Infeed Transfer Device (TDI)

ENTRY DEVICE

TDIs provide for the transfer of loads from a spur line to a main line, and may be used with sheet insertion devices.

PRODUCT DESCRIPTION

The Infeed Transfer Device is primarily a pusher bar that spans the width of the conveyor and moves along a path to push loads off the end, onto an adjacent perpendicular conveyor. The pusher bar or Head is recessed in the roller surface, at it's home position, allowing loads to pass over while moving to the conveyor end. Once clear of the head, the head raises above the surface of the rollers and moves to push the load off the end of the conveyor.

The pusher head is comprised of structural members that provide rigidity yet allow the head to fit recessed between the drive belt and the top of the rollers. The head is supported beyond the conveyor's sideframes by a pair of side arms. These arms are supported and guided by guide rails mounted to the sideframes of the conveyor. The pusher assembly is pulled, by a common drive, by means of tow chains attached to each side arm. The pusher head moves from it's recessed position, up, to engage the load, pushes the load completely off the end of the conveyor, and returns home and waits for the next load. Adjustable limit switches control the home and full forward positions of the stroke.

APPLICATION

The Infeed Transfer is used in a conveyor system, primarily as a means for moving loads from various spur lines onto a common main line conveyor. In addition, this device can serve the second purpose (in combination with the sheet gripper device) of placing a unit load on a deck or waster sheet when necessary. These units may operate in a manual or automatic system, although, manual intervention is required when the deck sheet loading operation is applied.

FEATURES

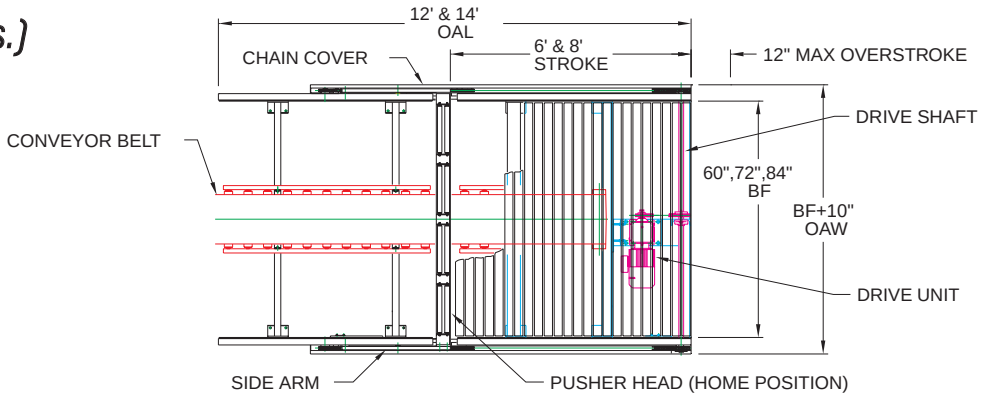
- For use with new or existing Mainline Conveyor System conveyors.
- Adaptable for use in other manufacturer's existing center belt drive conveyor.
- Potential for tandem operation.
- 1-1/2hp drive motor with brake.
- Maximum stroke of up to 12" beyond end of device.
- Adjustable home and forward limit switches.
- Heavy 1-1/2" cam rollers support head and side arms during travel.
- Head assembly free to move up and away from roller surface if object gets beneath head.
- Nominal 12" TOR with 2-1/2" rollers on 3" centers.
- Motor disconnect and position limit switches prewired for easy installation.

MAINLINE CONVEYOR SYSTEMS, INC.

Entry Device
For Use With CRG, CRN and CRA Conveyors

INFEED TRANSFER DEVICE (TDI)

Dimensions (ins.)



GENERAL SPECIFICATIONS

Nominal Conveyor Width	60", 72", 84", (bf)
Nominal Device Length	12' and 14' (Special lengths available upon request)
Nominal Full Stroke	6' and 8' (Special strokes available upon request)
Minimum Height	12" T.O.R.
Load Capacity	2,500 lbs., per device @ 40FPM

POWER REQUIREMENTS

Electrical Supply; Amperage	230-460V/3ph/60hz; 2.60 Amps(460V) @ Full load
Drive Gearmotor	1-1/2 HP Brakemotor @ 40 or 60 FPM

CONSTRUCTION

Frame	Integral weldment includes: Sideframe: C6X8.2# structural steel channel Tie Braces (cross supports): 4X2X1/8 rectangular tube and 4X3X3/8 structural angle Legs: Structural and formed steel
Guide Rails	3/8" cold rolled steel welded to sideframes
Conveyor Construction	Standard CRA/CRN Mainline Conveyor
Head	Structural angle composite weldment
Side Arms	Bar steel weldments with 1x2 primary members Two 1-1/2" cam rollers support each arm along guide rails
Tow Chains	Two #60 (3/4" pitch) roller chain
Drive Shaft	1-1/2" dia TGP
Gearmotor Mounting	Adjustable base plate, #60 roller chain to drive shaft

CONTROL OPTIONS *

Manual Operation	Pushbutton operator-actuated
Automatic Operation PC Controls	Device position sensors combine with load detecting sensors and control logic to position and transfer loads. Pushbutton controls are included with automatic application.
Safety Controls	Collision avoidance controls operate automatically to control the intersection.
Priority Entry Controls	When selected by operator, loads are held upstream of intersection to allow load entry.

* Contact Mainline Conveyor Systems, Inc. for additional control or capacity information.

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