DYNAMIC CONVEYOR CORPORATION

5980 Grand Haven Road
Norton Shores, MI USA 49441
www.dynamicconveyor.com

main: 231.798.1483
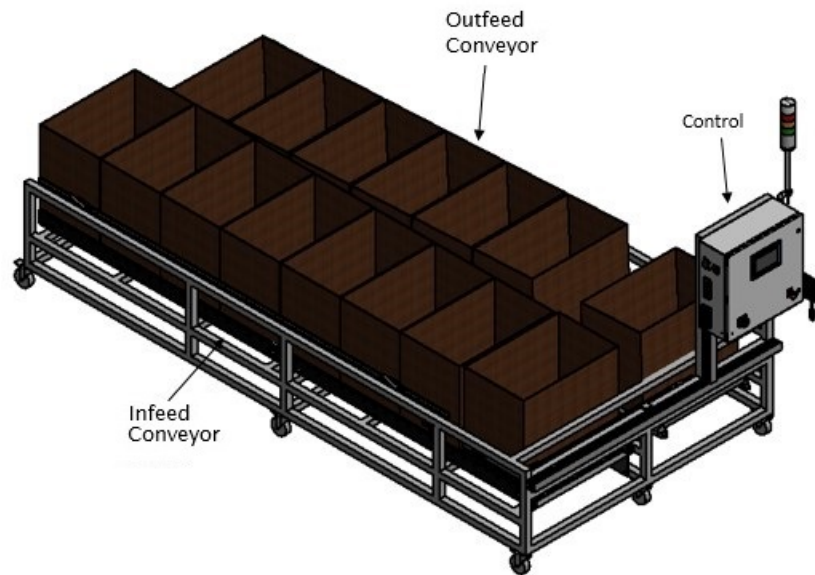fax: 231.798.9583

Side By Side Box Filling By Count

Filling by Count:

An operator will load the infeed conveyor with empty containers and remove any containers from the outfeed conveyor. The operator will load a recipe with the necessary information/parameters for the job that is being run. Press the auto mode touch button located on the HMI's main screen.

If there isn't a fault condition, the system will begin the filling cycle. The control will provide an Alarm-Output, 24VDC signal, if it encounters an alarm condition that would result in aborting the filling cycle. The Alarm-Output is available to interface with another control/system via a female M12 connector on the side of the provided control enclosure.

When the system is in a filling cycle, meaning that the filling container has not reached the target count, the control will signal the parts feed conveyor to run.

Parts are introduced to the part feed conveyor and a mold cycle signal is sent to the control. The mold cycle signal is multiplied by the cavitation count to give the current count.

When the current count is greater than or equal to the target count, the counter is reset and the part feed conveyor off delay timer starts. When the part feed conveyor off delay timer reaches it user-defined set point, the part feed conveyor stops, the full container will shift to the outfeed conveyor, the system will load the empty box into the filling position and restart the filling cycle.

Standard Features:

- Infeed conveyor: 1.9" Itoh Denki powered roller on 3" centers
- Outfeed gravity conveyor: 1.375" rollers on 3" centers
- Unitronics Samba 4.3" HMI/PLC combo

Side By Side Box Filling By Count (continued)

- 150 user defined stored recipes (name, box count or box weight, # of mold cavities, near full%, over tolerance weight or part count)
- Alarm Handler screen (Motor faults, conveyors full warning, conveyors full alarm, conveyor empty warning, conveyor empty alarm, box removed during fill cycle)
- 3 Color Alarm Light w/Buzzer (Green: system running, Yellow: system warning, Red Light/ Buzzer: System alarm)
- I/O Diagnostics screen w/ manual PB output operation
- Auto mode manual bin shift HMI pushbutton
- M12 System communication I/O receptacle (24 VDC counter input, Alarm active dry contact output)
- M12 Part delivery conveyor I/O receptacle (24 VDC Run FWD & speed 2 input, PNP transistor alarm output)
- Discrete I/O Itoh Denki powered roller card
- Oriental Motors servo motor control with absolute encoder (lift & pusher arm)
- Oriental motors pusher arm actuator
- Adjustable guide rail on one side
- Anodized aluminum frame
- 75mm swivel lock casters
- Mettler Toledo weigh scale base

Additional Options Available:

- Additional Infeed conveyor
- Additional outfeed conveyor
- Part delivery conveyor
- Unitronics UniStream 7" HMI/PLC combo
- E-stop w/ Phoenix contact safety relay
- Ethernet I/P communication
- 4 port Ethernet switch
- Ethernet interface port
- Ethernet I/P Itoh Denki powered roller card
- Infeed conveyor box stop & wake up sensor
- Adjustable guide rail on both sides