

Pallet Handling Systems Photo Gallery

Pallet Stacker



A pallet stacker is shown above designed and manufactured by Roach to stack 48" wide x 40" long x 6" tall pallets. A 2-strand chain drag conveyor, 36" strand centerline is mounted at 17-1/2" elevation which conveys individual pallets into the stacker and stacks of pallets OUT of the stacker.

Product Stacker



When product enters chain drag conveyor, side mounted mechanism moves into product, clamps it and raises product for clearance to allow next product to enter. Once second product has moved into place on the chain drag conveyor, first product is lowered onto second product and both are raised to allow additional products to enter conveyor. Process repeats.

Plywood De-Stacker



Stack of plywood enters chain drag conveyor and stack is squared when it is fully conveyed into the de-stacker. The chain drag conveyor--actually, a 2-strand chain transfer--is lowered one step and a pneumatically actuated mechanism moves into stack of plywood, clamps and holds entire stack EXCEPT for one sheet. Next, the chain conveyor is lowered to its lowest stage and the individual sheet of plywood exits de-stacker. Process repeats.

Plywood Stacker



Sheet of plywood enters chain drag conveyor and is squared when it is fully conveyed into the stacker. The chain drag conveyor--actually, a 2-strand chain transfer--is raised one step and a pneumatically actuated mechanism moves away from the existing stack of plywood, lowering it onto the last sheet. The transfer then raises to the highest level, its second stage and discharges the entire stack OR the transfers drops one stage, the clamps move in to hold the stack and the transfer falls to its lowest stage where another individual sheet of plywood may enter the stacker. Process repeats.

The Big Tipper Upender



The Roach Conveyor Big Tipper provides an efficient method of tipping or rotating metal coils, molds, dies and other heavy loads. The product is transferred onto the Tipper and upended 90 degrees so the discharge conveyor is inline with the feeder conveyor. Contact a Roach Distributor to discuss mechanical upenders and how they can be custom engineered for your particular application.

EZE - Reach Lift Table



The EZE - Reach Lift Table extends product up and over the side of the conveyor for the operator to work on, then places the product back onto the CDLR conveyor. Rollers are polyurethane-coated and the product rests are UHMW-lined to prevent product marking.

Pneumatic Upender



This pneumatic upender features a gravity roller conveyor bed. Product may enter or exit this conveyor on its gravity roller conveyor bed. The upender can be activated to move product to its "up" position for testing or assembly operations. Finally, the product may be moved off of the upender tray or lowered to its original position and conveyed off of the gravity conveyor section.

The Big Star Rollover



The Big Star Rollover device rotates panels 180 degrees to be sent to the next stage of the manufacturer's process. The arms of the rollover are aligned with the infeed 796 Line Shaft conveyor so the panels can be staged to be rolled over. Cutouts were placed in the conveyor so that the 12 strands can pass through and rotate 45 degrees for the next incoming panel. Once the panel reaches the other side it is now ready to be sent out. The arms of the roll-over are aligned with the discharge line shaft conveyor and the panels exit the rollover.

The Bowtie Conveyor



The Bowtie conveyor is designed to convey pipe and other cylindrically shaped products. The trough shape of the roller allows the product to be conveyed with very little side-to-side movement. Angled lifting bars covered with UHMW wearstrip are raised so the rods will roll onto a decline table

Hydraulic Upender



This hydraulic upender features a gravity roller conveyor mounted to bed assembly, model 196S-51-3-H-7, with 36" high end stop. Elevation is 20" TOR. Sized for total live load of 500 pounds, this upender can be activated to move product to its "up" position for testing or assembly operations. Finally, the product may be moved off of the upender tray or lowered to its original position and conveyed off of the gravity conveyor section.

Upender



Safety barriers and safety guarding to keep personnel out of tipping radius, required for safe operation, not shown.

