

SPECIFICATIONS

MODEL BW-1000-C-180

STANDARD BIN WASHER

DESIGN AND OPERATION

Designed for batch type operation where one (1) bin is loaded into the bin inverter. The bin inverter is rotated 180° into the machine by a gear motor and is activated by holding dual push buttons located on the side of the machine. After the door has been closed, the cycle start button is then pushed which initiates a recirculating ambient temperature non-detergent pre-wash (which removes any loose debris left in the bin) a 150° F. recirculating detergent wash and then an ambient chemical or 180° F. hot water sanitizing rinse. The sanitizing rinse water is directed back into the recirculated pre-wash tank to freshen it. The excess water then overflows to drain. The door is then reopened for unloading. The bin inverter is then returned to the floor by holding dual push buttons. Booster heaters maintain proper operating temperatures.

GENERAL CONSTRUCTION

Upper housing is constructed of #12 gauge, type #304 STAINLESS STEEL with a #3 finish. Pre-wash and wash tanks are constructed of #12 gauge, type #304 STAINLESS STEEL also with a #3 finish. Door is constructed of #14 and #12 gauge, type #304 STAINLESS STEEL. Manually opened and closed and protected from any cycle operating when not in the closed position. Base frame constructed of 3" x 3" x 1/4" structural STAINLESS STEEL angle. All seams are mig or tig welded and continuous. All welds are cleaned inside, cleaned and buffed outside.

BIN INVERTER

Bin inverter is constructed of #304 STAINLESS STEEL heavy wall tubing and is easily adjustable for different size bins. It is driven by a 1/2 H.P. TENV helical worm gear motor with internal encoder and brake, 208/230/460 or optional 575 volt, 3 phase, 60 cycle, controlled with a A.C. variable speed inverter.

RECIRCULATING PRE-WASH AND WASH TANKS

Recirculating pre-wash and wash tanks heated by electric, infrared gas or steam coil, thermostatically controlled, low water protected, complete with automatic tank diverter controlled by air operated cylinder and pump intake butterfly valves to separate pre-wash and wash tanks, 1" NPT automatic fill systems, 1 1/2" NPT overflow connections, 2" STAINLESS STEEL gate drain valves. Pre-wash 196 gallons (150 gas heated) and wash tank 213 gallons (166 gas heated), both sloped to drain.

PRE-WASH AND WASH PUMP

Closed coupled centrifugal pump with STAINLESS STEEL casing and impeller. Complete with 25 H.P. wash down duty motor, 208/230/460 or optional 575 volt, 3 phase, 60 cycle. Rated for 325 gallons per minute at 80 PSI.

SANITIZING RINSE	Fresh sanitizing rinse delivers 13 gallons per 30 second cycle at 20 PSI flow. 180° F. sanitizing rinse water supplied to unit by customer or optional 36 gallon pumped rinse tank heated by electric, infrared gas or steam coil with 1 H.P. wash down duty motor. 208/230/460 or optional 575 volt, 3 phase, 60 cycle. If booster heater is required, the water supply temperature is 120° F. minimum. If an ambient chemical rinse is preferred, it is to be supplied by customer.
FILTRATION	Soil filter diverter is located above the water line and is sloped to direct solids to filter baskets located in external tank, accessed through a removable lid on the left side of the machine.
STEAM EXHAUST VENT	Steam exhaust vent 12 7/8" inside diameter, consisting of #14 gauge, rolled STAINLESS STEEL collar bolted to the top of machine. Machine pre-wired with control timer for the addition of the fan.
OPTIONAL EXHAUST FAN	12" diameter STAINLESS STEEL exhaust fan with STAINLESS STEEL blade mounted on washer to extract steam after rinse cycle. 3/4 H.P. wash down duty motor, 208/230/460 or optional 575 volt, 3 phase, 60 cycle, 1725 RPM, rated 700 CFM @ .36" static pressure.
ELECTRICAL ENCLOSURE AND CONTROLS	Electrical enclosure is UL 4X STAINLESS STEEL with Square "D" components. Optional disconnect switch with lockout feature also available. Complete with 120 volt control circuit and Schneider Modicon PLC with Magellis 5.7" color operator interface touch screen including ethernet and data logging capabilities. A second UL 4X STAINLESS STEEL panel located near the front of the machine with dual buttons, which need to be pushed simultaneously, for lifting and lowering the bin inverter. Complete recirculating pre-wash, recirculating wash, sanitizing rinse, and dwell/fan cycles initiated by pushing the start icon. Pre-wash (set at 1 minute), wash (set at 1. 2 and 3.5 minutes), and rinse (set at 30 seconds). Washer will be factory wired in hard PVC coated conduit and tested prior to shipment.
OTHER FEATURES	Sanitary sloped roof design. 6" high adjustable STAINLESS STEEL legs for leveling machine.
CONTAINER SPECIFICATIONS	Designed for bins measuring from 40" x 40" x 34" up to 48" x 48" x 48" high weighing up to 200 lbs. Other design variations available for different container sizes.
DIMENSIONS	Washer Cabinet Dimensions: 75" wide x 72" deep x 139 1/8" high Overall Dimensions: 118" wide x 98" deep x 139 1/8" high

