Designation: ~~F1899 – 98 (Reapproved 2008)$^{\varepsilon 1}$~~ F1899 – 14

An American National Standard

Standard Specification for Food Waste Pulper Without Waterpress Assembly[1]

This standard is issued under the fixed designation F1899; 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.

~~ε^1 NOTE—Editorially corrected Footnote 6, 9.1, and 16.1.3 in December 2008.~~

1. Scope

1.1 This specification covers pulper assemblies intended for grinding of food scraps and limited amounts of cardboard, paper, and disposable plastic food service ~~wear.~~ware.

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

1.3 The following safety hazards caveat pertains only to the test method portion, Section 13, of this specification:

1.4 *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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

A6/A6M Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes, and Sheet Piling

A29/A29M Specification for General Requirements for Steel Bars, Carbon and Alloy, Hot-Wrought

~~A120~~A53/A53M Specification for Pipe, Steel, Black and ~~Hot-Dipped Zinc-Coated (Galvanized)~~ Hot-Dipped, Zinc-Coated, Welded and Seamless ~~for Ordinary Uses; Replaced by A 53 (Withdrawn 1987)~~

A126 Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings

~~A167~~A240 Specification for ~~Stainless~~Chromium and ~~Heat-Resisting~~ Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications ~~(Withdrawn 2014)~~

A269 Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service

A276 Specification for Stainless Steel Bars and Shapes

A436 Specification for Austenitic Gray Iron Castings

~~A442/A442M Specification for Pressure Vessel Plates, Carbon Steel, Improved Transition Properties (Withdrawn 1991)~~[3]

A505 Specification for Steel, Sheet and Strip, Alloy, Hot-Rolled and Cold-Rolled, General Requirements for

A513 Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing

A519 Specification for Seamless Carbon and Alloy Steel Mechanical Tubing

A532/A532M Specification for Abrasion-Resistant Cast Irons

A554 Specification for Welded Stainless Steel Mechanical Tubing

A582/A582M Specification for Free-Machining Stainless Steel Bars

A681 Specification for Tool Steels Alloy

B43 Specification for Seamless Red Brass Pipe, Standard Sizes

B75 Specification for Seamless Copper Tube

D2000 Classification System for Rubber Products in Automotive Applications

D2287 Specification for Nonrigid Vinyl Chloride Polymer and Copolymer Molding and Extrusion Compounds

D3915 Specification for Rigid Poly(Vinyl Chloride) (PVC) and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds for Plastic Pipe and Fittings Used in Pressure Applications

[1] This specification is under the jurisdiction of ASTM Committee F26 on Food Service Equipment and is the direct responsibility of Subcommittee F26.01 on Cleaning and Sanitation 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.

D3951 Practice for Commercial Packaging
E674 Specification for Industrial Perforated Plate and Screens (Round Opening Series)
F104 Classification System for Nonmetallic Gasket Materials
F437 Specification for Threaded Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80
F439 Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80
F441/F441M Specification for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80
~~F443 Specification for Bell-End Chlorinated Poly(Vinyl Chloride) (Cpvc) Pipe Schedule 40 (Withdrawn 1986)[3]~~
F760 Specification for Food Service Equipment Manuals
2.2 *UL Standards:*[3]
UL 430 Waste Disposers
UL 508 Industrial Control Equipment
2.3 *NFPA Standard:*[4]
NFPA 70 National Electrical Code
2.4 *ASSE Standard:*[5]
ASSE Standard 1012 Backflow Preventers With Intermediate Atmospheric Vent

3. Terminology

3.1 *General*—Pulpers are intended for grinding of food scraps and limited amounts of cardboard, paper, and disposable plastic food service wear. Materials are ground in a water filled tank (pulper) to produce a slurry, which is then passed into a disposal system or holding tank. Pulpers are not intended for grinding glass, china, metal, wood, clam, or oyster shell.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *pulper, n*—the pulper tank has a motor driven grinding disk to grind and cut waste material, and mixes this material with water to produce a slurry that is pumped to a disposal system or holding tank through a sizing screen. Pulpers may consist of the following principal parts: tank, motor, grinding disk, particle sizing ring, legs, feed chute, stationary cutters, and rotating cutters.

4. Classification

4.1 *General*—Pulper assemblies shall be of the following type, size, and options as specified.

4.2 *Type, Size, and Options:*

4.2.1 *Type A*—Free standing pulper with feed tray assembly and optional flanged feet.

4.2.2 *Type B*—Undercounter pulper for 34-in. (86-cm) high counter, with feed chute and flanged feet.

4.3 All equipment of the same model designation and options on the same purchase order shall have component interchangeability for serviceability.

5. Ordering Information

5.1 Purchasers should select the preferred options permitted in this specification and include the following information in procurement documents:

5.1.1 Title, number, and date of publication for this specification.

5.1.2 Classification of size and type.

5.1.3 Electrical power supply voltage range (see 9.1).

5.1.4 Electrical controls when specified to be remote from the unit (see 9.3).

5.1.5 Spare and maintenance parts required.

5.1.6 Designate special features required for installation, such as location of controls.

5.1.7 When naval shipboard use is intended (see Supplemental Requirements).

6. Materials

6.1 Unless otherwise specified, pulpers shall be fabricated of materials as specified below. Materials shall be free from defects, which would adversely ~~effect~~affect the performance or maintainability of individual components or the overall assembly. The unit shall be manufactured for cleanability.

6.1.1 *Corrosion-Resistant Steel*—shall conform to the requirements of any ~~300~~ 200, 300, or 400 series steel specified in Specification ~~A167~~A240, Specification A276, Specification A554, and Specification A582/A582M.

6.1.2 *Corrosion-Resisting Material*—Corrosion-resisting material is other than corrosion resistant steel that is equivalent in the pulper application.

6.1.3 *Abrasion-Resistant Cast Iron,* shall conform to the requirements specified in Specification A532/A532M.

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[3] Available from Underwriters Laboratories (UL), ~~Corporate Progress,~~ 333 Pfingsten Rd., Northbrook, IL 60062.
[4] Available from National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02269-9101.
[5] Available from ASSE International, ~~901 Canterbury, Suite A, Westlake, OH 44145.~~18927 Hickory Creek Drive, Suite 220, Mokena, Illinois 60448.