

GIRTON INDEXING TUNNEL WASHER MODEL GCWHV

GENERAL

Girton Model GCWHV Washer to wash and rinse plastic or metal bins, as large as 28" x 28" x 40" deep, at the variable rate of 20-30 bins per hour.

CONSTRUCTION

The tank, hull, in-feed and discharge sections are fabricated of 14 gauge, type 304 stainless steel with 2B finish. All seams are welded and cleaned. Guide rails, conveyor channels, piping, and headers with jet sprays are stainless steel. The inside of the indexing tunnel washer shall have all surfaces readily accessible or removable for cleaning. All surfaces shall be non-toxic, non-absorbant and corrosion resistant materials. All surfaces or cavities where contaminants can collect, shall be avoided.

CONVEYOR

The conveyor consists of two conveyor chains and is designed to convey the bins through the indexing tunnel washer in an upside-down position for proper cleaning action. Stainless belt optional.

Automatic conveyor stop switch, activated by the bin, shuts off the drive motor in case the operator is not present to remove the bin as it discharges from the indexing tunnel washer.

VARIABLE SPEED DRIVE

1/2 Hp Wash down duty gearmotor, arranged to carry the conveyor through the washer at an advancing speed of 15.5 per minute.

The conveyor will extend 5' from the infeed and 5' from the discharge ends of the indexing tunnel washer, to facilitate loading and unloading the bins.

Heavy duty stainless steel guide rails will support and guide the bins through the indexing tunnel washer.

SCREENS

Drawer type stainless steel tray screens shall be used, with perforations smaller than the jet openings, to trap debris and protect the pump and spray orifices.

VENT

Two 6" x 24" exhaust connections are provided on top of the indexing tunnel washer, to be connected to customer's exhaust system.

WASH PUMP

The 15 Hp wash pump is stainless steel, horizontal type, with a close-coupled motor, wash down duty, and is rated at 375 gallons per minute at 125 ft. hd.

FRESH RINSE

Fresh rinse consists of a single loop, spraying city water at house temperature and pressure, controlled by an automatic solenoid valve wired in conjunction with the conveyor drive. The fresh rinse shall operate only when the conveyor is moving. Minimum pressure to be 40 PSI.

HEATING

Temperature of the recirculated wash solution is controlled by an automatic temperature controller, steam solenoid valve, and steam coil for indirect heating.

JETS

The headers are equipped with straight through orifices and stainless steel spray deflectors, and are directly related to pump specifications.

This unit is also supplied with Bin Washing Nozzles located between the two conveyor chains to effectively wash and rinse the interior of the bins.

OPERATION AND TREATMENTS

1. Load - The operator inverts the bin and places it onto the 60" in-feed extension. The bins then move at the pre-determined speed through the following treatments:
2. Wash - Wash solution, as determined by the customer, is recirculated and sprayed onto all surfaces of the bin. Bin shall receive a one to three minute exposure to the wash solution.

3. Fresh Rinse - Rinse solution, as determined by the customer's house supply, is sprayed onto all surfaces of the bin. A sanitizing agent may be introduced into the final rinse water supply. Fresh rinse shall only spray when conveyor moves.
4. Discharge and Unload - The operator removes the washed and rinsed bin from the 60" discharge extension of the conveyor.

STANDARD FEATURES

The indexing tunnel washer is equipped with push button starters for individual motor control.

The indexing tunnel washer will be wired and tested before leaving the factory.

- Fresh Rinse Solenoid Valve - consists of solenoid valve to control fresh rinse water from plant supply, and solenoid stop switch mounted on conveyor.
- Steam Coil Heating – A stainless steel steam coil, complete with condensate trap, shall be supplied to heat up and maintain wash solution.
- Indicating Thermometer – An indicating thermometer shall be mounted near the main control box and shall display the wash solution temperature.

SERVICE REQUIREMENTS

3/60/208 volts

1/60/120 volt controls

A safety disconnect, provided by the customer, should be mounted on an adjacent wall, and customer will provide wiring from this switch to the indexing tunnel washer's main control panel.

1 – 1-1/2" steam connection, 40 PSI, 560 lbs. per hour consumption.

1 - 1" water line, 30-40 PSI, 2-4 gpm consumption.

1 - 2" gravity drain connection.

2 - 6" x 24" vent connections, 3900 CFM required.

OPTIONS

- ◆ **Pre-Wash Treatment** – shall be used to remove gross soil and send it directly to the drain. A 5 Hp pump shall be used to bring water from the fresh rinse tank up to satisfy 2 barrel jets positioned under the bin in the hooded infeed area.
- ◆ **Pump Pressure Gauge** – To monitor performance of pump. The gauge shall indicate recirculated water pressure.
- ◆ **Detergent Port** – The indexing tunnel washer will be provided with a coupling for automatic detergent dispensing near the center of the tank.
- ◆ **Exhaust Duct With Dampers** – Stainless steel ducting shall be supplied to tie both exhaust connectors on top of the indexing tunnel washer together. The ducting will have one exhaust port, to be connected to existing ventilation system, or for mounting an exhaust fan.
- ◆ **Exhaust Fan** – Shall be provided an interwired with the automatic control system to exhaust residual vapors from within the wash compartment. The fan is supplied complete with 3 phase, 60 cycle motor, and starters for overloaded protection.
- ◆ **Air Knife** – An air knife shall be mounted across the top discharge opening of the indexing tunnel washer to remove the majority of water laying on the top of the containers. Air shall come from plant supply. (20 – 25 CFM at 50 to 60 PSI)
- ◆ **Stainless steel conveyor belt** in place of 2 stainless steel drag chains.
- ◆ **Training of customers personnel in accordance to Girton Manufacturing Co., Inc. standard testing and demonstration policy.** Equipment shall be demonstrated to all operators and maintenance personnel, training period shall be limited to a maximum of two days on sight.