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# Standard Terminology Relating to Food Service Equipment<sup>1</sup>

This standard is issued under the fixed designation F1827; 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 terminology covers definitions for various terms and equipment listed in the test methods and specifications for Committee F26 on Food Service Equipment.

# 2. Referenced Documents

2.1 ASTM Standards:<sup>2</sup>

F759 Specification for Hot Chocolate Beverage Dispensers (Withdrawn 1995)<sup>3</sup>

F858 Specification for Hot Water Sanitizing Commercial Dishwashing Machines, Single Tank, Conveyor Rack Type

F859 Specification for Heat-Sanitizing Commercial Dishwashing Machines, Multiple Tank, Conveyor Rack Type

F860 Specification for Hot Water Sanitizing Commercial Dishwashing Machines, Multiple Tank, Rackless Conveyor Type

F861 Specification for Commercial Dishwashing Racks

F917 Specification for Commercial Food Waste Disposers

F918 Specification for Noncarbonated Mechanically Refrigerated Beverage Dispenser (Visible Product)

F919 Specification for Slicing Machines, Food, Electric

F952 Specification for Mixing Machines, Food, Electric

F953 Specification for Commercial Dishwashing Machines (Stationary Rack, Dump Type) Chemical Sanitizing

F1021 Specification for Feeders, Detergent, Rinse Agent, and Sanitizing Agent for Commercial Dishwashing and Glasswashing Machines

F1022 Specification for Chemical Sanitizing Commercial Dishwashing Machines, Recirculated Wash, Fresh Water

Rinse Type (Withdrawn 2012)<sup>3</sup>

F1023 Specification for Dispensers, Powdered Iced Tea

F1024 Specification for Dispensers, Rehydrated Mashed Potato (Withdrawn 2004)<sup>3</sup>

F1047 Specification for Frying and Braising Pans, Tilting Type

F1114 Specification for Heat Sanitizing Commercial Pot, Pan, and Utensil Stationary Rack Type Water-Driven Rotary Spray

F1126 Specification for Food Cutters (Electric)

F1150 Specification for Commercial Food Waste Pulper and Waterpress Assembly

F1202 Specification for Washing Machines, Heat Sanitizing, Commercial, Pot, Pan, and Utensil Vertically Oscillating Arm Type

F1203 Specification for Washing Machines—Pot, Pan, and Utensil, Heat Sanitizing, Commercial Rotary Conveyor Type

F1237 Specification for Commercial Dishwashing Machines, Multiple-Tank, Continuous Oval-Conveyor Type, Heat Sanitizing

F1275 Test Method for Performance of Griddles

F1299 Specification for Food Service Equipment Hoods for Cooking Appliances (Withdrawn 1997)<sup>3</sup>

F1360 Specification for Ovens, Microwave, Electric

F1361 Test Method for Performance of Open Deep Fat Fryers

F1371 Specification for Vegetable Peeling Machines, Electric

F1495 Specification for Combination Oven Electric or Gas Fired

F1484 Test Methods for Performance of Steam Cookers

F1496 Test Method for Performance of Convection Ovens

F1521 Test Methods for Performance of Range Tops

F1605 Test Method for Performance of Double-Sided Griddles

F1639 Test Method for Performance of Combination Ovens (Withdrawn 2012)<sup>3</sup>

F1695 Test Method for Performance of Underfired Broilers F1696 Test Method for Energy Performance of Single-Rack, Door-Type Commercial Dishwashing Machines

<sup>&</sup>lt;sup>1</sup> This terminology is under the jurisdiction of ASTM Committee F26 on Food Service Equipment and is the direct responsibility of Subcommittee F26.91 on Editorial and Nomenclature.

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<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> The last approved version of this historical standard is referenced on www.astm.org.

