Roller Conveyors



Both powered and idler roller conveyors are available in heavy and light duty designs. Standard models are manufactured in 5' and 10' long sections that can bolt together to fit the overall length required. Rollers can be specified with 3-1/2" or 2-9/16" diameters with 1,040-lbs. and 500-lbs. capacity, respectively; in 22", 32" or 42" working widths; and in a variety of roller spacings. Live roller conveyors employ #60 chain and sprockets roller-to-roller with formed chainguard covers that are removable. Power options include 3 H.P. and 5 H.P. electric motors, as well as comparable hydraulic drives with either single or variable forward and reverse speeds up to 60 feet per minute. Clutched drives can be supplied, too.

The conveyors are durably constructed with structural steel channel frame and leg assemblies.

The legs are manufactured to your height specification, and are equipped with leveling screws with ±1-1/2" adjustment. Anchoring brackets are included. The rollers are made from thick wall steel tubing with press-fit sealed bearings and hexagonal shafts. The bearings are grease packed with hardened raceways rated for extensive life. All powered conveyors are furnished with a console. Electric drive systems are also supplied with an enclosure housing their respective pre-wired controls and starters. An A.C. inverter and a joystick are employed for the variable speed option providing ultimate control and easy operation.

Many accessory options are available for the roller conveyors. Drip pans with an attached 1" PVC pipe coolant recovery system can be fitted to the sections. Filler plates between the rollers for short pieces can be specified to your exact spacing and quantity. Vertical guide rollers used for aligning conveyed material with the machine can be ordered. Also, conveyors can be equipped with hydraulic lift rollers. Accessories are further discussed on a separate sheet.

Steel Storage Systems can design and manufacture custom roller conveyors for your specific application. Sections can be manufactured to any length and width. Roller size, capacity and spacing can also be made to order. For extra heavy duty requirements, frames and legs can be built with stronger structural members and with larger diameter and thicker wall rollers on precision bearings. Drives can be upgraded as well. Special rollers can be supplied to meet any material handling need including concave, V-type and with protective linings.

Models	Section Lengths	Roller Size	Roller Capacity	Working Widths	Roller Spacings	Live	Idle
Heavy Duty	5' & 10'	3-1/2" dia. x .300 wall	1,040 lbs.	22", 32" & 42"	6", 12" & 24"	~	~
Light Duty	5' & 10'	2-9/16" dia x .180 wall	500 lbs.	22" & 32:	6", 12" & 24"	~	~
		Sta	ndard Dr	ives			

Call or write us for more details and to enlist our services to help you engineer a system to meet your particular needs. Whether your requirement calls for a short length of simple light-duty idler roller conveyor or a sophisticated, high production powered system to handle large heavy loads, we are your source.



3 H.P. Electric

5 H.P. Electric

Hydraulic



Single & Variable Speed

Single & Variable Speed

Single & Variable Speed





Transfer Conveyors can be supplied to feed, discharge and accumulate material. They comprise two or more arms that are linked to a common drive shaft powering a large #100 roller chain on which the loads are transported. The arms can be furnished in specified widths, quantities and spacings to handle virtually any length and weight. The transfer arms raise and lower to load and unload where they intersect a roller conveyor. As the chain moves, everything on it conveys together thereby minimizing travel and automatically allowing for the staging of additional material without affecting their sequence. Since the loads are carried on the chains, loud noise from dragging is eliminated and the material is protected from damage and abrasion. They provide uninterrupted material flow for continuous operation of machinery, resulting in maximum productivity.





Transfer conveyors are driven by a single-speed, two directional 5 H.P. electric motor at a speed of 25 feet per minute. Each arm is equipped with a hydraulic cylinder for lifting. The arms are constructed with large structural steel tubes in standard 15' lengths and each has a weight capacity of 15,000 lbs. Longer or shorter arms are available and also with greater loading capacities. Heavy duty bearings and sprockets are fitted on the arms to drive the #100 chain. The chain is offered in standard, straight sidebar and special sizes. Larger chain, tubes, and cylinders for extreme applications can also be specified. Other options include dual-lift arms using cylinders on both ends and equipped with load rails, and lift-and-carry transport carts. This latter design is very practical for transferring material to multiple processing stations such as a fabrication operation. In addition to increasing processing productivity, transfer conveyors will reduce material handling and improve safety.



Measuring Systems





Two standard designs are offered: a Powered Workstop, and a manually operated workstop. Whether your application requires simple measuring or close-tolerance high-production gauging, we can supply the right system to meet your demand and budget.

Powered Workshop

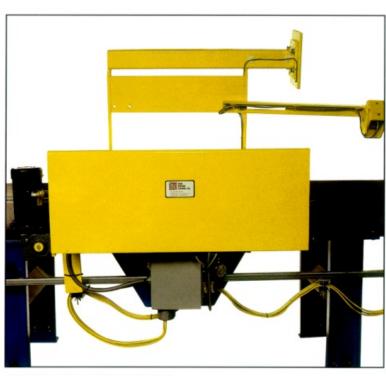
This design provides convenience, accuracy and efficiency. It is operated easily from a console with controls for its positioning, clamping, lowering and raising. The workstop is ruggedly constructed to withstand material contact and has self-contained power components. It has a material slow-down sensor as a safeguard that automatically activates the roller conveyors into a creep speed to minimize impact. There is also a material contact light on the console that illuminates to confirm material is in position. A closed circuit t.v. camera displays a tape measure readout on a monitor attached to the console for simple yet accurate measuring. As an option, LED readouts are available. Measurements are registered in inches up to two decimal points using a rotary encoder mounted to the workstop.



