

## SPECIFICATIONS

### “DOUGLAS” MODEL VBW-2000

### VAT/BUGGY WASHER

### PRE-WASH, WASH, AND RINSE SYSTEM

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<b>DESIGN AND OPERATION</b>	Designed for batch type operation where two (2) vats are loaded into support brackets mounted on the door. The cycle start button is then pushed which initiates a recirculating 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 the recirculated pre-wash tank to freshen it. The excess water then overflows to drain. The door is then reopened for unloading by holding the open/close door switch. Booster heaters maintain proper operating temperatures.
<b>OPTIONAL SAFETY CAGE</b>	The safety cage prevents machine door operation when the cage doors are not in the closed position. Also with this feature, after the bin has been loaded and the cage doors have been closed, the start button is pushed which activates the complete cycle. This includes the machine door closing, pre-wash, wash, sanitizing rinse and the door returning to the open position for unloading. A separate open/close machine door switch is also provided for manual override, operational only when the cage doors are in the closed position.
<b>GENERAL CONSTRUCTION</b>	Upper housing will be constructed of #12 gauge, type #304 STAINLESS STEEL with a #3 finish. Pre-wash and wash tanks to be constructed of #12 gauge, type #304 STAINLESS STEEL also with a #3 finish. Door is doubled skinned constructed of #12 and #14 gauge, type #304 STAINLESS STEEL with internal and external bracing for maximum strength. Manually opened and closed with a switch 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.
<b>RECIRCULATING PRE-WASH AND WASH TANKS</b>	Recirculating pre-wash and wash tanks heated by electric or steam coil, thermostatically controlled, low water protected, complete with automatic tank diverter, controlled by air operated cylinder and butterfly valves, to separate pre-wash and wash tanks, 1” NPT automatic fill system, 1 1/2” NPT overflow connection, 2” STAINLESS STEEL gate drain valves, thermometers and liquid filled pressure gauges. Pre-wash and wash tank capacities 250 gallons each, sloped to drain.
<b>PRE-WASH AND WASH PUMP</b>	Closed coupled centrifugal pump with STAINLESS STEEL casing and impeller. Complete with 40 H.P. wash down duty motor, 208/230/460 or optional 575 volt, 3 phase, 60 cycle. Rated for 400 gallons per minute at 80 PSI.
<b>FINAL SANITIZING RINSE</b>	Fresh sanitizing rinse delivers 12 gallons per 30 second cycle at 20 PSI flow. 180° F. sanitizing rinse water supplied to unit by customer or optional 20 gallon rinse tank heated by electric or steam coil. If booster heater is required, the water supply temperature is 120° F. minimum. Optional pumped rinse system also available.
<b>SPRAY PIPING SYSTEM</b>	Two (2) rotating hubs with extended arms to wash the inside and outside of the vats driven by a 1/2 H.P. TENV gear motor. Pre-wash, wash and final rinse constructed of STAINLESS STEEL piping, fittings, high velocity “V” wash jets and full cone rinse.

<b>FILTRATION</b>	Filter screens located above water line, easily cleaned without having to empty the pre-wash and wash tanks through removable access panels on either side of the machine.
<b>STEAM EXHAUST VENT</b>	Steam exhaust vent 12 7/8" inside diameter, consisting of #14 gauge, rolled STAINLESS STEEL collar, bolted to the top of the machine. Machine pre-wired with control timer for the addition of the fan.
<b>OPTIONAL EXHAUST FAN</b>	12" diameter STAINLESS STEEL exhaust fan mounted on washer to extract steam after rinse cycle. 1/2 H.P. wash down duty motor, 208/240/480 or optional 575 volt, 3 phase, 60 cycle, 1725 RPM, rated for 700 CFM @ .36" static pressure.
<b>ELECTRICAL PANEL AND CONTROLS</b>	Electrical control panel is UL listed, NEMA 4X STAINLESS STEEL with Square "D" components. Optional panel disconnect switch also available. Complete with motor starters, 120 volt control circuit with lighted "POWER ON" switch, "START" and "STOP" buttons, "RUN" indicator light, "OPEN/CLOSE" door switch, and short, medium, and long "WASH CYCLE SELECTOR" switch. Complete recirculating pre-wash, recirculating wash, final sanitizing rinse and dwell/fan cycles initiated by pushing the "START" button. Pre-wash, wash and final rinse cycle times are adjustable.
<b>OTHER FEATURES</b>	Adjustable STAINLESS STEEL legs for leveling machine. Complete hydraulic system with 20 gallon tank reservoir and 20 H.P. wash down duty motor. 208/230/460 or optional 575 volt, 3 phase, 60 cycle.
<b>CONTAINER SPECIFICATIONS</b>	Designed for 400 and 600 pound STAINLESS STEEL V-Edge dump buggies measuring 26" wide x 27 1/2" long x 37 1/2" high. Other design variations available for different container sizes.
<b>DIMENSIONS</b>	Washer Cabinet Dimensions: 110" wide x 60" deep x 97" high Overall Dimensions: 142" wide x 88" deep x 100" high
<b>CONNECTIONS</b>	Electrical: Single-point connection Pre-Wash and Wash Tank Water Inlets: (2) 1" NPT, 120° F. Final Rinse Water Inlet: (1) 1" NPT, 180° F. or 120° F. with optional booster heater Drains: (2) 2" NPT Overflows: (2) 1 1/2" NPT 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 CFM @ 100 PSI
<b>SERVICES</b>	Electric Heated: 208 Volt, 3 Phase, 60 Cycle, 255 Running Amps, 350 Amp Service Breaker 240 Volt, 3 Phase, 60 Cycle, 233 Running Amps, 300 Amp Service Breaker 480 Volt, 3 Phase, 60 Cycle, 118 Running Amps, 150 Amp Service Breaker 575 Volt, 3 Phase, 60 Cycle, 99 Running Amps, 125 Amp Service Breaker  Steam Heated: 208 Volt, 3 Phase, 60 Cycle, 155 Running Amps, 200 Amp Service Breaker 240 Volt, 3 Phase, 60 Cycle, 142 Running Amps, 200 Amp Service Breaker 480 Volt, 3 Phase, 60 Cycle, 72 Running Amps, 90 Amp Service Breaker 575 Volt, 3 Phase, 60 Cycle, 62 Running Amps, 80 Amp Service Breaker  Steam Consumption: 270 lbs. per hour for recirculating pre-wash and wash tanks 65 lbs. per hour for optional final rinse booster heater  Please add the following amps to those above for an optional exhaust fan (2.1 at 208 volt, 1.8 at 240 volt, .8 at 480 volt, or .5 at 575 volt) and/or electric booster heater (50 at 208 volt, 45 at 240 volt, 22.5 at 480 volt, or 18 at 575 volt) and recalculate service breaker size, which should be at least 125% of total running amps.