Box Downender



Large vertically oriented box is pushed via gravity roller onto the receiving downender. Operator will downend the product into a horizontal position. Operator then activates a lift, allowing the operator to slide 2 or more offset supports underneath the product lengthwise. The operator then pushes the product off onto the next conveyor sequence and returns the downender back to its receiving position.

Product Rollover



Allows product to enter at one side of conveyor and after "flipping" product 180 degrees, conveys product through unit for next stage in manufacturing process. Notice wire mesh belt conveyors located inside rollover conveyor.

Inline 180 Degree Rollover



Allows product to enter at one side of conveyor and after "flipping" product 180 degrees, conveys product through unit for next stage in manufacturing process.

Inline Wheel Inverter



Wheels enter this inverter at infeed of belt conveyor, wheel is inverted 180 degrees and is conveyed to discharge of belt conveyor and on to next process in wheel manufacturing/packaging process. A separate drive (electric) is utilized for both belt conveyor and inverter mechanism. The belt conveyor is model 500BSB with 8" wide belting and B-section V-belt attached to back side of belt for tracking. Rate on conveyor is 5 wheels per minute.

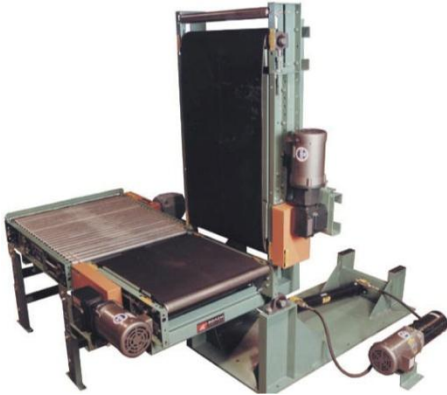
Single Lane Gravity Over / Under w/ Integrated Lift Table & Spring Loaded Manual Part Stops



Dual Lane Gravity Over / Under Conveyor w/ Integrated Lift Table & Parts Meter

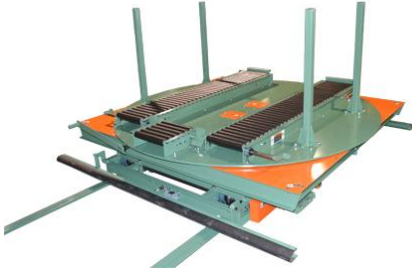


Hydraulic Upender w/ 138LR



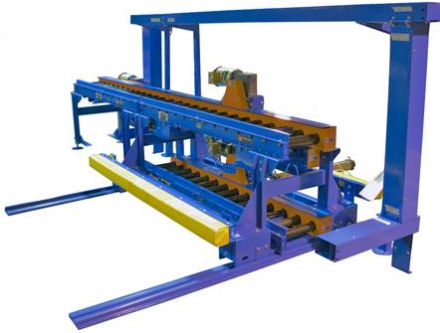
Numerous upenders are designed and manufactured by Roach to transfer product carrying surface or to re-direct product for numerous manufacturing operations. This hydraulic upender includes a 4-foot slider bed belt conveyor with V-grooved pulleys and B-section attached to bottom of belt (for tracking) on each transporting bed. Live roller shown is model 138LR-31-1.5-3'-0" long. Product moves onto slider bed belt conveyor, upender cycles and stations product on its end and is conveyed by the upender's second belt conveyor to another operation by conveyor end-user.

Dual Lane Transfer Cart w/ Turntable



This is a manually operated turntable combined with a transfer cart. Automotive parts on a pallet are conveyed onto the turntable. This turntable has 2-199S gravity conveyors spaced apart to give an effective 50" BF. To contain the product these gravity units have heavy duty butt end stops at the discharge end and dual blade stops at the infeed end. The operator can release the lock for the turntable and use the 4 post to manually rotate the product for inspection. After inspection the product is then moved by the transfer cart along the floor track to the next conveyor line.

