

Fully Integrated Self Cleaning System Specification

The hood shall be a Type I exhaust hood with factory installed spray and manifold assembly. Assemblies shall be NSF listed and ETL listed to conform to UL710, ULC710, and UL508A.

The hood shall be constructed of 100% Stainless steel, either 304 or 430. All welds in the plenum shall be dye-penetrate tested for leaks. High efficiency baffle filters shall be installed in hood, and the sprayers located inside the plenum will clean the back of the filters. All plumbing shall be standard brass pipefitting except for penetrations, which shall be stainless steel. All nozzles shall be wide-angle, full-cone with internal strainer and pressure sensitive check valve.

The water inlet shall be a 3/4" NPT pipefitting. Drains shall consist of one 1 1/2" NPT pipe, unless exhaust hood is over 10' long or 30" tall, in which case two drains shall be installed. A ball valve shall be installed with the manifold for servicing the self cleaning system. All surfactant injection shall be done after a vacuum breaker backflow prevention valve. Timers shall be factory set for a three minute wash cycle with a one second surfactant injection before a delay of one minute.

Certifications

The ND-2, SND-2 and CND-2 Models have been certified by ITS. This certification mark indicates that the product has been tested to and has met the minimum requirements of a widely recognized (consensus) U.S. and Canadian products safety standard, that the manufacturing site has been audited, and that the applicant has agreed to a program of periodic factory follow-up inspections to verify continued performance. Models are ETL listed under file number 3054804-001.



Suggested Specifications

Aerodynamic Grease Trough

Fully welded grease sub-assembly and a deep grease trough allows for easy cleaning. Grease trough shall be integrated into the hood to ensure smooth effluent transition from appliance to filter.

Filter Options

The filters shall be constructed of stainless steel and shall be NSF and UL or ETL classified. Various types of filters are available based on cooking application. The filters used in the system will come standard with filter drip blanks and be configured according to filter sizes selected.

Integrated Spray Bar and Nozzles

The spray bar extends the full length of the hood immediately behind the filters in the hood. The bar is $\frac{3}{4}$ " brass fittings with nozzles that spray directly toward the back of the hood. Water enters the spray bar via a $\frac{3}{4}$ " quick-seal. All fittings and pipe will be brass. Nozzle(s) covering the riser(s) will be $\frac{1}{4}$ " NPT and is a wide angle, high flow nozzle. The first six feet of ductwork will be sprayed with the nozzle.

Self Cleaning Wash Timers

Timers shall be factory set for a three minute wash cycle with a one second surfactant injection before a delay of one minute. The wash cycle timer is a fleeting off timer and is triggered by turning the fan switch to the "OFF" position. The surfactant timer is an asynchronous on-off timer, which cycles contacts on and off for adjustable time ranges.



Manifold

Manifold is configured based on options selected. A ball valve shall be installed with the manifold for servicing the self cleaning system. All surfactant injection shall be done after a vacuum breaker backflow prevention valve. Parts included are main shutoff valve, temperature and pressure gauge and surfactant pump.

Optional Suggested Specifications:

CORE Protection

Hood to ship with UL-300 integral plenum and duct fire system

Factory Installed Energy Management System

Factory will install the energy management system (EMS) in the hood's integral end utility cabinet. Includes factory wiring of duct temperature sensor, and pre-set timers. EMS shall be capable of reducing exhaust and supply airflow quantities by 20% using variable frequency drives.

End Panels

Factory supplied end panels will reduce dynamic effects from cross drafts and enhance the capture and containment of the hood. Exhaust CFM can be reduced by up to 30 percent of the normal exhaust rate.

Drain Kit

Drain(s) shall consist of one 1 1/2" NPT pipe, which comes standard with the hood. Optional drain kit includes slip nut, 90 degree fitting, 45 degree fitting, 6" pipe nipple and 72" of pipe length to make connection to the grease trap or other approved reservoir. All parts are stainless steel.



Plugged end. Removable for back to back or Hot water ruly integrated set cleaning system (1)) who can be a set of the line integrated set cleaning system uses the basic manifold with the addition of a detergent pump and times to cantot the system. When the fan power switch is turned off, the system syrays and injects surfactant into the plenum for cleaning. The length of the wash cycle and syradcath right the wash intuities indication are adjustable. It is recommended that the wash time be 3 minutes and releagent hipsclion is a second Water Pressure = 30 to 70 FSI Operating Water Pressure = 125 FSI Maximum Static Water Itemp = 140° to 170° F end to end - All hoods Fire System Activation (One Per Riser) -Spray bar located inside hood. -Sprav manifold 2 Cold Water Fully Integrated Self Cleaning System (W2). (W2). The cold water fully integrated self cleaning system uses the basic manifold without a surfactant pump or ilmers. When the fan switch is furned an, the system begins to spray cold water into the pleanum. The spray stops ance the fans are furned off. Water pressure regulator is supplied by others. Water Nessure 10 to 20 PSI Operating Water Pressure = 125 PSI Maximum Static Surfactant 3. 1 Hot And Cold Fully Integrated Self Cleaning Tank System (W3). The hot and cold fully integrated self cleaning system uses both systems above with one change. It has two water inlets versus the previous systems one. This system combines the functionality of the above systems. Features: CORRECTION WO Primary Water Spinkler File Protection for Commercial Kitchen Hoods. Duct, Plenum, and Appliance Prie System protection is provided by this option per UL300. Appliance protection provided by Total Flood Protection, Duct mounted sensor electrically activates the water spray system to extinguish duct, plenum, and appliance fires. Flectrical Easily serviced Automatic operation control package 4. Additional period
Backflow prevention
Adjustable wash time
Drip less nozzles with internal strainer
Adjustable surfactant injection timing and
augustic quantity Operating Water Pressure: 30 to 70 PSI** Note: Filters must be installed for proper system operation. Filters can be removed once the system is off. "Water pressure may not drop below 30 PSI while water is spraying. Pressure may not raise above 70 PSI when water is spraying. Max water static pressure is 125 psi. Part Number: Various MACOLA Number: Various Drawing Name: Self Cleaning Instructions Drawn By: JTS Parent Assembly: Self Cleaning/CORE Sheet: 2 of 32 therwize Specified al: Various ize: N/A x N/A Standard Ion... Fractions: ±1/16 Decimal: XX±.05 XXX±.015 ±1 CONFIDENTIAL

Fully Integrated Self Cleaning System Overview



Fully Integrated Self Cleaning System Manifold Details

