



Designation: F 858 – 96

Standard Specification for Hot Water Sanitizing Commercial Dishwashing Machines, Single Tank, Conveyor Rack Type¹

This standard is issued under the fixed designation F 858; 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.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This specification covers single tank, automatic rack type, commercial dishwashing machines.

2. Referenced Documents

2.1 ASTM Standards:

A 167 Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip²

A 276 Specification for Stainless and Heat-Resisting Steel Bars and Shapes³

A 436 Specification for Austenitic Gray Iron Castings⁴

A 554 Specification for Welded Stainless Steel Mechanical Tubing⁵

A 582 Specification for Free-Machining Stainless and Heat-Resisting Steel Bars, Hot-Rolled or Cold-Finished³

B 43 Specification for Seamless Red Brass Pipe, Standard Sizes⁶

B 75 Specification for Seamless Copper Tube⁶

B 127 Specification for Nickel-Copper Alloy (UNS NO 4400) Plate, Sheet, and Strip⁷

F 760 Specification for Food Service Equipment Manuals⁸

F 861 Specification for Commercial Dishwashing Racks⁸

2.2 Federal Regulation:

OSHA Title 29⁹

2.3 American National Standards:

ANSI S1.4 Specification for Sound Level Meters¹⁰

ANSI S1.13 Methods for Measurement of Sound Pressure Levels¹⁰

2.4 National Electrical Manufacturers Association Standards:

NEMA ICS Industrial Controls and Systems¹¹

NEMA MG-1 Motors and Generators¹¹

2.5 National Fire Protection Association Standard:

NFPA No. 70 National Electrical Code¹²

2.6 NSF International Standards, Criteria, and Listings:

NSF 3 Spray Type Dishwashing Machines¹³

NSF 5 Commercial Hot Water Generating Equipment¹³

NSF 14 Plastic Piping System Components and Related Materials¹³

NSF 29 Detergent/Chemical Feeders for Commercial Spray-Type Dishwashing Machines¹³

NSF 51 Plastic Materials and Components Used in Food Equipment¹³

NSF Criteria C-2 Special Equipment and/or Devices¹³

NSF Food Equipment and Related Products, Components, and Materials¹³

2.7 Underwriters Laboratories Standard:

UL 921 Commercial Electric Dishwashers¹⁴

2.8 American Society of Sanitary Engineering Standards:

ASSE 1001 Pipe Applied Atmospheric Vacuum Breakers¹⁵

ASSE 1004 Dishwashers¹⁵

3. Terminology

3.1 Definition:—*commercial dishwashing machines*—machines that uniformly wash, rinse, and hot water sanitize eating and drinking utensils. The machines shall be capable of removing physical soil from properly racked and pre-scraped items, and sanitizing multiple use eating and drinking utensils. These machines shall automatically convey racks of soiled dishes through the treatment stages of the machine, conveying them out at the clean end of the machine. The dishwashing

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² *Annual Book of ASTM Standards*, Vol 01.03.

³ *Annual Book of ASTM Standards*, Vol 01.05.

⁴ *Annual Book of ASTM Standards*, Vol 01.02.

⁵ *Annual Book of ASTM Standards*, Vol 01.01.

⁶ *Annual Book of ASTM Standards*, Vol 02.01.

⁷ *Annual Book of ASTM Standards*, Vol 02.04.

⁸ *Annual Book of ASTM Standards*, Vol 15.07.

⁹ Code of Federal Regulations, Chapter XVII, Part 1910, available from Superintendent of Documents, Government Printing Office, Washington, DC 20402.

¹⁰ Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.

¹¹ Available from National Electrical Manufacturers Assn., 2101 “L” Street, N.W., Washington, DC 20037.

¹² Available from National Fire Protection Assn., Batterymarch Park, Quincy, MA 02269.

¹³ Available from NSF International, P.O. Box 130140, Ann Arbor, MI 48113-0140.

¹⁴ Available from Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062.

¹⁵ Available from American Society of Sanitary Engineering, P. O. Box 9712 Bay Village, OH 44140.