Warhead Transfer Cart



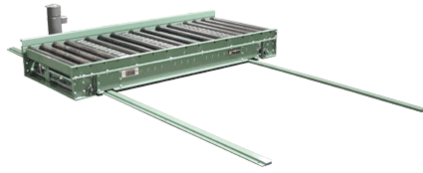
2-tier 251CDLR Transfer Cart. Features pneumatic blade stops and "z" bracket guards for securing product during transfer. Cart is pushed along track via a pneumatic piston.

Dual CDLR Transfer Cart



This transfer cart has 2 CDLR conveyors on top mounted side by side, one for infeed and the one for discharge. The cart moves side to side to transfer product to the appropriate lines.

Gravity Roller Transfer Cart



3-strand gravity roller transfer mounted within a heavy duty 251S gravity roller conveyor. Unit runs on a floor-mounted track between receiving and discharging positions. 3-strand gravity transfer designed to lift up to 4,000 lbs with 1" clearance.

Powered Transfer Cart



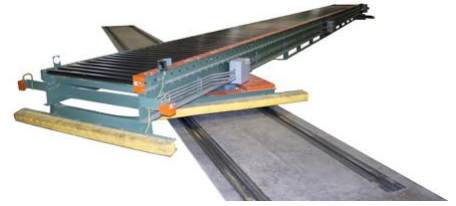
The Powered Transfer Cart is mounted at the end of two conveyor lines. Product is transferred from one conveyor to the other. V-Groove casters travel along the 6' inverted-angle track. Fixtures will be mounted to lifting plates between the rollers to raise and lower product on and off the transfer.

Low Profile IPT



The Low Profile IPT is a transfer cart topped with a powered roller conveyor turntable in a compact elevation. Used to move and rotate large products. The powered rollers assist in the transfer on and off of the turntable. The rollers feature pneumatic roller stops to prevent roller and product movement during cart motion. Also features safety-stop bumpers in case of path blockage while the cart is in motion.

Turning Transfer Cart



Designed to move product within a confined space. 60 feet long and constructed of heavy duty structural steel. The cart is guided by angle track mounted flush with the floor. Supports products exceeding 8000 lbs over the entire length of the cart.

Inclined Belt Transfer Cart



This inclined belt conveyor runs on a floor-mounted track. Product is loaded onto conveyor at the infeed (lower) end and conveyor is powered to run on track to discharge position where product is discharged from conveyor.

Chain Drag Transfer Cart



Heavy duty 2-strand chain drag conveyor runs on floor-mounted track moving racks weighing up to 1500 pounds. Transfer cart is powered by 1HP brake motor to travel on track to discharge position where rack is discharged onto 2-strand chain drag zero pressure accumulating conveyor. Elevation to top of chains is nominal 22". Distance traveled by transfer cart is 7'-6" at 30FPM.

Pneumatic Shuttle Cart



The Heavy Duty pneumatic shuttle cart enables the transfer of product between conveyor lines. The dual stage cylinders hold and pull the conveyor into position.

Chain Driven Transfer Cart



Heavy duty chain driven live roller conveyor runs on a floor-mounted track from foreground conveyor to discharge conveyor shown. Transfer cart is powered to run on track to discharge position where product is discharged from conveyor. Note Roach blue powder paint. Foreground and discharge conveyors are heavy duty, model 3509CDA, chain driven accumulators, handling bales weighing up to 750lbs.

Low-Pro Transfer Cart



This Low Profile Transfer Cart receives product racks at a low elevation of 9" for easier manual loading of the racks. It then travels to the receiving conveyor, elevates to 19" via scissor-lift, and transfers the loaded racks onto conveyor. The conveyor and transfer cart are powered by MDR (Motorized Drive Rollers).

Custom Heavy Duty Battery Transfer Cart



This transfer cart was built to service multiple lines where pallets were feeding off of conveyor systems where the product was being produced. This model is a heavy duty model and was rated for 12,000#.

Heavy Duty Transfer Cars



Transfer cars are used in conjunction with our conveying equipment. A typical application utilizes a conveyor deck that is attached to a mobile base. Transfer cars can traverse automatically under the control of a PLC or can be used in a hand-push application and/or lean manufacturing operations.