Console with touch-screen controls and LED measurement display.



It is a basic measuring system and effective for light applications. The workshop has a pointer aligned with a tape measure mounted to the roller conveyor. It slides with ease on its track for positioning and it has a dual locking device to firmly secure it. The workstop arm is heavy duty but balanced for effortless raising and lowering.



Powered Workstop with its arm raised.



Accessories



The Pushbar Ejector System is employed for removing material, usually cut pieces and remnants, from a roller conveyor. The pushbar is mounted just above the rollers and it sweeps across the conveyor "pushing" material onto discharge skids. It can be furnished to handle any length and weights up to 10,000 pounds. It is chain driven by an electric motor and there are different drive options to meet the capacity required. With a quick, safe motion, the system eliminates another man-handling job, and expedites further conveying and processing.

Staging and Discharge Skids are constructed with steel tubes, and are attached to the side of the roller conveyors in either a level or inclined position for staging and discharge, respectively. They can be specified to width and in spacings and quantities for any range of lengths. They provide a simple, inexpensive, yet effective method to stage and off load roller conveyors, thus enhancing material flow and processing productivity.

Vertical Guide Rollers are used for aligning material on a conveyor. They are available in either a fixed or adjustable design and in different heights. Adjustable rollers can be quickly and easily set in any position across the working width of the roller conveyor. A combination of fixed and adjustable vertical guide rollers can lead material in an exact line to a machine. Also, they provide a good means of squaring material when employed with a transfer conveyor.

Squaring Arms align material with the machinery the roller conveyors service. The system comprises hydraulically powered arms that press the material against a sturdy backstop or heavy duty guide rollers. The entire assemble can be easily fitted to our standard roller conveyors. The arms travel across the conveyor with a push button control and they can be designed to square any size of stock.

Lift Rollers can be attached to roller conveyors to assist material movement into and away from the machines they serve. They lift hydraulically with a 1/2" stroke and have a 5,000 lb. capacity. Lift Rollers can be driven when furnished with powered roller conveyors.

Hydraulic Power Units are offered to serve our many hydraulic components. They are specified to order with the proper motor, pump and valves necessary for the system.



Pushbar ejecting material onto discharge skids.

Vertical Guide Roller.









Bar and Pipe Loaders

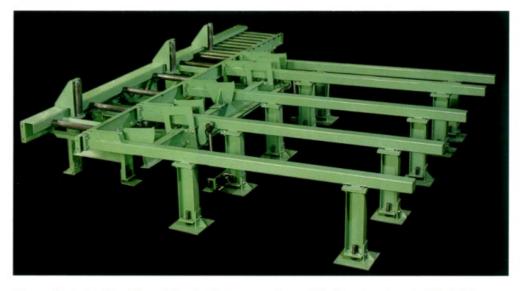


Bar and Pipe Loaders are designed exclusively for round material. They provide a complete infeed handling system with staging, loading, and conveying components for metal working machinery.

They comprise a staging magazine, a loader and a powered roller conveyor. The magazine is a series of inclined skids on which material is staged and gravity fed to the attached loader. The loader has a lifting pawl that picks one or more bars or pipes at a time. It elevates the material to a sloped ramp whereby it rolls onto the roller conveyor.

The loader is powered to raise and lower as well as index. The pawl has lateral movement to adjust to the width of the desired load. The standard indexing range is 0 to 16". The pawl can pick a single item up to 16" diameter or a combination of pieces 16" wide.

The system is conveniently controlled at an operator's console. The Bar and Pipe Loader can greatly increase productivity because of its integrated handling, and its ability to provide an ongoing supply of material to the machine it serves.



It is possible to interface a Bar and Pipe Loader to a processing machine for automatic material feed. The loader and roller conveyor can be easily controlled to operate in sequence upon receiving a command.



The Bar and Pipe Loader utilizes the gravity movement of round material to accomplish an economical and efficient feed system.



Loaders can be specified to handle a broad range of lengths from short pieces to long stock. The number of staging skids and their spacing as well as the lifting pawl can be arranged to support almost any length required. The magazine can also be manufactured to a custom staging width and weight capacity.

The pawl lifts and indexes hydraulically. The loader is supplied with an appropriate sized hydraulic power unit with flow dividers for uniform operation of the cylinders. Its length and capacity can be made to order and the indexing range can be increased, too.

The roller conveyor is designed for the same material as the staging magazine and loader. Its length, roller width and spacing, and weight capacity can be tailored accordingly. Drive options are available including single and variable speed in either electric or hydraulic power. Vertical guide rollers are furnished to serve as a backstop for the bars and pipes and to align them with the machine. As the material loads onto the conveyor, it will have momentum to roll to the guide rollers.