

GIRTON CANDY MOULD WASHER MODEL CTX

GENERAL

The Girton Model CTX Candy Mould Washer is a conveyORIZED tunnel style washer to wash and rinse plastic candy moulds. The system can be designed with two or more lanes or slots to accommodate moulds in an on-edge position with the moulds being inserted into the slots in a lengthwise manner. A heated blow-off and a cooling section can be added.

CONSTRUCTION

The system shall be of sectionalized construction. The tank, hull, infeed and discharge sections are fabricated of 12 and 14 gauge, type 304 stainless steel with 2B finish. All seams are welded and cleaned. Guide rails, conveyor channels, piping, and header with jet sprays are stainless steel.

The candy mould washer shall be insulated with 2" rigid foam, covered with a 20-gauge stainless steel jacket with 2B finish.

The wash and rinse tanks shall be heated with a stainless steel indirect steam heating coil, complete with condensate traps.

Access doors or panels shall be provided on top of the wash and rinse section, for access to the spray jets for routine maintenance.

Stainless steel baffles shall be provided to minimize carry over and intermixing of solutions between the treatments.

Stainless steel guide rails shall be provided for each slot, to hold the moulds in an on-edge, upright position.

The pump or pumps shall be stainless steel, close-coupled, motor-mounted type. This gives greatest efficiency with the minimum maintenance possible from centrifugal pumps of the horizontal type.

HEADERS

The headers are provided to give most effective coverage on both sides of the moulds. The spray jets shall be vertical header pipes, providing full coverage to the moulds.

The headers are arranged above, and on both sides of each lane of moulds.

SCREENS

Screens are tray type units located under the bottom area of the spray compartment. The tray screens are removable from either side of the washer. The screens are supported above the solution level so all water must fall through the screens to get into the solution tank. Openings in the screens are 1/16" diameter to trap all debris. The superior screening will virtually eliminate clogged jets.

VENTS

The candy mould washer is supplied with 10" diameter vent openings in the hood or top of the unit, to be connected by the customer to the outside, or to his ventilation system. A ventilating fan may need to be incorporated in the stack to insure proper ventilation.

WASH DOWN DUTY MOTORS

3/60/208-230-460 or 3/60/460, meeting NEMA standards. Other specification available.
Motor shall be Wash Down Duty or Chemduty.

WIRING

The Girton Model CTX will include two position selector manual switches and contactors to separately control individual pumps, and motors. All systems come pre-wired. The stainless steel control box, shall include the following: control transformer, solid state overload relays, time delay fuses, emergency stop switch and illuminated status beacon with audible alarm.

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

In addition to the above, the following control system shall be included:

Allen Bradley MicroLogic 1200 Series PLC, and Microview operator interface.

PLC control – The heart of the control system will be an Allen Bradley Micrologix 1200 series PLC. The PLC shall be able to meet various voltage needs as well as I/O capabilities. As a standard, the input modules will be based on the 120 VAC-control voltage. The output modules will be isolated relays.

PLC control adds many features that standard relay logic cannot provide (or cannot provide without a large expense). These features include low level pump protection; low level heating protection; staggered start up of large motors; diagnostic ability of heating, pump overloads, and instruments, advanced conveyor control; as well as other features involving time delays and complex functions.

Equipment diagnostics and alarms help prevent down time by finding equipment failures quickly rather than waiting for operating personnel to recognize a failure.

The PLC software shall insure the highest level of safety for personnel, as well as the machinery, by providing alarms and control features that prevent potentially dangerous situations.

Operator interface – A Microview two-line LCD data display shall be provided as an operator interface. This display shall be equipped with a keypad for input of critical parameters that the PLC controls. The display shall show status or alarm messages when required, informing the operator of any abnormal situations.

PLUMBING

One water connection, one steam connection, one overflow connection and one drain connection are provided.

SELF-CONTAINED CONVEYOR DRIVE SYSTEM

The system includes a stainless steel conveyor belt, driven motor, take-up, shafts, sprockets, etc.

HEATING

The wash and rinse tanks shall be heated by indirect steam coils.

AUTOMATIC TEMPERATURE CONTROL

The tank temperature is controlled by an automatic controller, which is adjustable to the most efficient temperature for the job. The controller operates a solenoid valve, which permits steam to enter the tank to heat the wash solution. The temperature in the tank is maintained by indirect steam coils.

WATER LEVEL CONTROL

The water level control in the re-circulated wash and rinse tanks shall be maintained by a sanitary switch.

GUIDE RAILS

Adjustable guide rails shall be supplied to hold containers in proper position for washing.

EMERGENCY STOP BUTTON

To enable operator on the unload end of the washer to stop the conveyor in the event of an emergency.

TREATMENTS

1. Load – The moulds are delivered to the washer by the customer's conveyor.
2. Drain Position – To prevent wash solution from discharging at the infeed opening of the candy mould washer.
3. Pump Wash – Detergent wash solution is re-circulated and sprayed through strategically placed, properly designed jets at high velocity and volume under pressure by the pump. Circulation is at the proper gallons per minute and heated to properly clean the moulds to be washed. Soaking action of the re-circulated hot detergent solution chemically softens the soil and contamination, which is continually scrubbed and flushed away by mechanical force of the spray.
4. Drain Position – To prevent wash solution from being lost to the rinse section.
5. Pump Rinse – Rinse solution is re-circulated through spray jets strategically placed. The rinse water shall flush away the detergent solution and any remaining soil.
6. Fresh Rinse / Sanitizing Loop – Utilizes fresh water from the house supply, at house pressure and temperature. A sanitizing agent may be introduced into the final rinse water supply.
7. Drain Position – To prevent water from being discharged from the washer.
8. Discharge – Conveyor moulds continue on customer's conveyor.

SERVICE REQUIREMENTS

- 2 – 3/4" hot water connections
- 2 – 1" steam connection
- 2 – 2" overflow connections
- 2 – 2" drain connection (gravity)
- 2 – 10" diameter vent connections
- 2 – 3/4" condensate connections

OPTIONS

Consult Factory

CTX Candy Mould Washer

