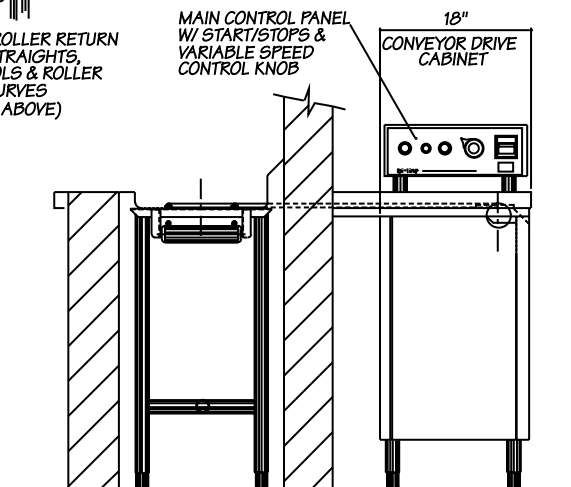


ENLARGED TYPICAL CROSS-SECTION



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Bi-Line BULLETIN *PC-90 Twin Polycord Tray Return Conveyor*

Model #PC-90

SPECIFICATIONS

A. DESCRIPTION

Provide soiled tray return conveyor to handle cafeteria trays. System to consist of 14 ga. stainless steel (s/s) conveyor bed as shown to accept twin polycord conveyor belts. Belts to be supported on polyethylene wear guides suitably spaced to reduce drag and eliminate wear on the s/s conveyor beds.

Where conveyor turns a corner, belts shall be supported on machined Delrin idler pullies. Provide sufficient number of rollers to ensure smooth transfer of product around curves.

The belts shall return under the s/s bed, and shall be supported on PVC rollers and Delrin pullies specially grooved to accept the belts.

B. CONVEYOR BELTING

Provide twin strands of round polyurethane belting, 1/2" dia., endlessly joined by thermal welding.

On longer conveyors, generally considered to be over 25 ft., or for conveyors with an unusual number of curves, belting shall be "cable", of a durometer suitable for the length of the system involved. Cable contains a woven nylon core to eliminate undue stretching. Contact Bi-Line engineering.

C. DRIVE FRAME

Provide an all-welded s/s angle frame with 1-5/8" s/s legs 6" lg. w/adj. s/s bullet feet. This frame shall support the bearings, drive shaft, secondary shafts, belt drive pullies and motor/reducer. Entire drive motor assembly shall be mounted on a movable s/s angle frame which shall be vertically adjustable to effect tensioning in the polycord belts. Tensioning adjustments shall be accomplished by loosening nuts on threaded rods and moving motor down to tighten belts. Nuts shall be re-tightened to fix motor in place. "Floating" frames shall not be permitted.

D. DRIVE HOUSING

Provide 18 ga. s/s enclosure panels on ends, and rear where exposed. Provide a horizontally-split double door for access to drive housing. Top door to be screwed shut for access to moving parts by service personnel. Bottom door equipped with a simple spring catch for access to a slide-out scrap drawer by operating personnel.

E. DRIVE COMPONENTS

All drive and idler shafts to be s/s; belt pullies to be machined or moulded Delrin. Bearings and pillow blocks to be precision ball bearings, lubricated for life.

F. DRIVE MOTOR

Provide integral motor/reducer, sized to suit project, by Bi-Line. Reducer equipped with a double output shaft for mounting of main drive pullies. Motor is D.C. type, 90- or 180-volt, to facilitate electronic variable speed. (see section G. Control System).

G. CONTROL SYSTEM

Conveyor shall be controlled by a watertight control centre containing start/stop buttons, indicating lights, speed control potentiometer knob, and main disconnect switch. The D.C. drive motor shall be controlled with an "SCR" solid-state variable-speed controller with overload protection and electronic torque control. Controls are a safe 24-volt A.C.

Provide a 2-pole disconnect circuit breaker and control transformer (24-volt secondary). All components shall be neatly contained in a s/s waterproof enclosure. Wiring to conform to latest CSA, UL and local electrical codes and standards. Provide auxilliary start/stop and accumulation switches as req'd.

Connections: 1/2hp 120/220-v. 1-ph. or 208-v. 3-ph.

H. TAIL ASSEMBLY

Provide s/s tail frame structure suitably reinforced to support s/s tail shaft and pullies. This frame to be mounted from underside of s/s conveyor bed.

I. IDLER PULLIES (return side)

Provide PVC return rollers on straight sections, and a combination "enter/exit" spool and pulley system on curves to ensure accurate belt tracking.

J. SAFETY BLOCKS

Provide UHMW-Polyethylene guide blocks where belts enter and exit the top conveyor bed - (4) locations. Blocks keep water and debris out of return side, and ensure safety around openings.