *Dual Check Valve Type Backflow Preventers*[4]

ANSI/UL 471 – 1995, *Commercial Refrigerators and Freezers*[5]

[3] American National Standards Institute, 11 West 42nd Street, New York, NY 10036

[4] American Society of Sanitary Engineering, 28901 Clemens Road, Suite 100, Westlake, OH 44145

[5] Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062