F1704 Test Method for Capture and Containment Performance of Commercial Kitchen Exhaust Ventilation Systems

2.2 ANSI Standard:<sup>4</sup>

ANSI Z83 American National Standard for Gas Food Service Equipment

2.3 UL Standards:<sup>5</sup>

ANSI/UL Standard No. 197 Commercial Electric Cooking Appliances

 UL Standard No. 710 Grease Extractors for Exhause Ducts
UL Standard No. 763 Motor-Operated Commercial Food Preparing Machines

UL Standard No. 969 Marking and Labeling Systems

2.4 NSF International Standards:

ANSI/NSF Standard No. 2 Food Service Equipment

ANSI/NSF Standard No. 4 Commercial Cooking, Rethermalization and Powdered Hot Food Holding and Transport Equipment

ANSI/NSF Standard No. 8 Commercial Powdered Food Preparation Equipment

ANSI/NSF Standard No. 3 Commercial Spray-Type Dishwashing and Glasswashing Machines

2.5 NFPA Standard:<sup>6</sup>

NFPA Standard No. 96

#### 3. Terminology

3.1 Definitions–Food Service Appliances:

**braising pan**—equipment suitable for the preparation of foods by several methods, such as frying, braising, boiling and simmering.

broiler, conveyor—equipment that carries the food product on a wire rack through a tunnel that heats using high temperature radiant heat sources above and or below the rack, for cooking on one or both sides of the food product at once. See broiler, overfired and broiler, underfired.

**broiler, overfired**—equipment with a high temperature radiant heat source above a grate for cooking food.

*upright broiler*— a heavy duty freestanding piece of equipment with a high input rate and production capacity among overfired broilers. See **broiler**, **overfired**.

salamander—a medium duty broiler, with approximately half the depth of an upright, and generally mounted above a commercial range. See broiler, overfired.

**broiler, underfired**—equipment with a high temperature radiant heat source below a grate for cooking food, including charbroiler, radiant-broilers, smokeless broilers, etc..

**cheesemelter**—a low input unit, designed to melt cheese on top of specialty foods, but usually incapable of fully cooking a food item such as steak or chicken. See **broiler**, **overfired**.

**dishwashing machine, commercial**—machines that uniformly wash, rinse, and sanitize kitchen ware. The machines shall be capable of removing physical soil from properly racked and prescraped tableware, and sanitizing multiple-use tableware.

booster heater— the water heater responsible for heating and maintaining the final sanitizing rinse water (to a minimum of 180°F) to dishwater, may be separate from dishwater or integral.

*chemical sanitizing*—solution to destroy or kill any residual bacteria from multiple-use tableware.

chemical sanitizing, recirculated wash, fresh water rinse type—machines with a final rinse using fresh water from an outside source combined with chemical sanitizing solution; additional parts: chemical sanitizing equipment. See dishwashing machine, commercial.

chemical sanitizing, stationary rack, dump type—machines with chemical sanitizing solution added to the rinse cycle; additional parts: chemical sanitizing equipment. See dishwashing machine, commercial.

*conveyor*—a mechanism designed to move racked/unracked dishware through the treatment stages and out to the clean end of conveyor type dishwashing machines.

detergent feeder— a device that automatically feeds detergents into wash tanks of spray-type commercial dishwashing and glasswashing machines.

dish rack—a peg type, polypropylene, or other noncorrosive material rack designed to hold tableware in place during washing.

dishwater inlet— incoming water to dishwater.

heat sanitize— fresh water, heater to a minimum specified temperature (usually a minimum of 180°F), to destroy or kill any residual bacteria from tableware.

heat sanitizing, conveyor rack type—machines that automatically convey racks of soiled tableware through treatment stages and final heat sanitizing rinse, conveying them out at the clean end of the machine; additional parts: rinse chamber, heating equipment, and conveying mechanism. See dishwashing machine, commercial.

heat sanitizing, stationary rack type—manually fed machines, includes a final heat sanitizing rinse; additional parts: heating equipment. See **dishwashing machine**, **commercial**.

heat sanitizing, continuous oval-conveyor type—dishwashing machine and conveyor-table when assembled, shall form an oval-shaped dish handling system. Machines shall automatically convey racks of soiled tableware through the treatment stages, including a final heat sanitizing rinse of the machine, conveying them out to the clean tableware removal area of the conveyor: additional parts: recirculating pre-wash chamber, rinse chamber, conveying mechanisms, heating equipment and horizontal conveyor tables. See dishwashing machine, commercial.

 $<sup>^4</sup>$  Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.

<sup>&</sup>lt;sup>5</sup> Available from Underwriters Laboratories (UL), Corporate Progress, 333 Pfingsten Rd., Northbrook, IL 60062.

 $<sup>^6</sup>$  Available from The National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269-9101.

