

SPECIFICATIONS
“DOUGLAS” MODEL WRBO-2500-ABPW
ASSORTED BAKERY PAN WASHER
WASH, RINSE, SANITIZE, AND BLOW-OFF CONVEYOR SYSTEM

**DESIGN AND
OPERATION**

Designed for continuous operation with a variable speed drive and digital readout to modify and monitor speed for varying soil conditions. A heavy duty STAINLESS STEEL belt transports products through 150° F. recirculating wash and 160° F. recirculating rinse chambers, then a 180° F. final fresh water sanitizing rinse section. After being sanitized, they proceed into a high pressure blow off module with six (6) air knives. Dwell zones and anti-splash curtains are provided at the entrance and exit ends to help prevent overspray from reaching the operators. A dwell zone is also provided between the wash and rinse chambers to prevent cross contamination of detergent and rinse water. The final sanitizing rinse water by design automatically flows back into the recirculating rinse tank to freshen it. If desired, you can manage the overflow of all or any portion of this water back into the recirculating wash tank. Manually adjustable hold down mechanism and fixed product guides are provided to keep containers in place and prevent jamming. Booster heaters maintain proper operating temperatures.

**GENERAL
CONSTRUCTION**

Upper housing will be constructed of #14 and #16 gauge 300 Series STAINLESS STEEL with a #3 finish. Wash tank to be constructed of #12 gauge 300 Series STAINLESS STEEL also with a #3 finish. Base frame constructed of 3” STAINLESS STEEL square tubing and 3” x 3” x 1/4” structural STAINLESS STEEL angle. All seams tig or mig welded. Seams, where needed for watertight construction and at tank base frame, are continuously welded. All other seams are stitch welded for strength. All welds are cleaned inside, cleaned and buffed outside. Optional continuous welds in lieu of stitch welds available.

**RECIRCULATING
WASH AND RINSE
TANKS**

Recirculating wash and rinse tanks heated by gas, live steam or steam coil, thermostatically controlled, low water protected, complete with 1” NPT automatic fill system, 1 1/2” NPT overflow connection, 1” NPT valved overflow from rinse tank to wash tank. 3” gate drain valves, thermometers and pressure gauges. 330 gallon wash tank (450 if gas heated) and 235 gallon rinse tank (495 if gas heated) capacities, sloped to drain.

WASH PUMP

Close coupled centrifugal wash pump, bronze fitted with cast iron casing. Complete with 20 H.P. TEFC or optional wash down duty motor, 208/230/460 or optional 575 volt, 3 phase, 60 cycle. Rated for 310 gallons per minute at 60 PSI. Optional STAINLESS STEEL wet end available.

RINSE PUMP

Close coupled centrifugal rinse pump, bronze fitted with cast iron casing. Complete with 5 H.P. TEFC or optional wash down duty motor, 208/230/460 or optional 575 volt, 3 phase, 60 cycle. Rated for 125 gallons per minute at 40 PSI. Optional STAINLESS STEEL wet end available with 7 1/2 H.P. motor.

**FINAL SANITIZING
RINSE SECTION**

Fresh water rinse section delivers 1.54 gallons per minute at 20 PSI flow. 180° F. sanitizing water supplied to unit by customer or optional booster heater. If booster heater is required, the water supply temperature is 120° F. minimum.

**NOZZLES
AND PIPING**

Interior recirculated wash, rinse and sanitizing rinse sections constructed of STAINLESS STEEL piping, removable end caps, fittings and brass “V” jet nozzles. Optional STAINLESS STEEL nozzles available.

FILTRATION

Filter screens located above water line, easily cleaned without having to empty the wash and rinse tanks through removable access panels on both sides of the machine. Optional traveling filtration system with external dump basket available. Note, with this option, the load height increases by 6”.

CONVEYOR

One (1) 27” wide #304 STAINLESS STEEL 1” x 1” heavy duty flat wire belt complete with reversible A.C. variable speed inverter with ball detent clutch to prevent belt damage in case of jamming. 1/2 H.P., TENV helical worm gear motor, 208/230/460 or optional 575 volt, 3 phase, 60 cycle, corrosion resistant bearings, STAINLESS STEEL take up frames, supports, UHMW belt sprockets and wear strips.

