

VASDHS
Nutrition and Food Service
SALIENT CHARACTERISTICS FOR FLIGHT-TYPE DISHMACHINE

Dish machine will be a fully automatic flight-type dish machine with automatic soil removal system and power recirculating prewash in the 8' 8-1/4" load section. The 8' center section is to include a 3' power wash tank, 3' power rinse tank, 2' dual rinse tank, and pumped fresh water final rinse. The unload section to be 7' 6-1/2" in length. Overall length of machine to be 24' 3-1/4". Direction of operation to be left to right. Voltage for the machine to be 208/60/3.

AUTOMATIC SOIL REMOVAL

Machine will be equipped with an integrated automatic soil removal system. This system will minimize the need to pre-scrub dishes and reducing detergent consumption. Prevents more than 75% of food scraps from entering pre-wash; therefore no need to manually pre-rinse by operator

Key feature includes:

- Separate 24" module with dedicated tank between the load platform and the prewash containing upper and lower pre-rinse arms
- Soil is automatically pre-rinsed from the ware and pumped to an external scrap basket located in load section
- Wash water stays cleaner longer reducing water changes by 50%

AUTO-DELINE

Machine will be furnished with an alert and automatic de-lime process, which will notify the operator when a de-lime cycle is required, based on the location's specific water conditions and the concentration of it's de-lime solution. Once the cycle is initiated, the machine will run for the necessary length of time, drain, refill, flush the interior, and drain automatically, with no further action required from the operator.

Key feature includes:

- The machine provides clear instructions on the visual display.
- Dishmachine has alert to indicate when de-liming is needed.
- On board chemical pump injects de-lime solution automatically into the booster heater.
- Once de-lime is engaged by the operator the automated process takes approximately 60 minutes
- Once the machine drain, the system will shut down for use the next day.

AUTO CLEAN

When prompted by the operator through the controls, the machine will initiate auto-clean cycle, where (3) rotating flush arms and the machine's wash arms will perform a 5 minute self-cleaning cycle, and will drain automatically at the conclusion of the cycle.

Key feature includes:

- Automated process that allows the operator to leave the machine once engaged saving more than 45 minutes of cleaning time
- Operator engages the auto clean by sliding the capless wash arms open, dumps the strainer baskets, opens the drains, and starts the cycle.

- Auto clean system flushes debris from wash arms, independent spray nozzles located in the chamber spray fresh water to wash down all interior surfaces removing food soil from all surfaces and curtains. Once complete the machine drains and shuts down; ready for next day use
- Process will take 10 minutes of operators time to keep machine sanitary

ENERGY RECOVERY

Energy recovery system will be included with the dish machine. System will preheat an incoming cold water line with the exhaust from the dish machine, and feed the heated water to the machine's booster heater to save energy and reduce operating costs.

CONSTRUCTION

Tanks will be deep drawn, without any welds, and constructed of #16 gauge stainless steel. Chamber prewash, power wash, and power rinse inspection doors to be fully insulated and hinged opening outward for energy efficiency and ease of cleaning. Sliding wash arms will not include caps that need to be removed or that can be lost. Stainless steel back panels and lower front panels to provide an air gap for a cooler surface area and a reduction in heat loss. Conveyor drive gear to be constructed of cast stainless steel. Easily removable curtains to be placed between each section to aid in heat retention. Sloped screens to carry scrapes to the scrap baskets. Must include a blower dryer after the final rinse integrated into the unit. Steam booster to ensure water temperatures hot enough to sanitize.

PUMPS

Prewash and dual rinse pumps to produce a flow rate of 150 gallons per minute, and power wash and power rinse pumps to produce a flow rate of 292 gallons per minute. All pumps and impellers to be stainless steel and self-draining. Easy to reach pump clean-outs to be provided for each pump.

MOTORS

All pump motors to be totally enclosed fan cooled motors. Prewash pump to be 3 1/2 HP, and the wash and power rinse pump motors to be 5 HP. Each motor will have inherent overload protection.

CONTROLS

Machine will include microprocessor controls mounted at eye level and equipped with service diagnostics, dirty water indicators, de-lime notifications, machine status updates, and digital temperature readouts. Controls to allow the operator to initiate auto-clean and auto-delime. Power on/off and start/stop switches integrated into keypad. Conveyor start/stop switches ergonomically located at the load and unload section

CONVEYOR DRIVE SYSTEM

Conveyor drive motor to be 1/3 hp. with inherent overload protection. Two sets of photo electronic eyes positioned at the load end of the machine to detect all sizes of ware and activate machine operation and sequence the fresh water rinse system to provide a reduction in operating cost. Trip mechanism provided on unload section shall stop the conveyor. Flight links to be of Duraflex material to accommodate dishware as well as 18" x 26" sheet pans. Flight links pegs to be designed with V-shaped edges, containing no flat surfaces to deflect lower wash arm water. Conveyor width of to be 30". Conveyor will have adjustable speed from 4 to 8.5- feet per minute provided on the digital display keypad.

VENT SYSTEM

Single point 16" round indirect vent connection to include draft induction fan powered by the machine's controls. Capable of providing 750CFM exhaust at standard air condition.

DRAINS

Machine will be equipped with both manual and automatic drains. The electronic drain to allow for automatic draining following an auto-clean or auto-delime cycle. Manual tank drains to be opened and closed by means of a heavy gauge handle connected to a brass body and stainless steel ball valve.

CLEAN OUT ACCESS

Extension panels on load and unload sections to be completely removable without the use of tools for easy cleaning.

STRAINER SCREENS

Prewash, power wash and power rinse scrap screens to be one piece slanted design slopped toward the front of the machine and the large removable 16 gauge stainless steel scrap basket. Scrap system to be inside chamber allowing for a flat front.

BLOWER DRYER

Heated blower dryer to include (2) 1 HP blower motors. Blower dryer to include side baffles, to improve drying results. To include 7.5 KW heating element.

FINAL RINSE

Fresh water pumped final rinse water usage will be no more than **58 gallons per hour** at a conveyor speed of 8.5 feet per minute. Rinse arms will be snapped in place, so they are removable without tools for easy cleaning. Rinse activation to be sequenced through the use of photo electronic sensors mounted at the entrance end of the load chamber. Final rinse #150 steam booster electrically integrated to the dish machine.

WARRANTY

18 month standard parts and labor warranty.

SERVICE

Local dedicated service network with factory trained technicians to support dishmachine maintenance and repair.

Additional Characteristics:

- Must be able to be equipped with Ecolab chemical auto dispensing system

- Digital temperature displays located on front of the dish machine
- Start and stop switches at both ends of the machine
- Trip mechanisms provided at unload section.
- Must be NSF certified and be UL classified