- heat sanitizing, rackless conveyor type—machines shall automatically convey unracked soiled tableware through the treatment stages, includes a final heat sanitizing rinse, conveying them out at the clean end of the machine; additional parts: rinse chamber, conveying mechanisms, and heating equipment. See dishwashing machine, commercial.
- pot, pan, and utensil washing machine, commercial—see pot, pan, and utensil washing machines, commercial.
- rinse additive feeder—a device that automatically feeds rinse additives into recirculated or non-recirculated rinse water of spray-type commercial dishwashing and glasswashing machines.
- sanitizing agent feeder—a device that automatically feeds sanitizer into recirculated or non-recirculated rinse water of spray-type commercial dishwashing and glasswashing machines.
- *tank heater*—heating system that maintains the dishwasher's wash tank temperature.
- **dispenser**—commercial equipment designed to deliver a beverage or food product.
- aeration system— a type of circulation system that causes the beverage to cascade across the top and down the sides of the bowl interior incorporating sir into the beverage.
- *circulation system*—the system that moves the beverage within the bowl to ensure proper cooling and mixing.
- hot chocolate dispenser—commercial equipment designed to deliver a predetermined amount of hot chocolate flavored beverage.
- noncarbonated mechanically refrigerated visible product, beverage dispenser—counter-top equipment, mechanically refrigerated, with a transparent, impact-resistant container designed to afford a visual display of the beverage.
- powdered iced tea dispenser—commercial equipment designed to deliver a portion of instant tea, usually mixed with tap water and dispensed into a container with ice.
- rehydrated mashed potato dispenser—commercial equipment designed to deliver whipped or mashed potatoes.
- throw—a quantity of liquid or powder ingredient that is augured, pumped, or dispensed into a liquid of larger mass and makes up the basic flavoring and/or solid of a finished product.
- whippers—a mechanical device used to beat air into a beverage so as to change its properties from a liquid drink to a frothy drink.
- **exhaust hood**—a device that captures hot air, odors, and vapors produced in the cooking process and directs them to an exhaust fan.
- canopy—a covering fixed above cooking equipment and overhanging on all sides of its unclosed sides, whose lower edge is a minimum height of 6 ft 6 in. from the finished floor. The

- purpose of the canopy is to contain and capture the unwanted by-products resulting from cooking activities and may be Type I or Type II. See *Type I*, *Type II*, and **exhaust hood**.
- wall-mounted canopy—used for all types of cooking equipment located against a wall. See *canopy*.
- *single island canopy*—used for all types of cooking equipment in a single line island configuration. See *canopy*.
- double island canopy—used for all types of cooking equipment mounted back to back in an island configuration. See *canopy*.

## grease removal devices:-

- baffle filters— a series of vertical baffles designed to capture grease and drain it away to a container. The filters are arranged in a channel or bracket for easy insertion into, and removal from, the hood for cleaning, and are usually constructed of aluminum, steel, or stainless steel and they come in various standard sizes. See exhaust hood.
- grease extractors— a system of components designed for integration within the exhaust hood for the removal of the airborne grease particles and the condensate of grease vapors, or both, for immediate or future disposal. See exhaust hood.
- removal extractor— a series of horizontal baffles, usually constructed of stainless steel, designed to remove grease and drain it away to a container. They are cleaned by running them through a dishwasher or by soaking and rinsing. See grease extractors.
- stationary extractor—a series of horizontal baffles that run the full length of the exhaust hood and are not removable for cleaning. It includes one or more water manifolds with spray nozzles that, upon activation, wash the grease extractor with hot, detergent-injected water, removing the accumulation of grease from the extractor. See *grease extractors*.
- makeup air—the supply of outside air, tempered or untempered, to a building in a controlled manner for the replacement of air exhausted through the hood, or the supply of outside air, untempered, into the hood to reduce the amount of tempered air exhausted from the building.
- hood with integrated makeup air—an exhaust hood that introduces makeup air through a plenum, as an integral part of the hood. Integral makeup air options include down discharge, front face discharge, or internal discharge (short-circuit), or both.
- down discharge— makeup air method is used when spot cooling of the cooking staff is desired to help relieve the effects of severe radiant heat generated from equipment such as charbroilers. The makeup air must be heated or cooled, or both, depending on the climate.
- front face discharge—makeup air method that is very flexible, but should be directed away from the hood, but the closer the air outlet's lower edge is to the bottom of the hood, the lower the velocity must be to avoid drawing effluent out of the hood.