CONNECTIONS

Electrical: Single-point connection
Pre-Wash Inlet: (1) 1" NPT, Ambient
Wash Tank Water Inlet: (1) 1" NPT, Ambient to 140° F. maximum
Final Rinse Water Inlet: (1) 1" NPT, 180° F., ambient for chemical sanitizing or 120° F. minimum with optional booster heater
Drains: (2) 2" NPT
Overflows: (2) 1 1/2" NPT
Gas Option: (2) 3/4" NPT and (1) 1/2" NPT with optional booster heater
Steam Option: (2) 3/4" NPT or (3) 3/4" NPT with optional final rinse booster heater
Steam Condensate: (2) 3/4" NPT or (3) 3/4" NPT with optional final rinse booster heater
Compressed Air: (1) 1/4" NPT, 20 SCFM @ 100 PSIG

UTILITIES

Electric Heated:
208 Volt, 3 Phase, 306 Running Amps, 400 Amp Service Breaker
240 Volt, 3 Phase, 264 Running Amps, 350 Amp Service Breaker
480 Volt, 3 Phase, 133 Running Amps, 175 Amp Service Breaker
575 Volt, 3 Phase, 109 Running Amps, 150 Amp Service Breaker

Gas or Steam Heated:
208 Volt, 3 Phase, 73 Running Amps, 100 Amp Service Breaker
240 Volt, 3 Phase, 62 Running Amps, 80 Amp Service Breaker
480 Volt, 3 Phase, 32 Running Amps, 40 Amp Service Breaker
575 Volt, 3 Phase, 24 Running Amps, 30 Amp Service Breaker

Steam Consumption:
300 lbs. per hour for recirculating pre-wash and wash tanks
80 lbs. per hour for optional final rinse booster heater

Gas Firing Rate:
120,000 BTU/Hour for recirculated wash
120,000 BTU/Hour for recirculated rinse
70,000 BTU/Hour for optional final rinse booster heater

Additional Amps

Please add the following amps to those above for an optional exhaust fan (2.4 at 208 volt, 2.3 at 240 volt, 1 at 480 volt, or .75 at 575 volt) and or pumped rinse tank, gas or steam heated (2.4 at 208 volt, 2.3 at 240 volt, 1 at 480 volt, or .75 at 575 volt) or pumped rinse tank, electric heated (69 at 208 volt, 60 at 240 volt, 29.8 at 480 volt, or 24.8 at 575 volt) and recalculate service breaker size, which should be at least 125% of total running amps.

EFFECTIVE DATE

Effective: March 1, 2020

SPRAY PIPING SYSTEM

A water driven rotating nozzle to pre-wash and wash the inside of the bin and six (6) compressed air piston driven, oscillating spray arms for complete 360° coverage on the outside. Pre-wash and wash supplied with STAINLESS STEEL piping, fittings, removable end caps and chemical and corrosion resistant "quick release" V-jet spray tips. Interior sanitizing rinse line includes STAINLESS STEEL tubing and "quick release" full cone nozzles.