



# SPECIFICATIONS "DOUGLAS" MODEL WR-1500V-2LSMPMW TWO-LANE SHEET, MUFFIN PAN, AND MOULD WASHER WASH AND SANITIZE 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 two lanes of pans through a 160° F. recirculating wash chamber and an ambient chemical or 180° F. fresh water sanitizing rinse before exiting the machine. 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 sections to help minimize cross contamination of fresh and detergent water and to provide the opportunity to manage the flow of all or any portion of the fresh water back into the recirculating wash tank or to drain. Fixed or adjustable product guides are provided to keep pans 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 1 1/2" and 1" STAINLESS STEEL piping. 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 TANK

Recirculating wash tank 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, 2" valved overflow from final rinse to wash tank or drain, 3" gate drain valve, thermometer and pressure gauge. 310 gallon wash tank capacity, sloped to drain.

#### WASH PUMP

Close coupled centrifugal wash pump, bronze fitted with cast iron casing. Complete with 25 H.P. TEFC or optional wash down duty motor, 208/230/460 or optional 575 volt, 3 phase, 60 cycle. Rated for 415 gallons per minute at 60 PSI. Optional STAINLESS STEEL wet end available. Externally mounted for ease of maintenance.

# SANITIZING RINSE SECTION

Sanitizing rinse section delivers 5 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 130° F. minimum. If ambient chemical rinse is prefered, it is to be supplied by customer.

## SPRAY LINES AND NOZZLES

Interior recirculated wash supply lines includes STAINLESS STEEL piping with quick disconnect, removable end caps and chemical and corrosion resistent fixed "quick release" V-jet spray tips. Interior sanitizing rinse line includes STAINLESS STEEL piping, removable end caps and fixed "quick release" V-jet spray tips.

## **FILTRATION**

Sliding filter screen drawers located above water line, easily removed and cleaned during operation. Conveniently removed from one side of the machine. Also provided with a secondary pump protection screen easily removed through the access panel on the pump box. Optional traveling filtration system with external dump basket available. Note, with this option, the load height increases by 6".

#### CONVEYOR

One (1) 15" wide #304 STAINLESS STEEL 1" x 1" heavy duty flat wire belt complete with reversible A.C. variable speed inverter. 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.

## STEAM EXTRACTION

Two (2) 12" diameter fans, mild steel painted or optional STAINLESS STEEL, mounted on hoods at entrance and exit of washer to exhaust excess steam. 1 1/2 H.P. TEFC or optional wash down duty motors, 208/230/460 or optional 575 volt, 3 phase, 60 cycle, 3450 RPM rated for 1225 CFM each at .60" static pressure.

## ELECTRICAL PANEL AND CONTROLS

Electrical enclosure is UL 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 tank low water light, Start and Stop Buttons plus Run Indicator Lights. Emergency stop button, conveyor start, stop and 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 and unload tables. Sanitary sloped roof design.

6" high adjustable STAINLESS STEEL legs for leveling machine.

Fiber optic sensor to shut off the rinse with no pans present.

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/Muffin Pans (18" x 26" x 1" to 2") 800 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: 3' - 6" wide x 16' - 0" long x 6' - 4" high Overall Dimensions: 5' - 3" wide x 21' - 0" long x 9' - 3" high

#### CONNECTIONS

Water Inlet: (1) 1" NPT Ambient to 140° F. max. and (1) 3/4" NPT 180° F. or (1) 3/4" Ambient or with optional booster heater (1) 3/4" NPT 130° F.

Drain: (1) 3" NPT, (1) 2" NPT Overflow: (1) 1 1/2" NPT

Gas Option: (1) 3/4" NPT or (1) 1 1/2" NPT with optional booster heater

Steam Option: (1) 3/4" NPT or (1) 1 1/2" NPT w/ optional booster heater @ 30 PSI min., 80 PSI max.

#### SERVICES

## Electrical:

208 volt, 3 phase, 60 cycle, 82 running amps, 110 amp service breaker 240 volt, 3 phase, 60 cycle, 71 running amps, 90 amp service breaker 480 volt, 3 phase, 60 cycle, 36 running amps, 45 amp service breaker 575 volt, 3 phase, 60 cycle, 27 running amps, 35 amp service breaker

Gas Firing Rate:

360,000 BTU/Hour for recirculated wash

195,000 BTU/Hour for optional rinse booster heater

Steam Consumption:

200 lbs. per hour for live steam 250 lbs. per hour for steam coil

160 lbs. per hour for optional rinse booster heater