internal discharge—method in which makeup air is introduced inside the hood. This design has limited application, and the amount of supply air able to be introduced varies considerable with the type of cooking equipment and the exhaust flow rate. Makeup air may be untempered depending on climatic conditions.

short-circuit— see internal discharge.

noncanopy—a fixed device located in close proximity over cooking equipment and in some cases having a shelf-like appearance. The purpose of which is to channel air movement to contain and capture the unwanted by-products resulting from cooking activities.

backshelf—used for counter-height equipment typically located against a wall, but could be freestanding.

eyebrow—used for direct mounting to ovens and some dishwashers.

*pass-over style*— used over counter-height equipment when pass-over configuration (from the cooking side to the serving side) is required.

Type I—exhaust hood designed for removal of grease and smoke. It includes both listed grease filter, baffles, or extractors for removal of the grease and fire suppression equipment. See **exhaust hood**.

Type II—exhaust hood designed for collection and removal of steam, vapor, heat, and odors where grease is not present. It may or may not have filters or baffles and typically does not have a fire suppression system.

ventilator—see exhaust hood.

food cutters—machine that uniformly reduces food products to a small particle size for salads, spreads, bread crumbs, and other food service recipes. Reduction of the food product is accomplished by combining the rotation of the product bowl with the perpendicular high speed rotation of a set of stainless steel cutlery knives.

**food mixing machines**—vertical electric machine that shall be adaptable for mixing, whipping, and beating food products. The size range (as expressed by bowl capacity) from 12 qt to 140 qt and does not include special purpose machines that are intended solely for mixing dough.

agitators—a removable device attached to the power output shaft that extends downward into the mixer bowl and converts or imparts the desired action on the contents of the bowl.

attachment hub— a device featuring an industry-standard square drive, that supports and powers ancillary devices such as a vegetable slicer or chopping attachment.

bowl guard—the barrier, assembled over the bowl area, intended to reduce the user's access to the hazards that exist in the bowl during machine operation.

**food service equipment manuals**—manuals for food service equipment shall contain as a minimum, complete

installation, operating, preventive maintenance, safety warnings, cleaning, and service instructions, including applicable charts and diagrams.

**food slicing machines**—a machine with electrically-driven rotating slicing blades.

carriage—the device for holding the food product that is manually or automatically reciprocated to bring the product in contact with the knife.

feed chute—a device that can replace the carriage for the purpose of slicing multiple small cross-sectional food products. This device also includes an end weight or spring to permit slicing of product to within the last one-quarter inch.

gage plate—a device that determines the thickness of an individual slice of food product.

gage plate adjuster—a manually operated dial or a lever that is used by the operator to set the gage plate. Usual practice is to indicate the thickness by a graduated scale with a 0 (zero) setting to indicate that the gage plate is completely closed.

sharpener—the device for holding the sharpening and truing stones. The sharpener can be either attached to the slicer or removable from the slicer's sharpener attachment point. If it is removable, a storage location within the machine structure shall be provided.

food waste disposal, commercial—a device intended for grinding food waste into small particles that are then flushed by water into a sanitary sewer system. Food wastes can be cooked or noncooked soils from the preparation or serving of foods. Use not intended for grinding glass, china, metals, clam or oyster shells, large bones, wood, paper, cardboard, or plastic.

device intended for grinding food waste, food service paper, cardboard products, food service plastic products, documents including computer printouts, general office and retail store paper, and cardboard waste. Materials are ground in a water-filled tank (*pulper*) to produce a slurry which is then passed to the waterpress to be dewatered. Use not intended for grinding glass, china, metal, wood, clam, or oyster shells. Any small pieces of metal inadvertently placed in the pulper, such as cardboard box staples, aluminum refreshment cans, or tin food cans, shall be removable from the outside of the pulper tank.

*pulper*—a water filled tank with 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 the waterpress through a sizing screen.

waterpress—a device that de-waters the slurry generated in the pulper by use of a tapered compression cone and perforated screen, then discharges the pulp down a chute to a waste container. Water removed during this process is recirculated to the *pulper* tank in order to conserve fresh water use.

**fryer**—equipment, including a cooking vessel, in which oils are placed to such a depth that the cooking food is essentially