BLOW-OFF MODULE	One (1) high pressure blower, mild steel painted blue or optional STAINLESS STEEL housing with aluminum wheel, with 20 H.P. TEFC or optional wash down duty motor, 208/230/460 or optional 575 volt, 3 phase, 60 cycle. Complete with #14 gauge STAINLESS STEEL ductwork and six (6) tear drop air knives to pressurize air and increase ambient temperature by approximately 30°F.
STEAM EXTRACTION	Two (2) 12" diameter fans, mild steel painted gray or optional STAINLESS STEEL, mounted on hoods at entrance and exit of washer to exhaust excess steam. 1 H.P. TEFC or optional wash down duty motor, 208/230/460 or optional 575 volt, 3 phase, 60 cycle, 3450 RPM rated for 1350 CFM each at .69" static pressure.
ELECTRICAL PANEL AND CONTROLS	Electrical control panel is UL listed, NEMA 4 mild steel painted gray or optional NEMA 4X STAINLESS STEEL with Square "D" components. Optional panel disconnect switch with safety lockout is also available. Complete with motor starters, 120 volt control circuit with Power On switch, conveyor speed dial with foot per minute digital display, wash and rinse tank low water lights, Start and Stop Buttons plus Run Indicator Lights. Emergency stop button, clutch trip indicator light and conveyor start/stop/reverse buttons on entrance end. Emergency stop button and conveyor stop button on exit end. Washer will be factory wired in hard aluminum conduit and tested prior to shipment.
OTHER FEATURES	Complete with load table. Adjustable STAINLESS STEEL legs for leveling machine. Anti-splash curtains at entrance and exit of washer. Removable side panels for easy access. Optional safety interlocks are available.
ESTIMATED CAPACITY	Assuming the items will clean at the speeds listed below, the following quantities will be processed: Sheet Pans (18" x 26" x 1") 515 pieces/hour at 15 FPM Muffin Pans (18" x 26" x 1 1/2") 340 pieces/hour at 10 FPM Cake Pans (8" diameter) 1600 pieces/hour at 8 FPM Transport Basket (20" x 26" x 6") 515 pieces/hour at 15 FPM Items of similar size and shape may be processed through this machine. Please check with Douglas Machines to confirm feasibility. Belt speed adjustable from 1 to 20 FPM for varying soil conditions.
DIMENSIONS	Washer Cabinet Dimensions: 4' - 3" wide x 20' - 0" long (21' - 6" gas heated) x 5' - 3" high Blow-Off Cabinet Dimensions: 4' - 3" wide x 6' - 0" long x 5' - 3" high Overall Dimensions: 5' - 9" wide x 30' - 6" long (32' - 0" gas heated) x 9' - 3" high
CONNECTIONS	Water Inlet: (1) 1 1/2" NPT 120° F., (1) 3/4" NPT 180° F. or (1) 2" NPT with optional booster heater Drain: (2) 3" NPT, (1) 2" NPT Overflow: (2) 1 1/2" NPT Gas Option: (1) 1 1/2" NPT or (1) 2" NPT with optional booster heater Steam Option: (1) 1 1/2" NPT or (1) 2" NPT with optional booster heater
SERVICES	Electrical: 208 volt, 3 phase, 60 cycle, 127 running amps, 175 amp service breaker 240 volt, 3 phase, 60 cycle, 115 running amps, 150 amp service breaker 480 volt, 3 phase, 60 cycle, 58 running amps, 80 amp service breaker 575 volt, 3 phase, 60 cycle, 49 running amps, 70 amp service breaker Gas Firing Rate: 360,000 BTU/Hour for recirculated wash 360,000 BTU/Hour for recirculated rinse 100,000 BTU/Hour for optional final rinse booster heater Steam Consumption: 420 lbs. per hour for live steam 530 lbs. per hour for steam coil 70 lbs. per hour for optional final rinse booster heater Please add the following amps to those above for optional STAINLESS STEEL pump with 7 1/2 H.P. motor (6.4 at 208, 6 at 240, 3 at 480, or 2.2 at 575 volt) and recalculate service breaker size, which should be 125% of total running amps.