



CONVEYOR SYSTEMS: Overview

Modular Components and Engineered Systems To Meet Your Specific Requirement

Conveyor Systems are engineered for any material handling application. Our Conveyors serve saw systems, CNCs, lasers, cut-to-length (CTL) and fabrication lines, shotblasters, bay to bay and inside to outside movement, orderfilling, and tube mill applications. Both linear and lateral movements are offered.

ROLLER CONVEYORS

TRANSFER & CROSS CONVEYORS

ROUND BAR & PIPE LOADERS

BUNDLING & ORDERFILLING SYSTEMS

STAGING & DISCHARGE TABLES

ACCESSORIES & SAFETY FEATURES

CONTROLS & AUTOMATION

MEASURING SYSTEMS



*A Conveyor with Lift and Carry Transfers
serving a saw*

**STEEL
STORAGE
SYSTEMS**

HANDLING METAL EFFICIENTLY



CONVEYOR SYSTEMS: *Roller Conveyors*

Roller Conveyors Serve Processing Machinery and Facilitate Flow

POWERED ROLLER CONVEYORS

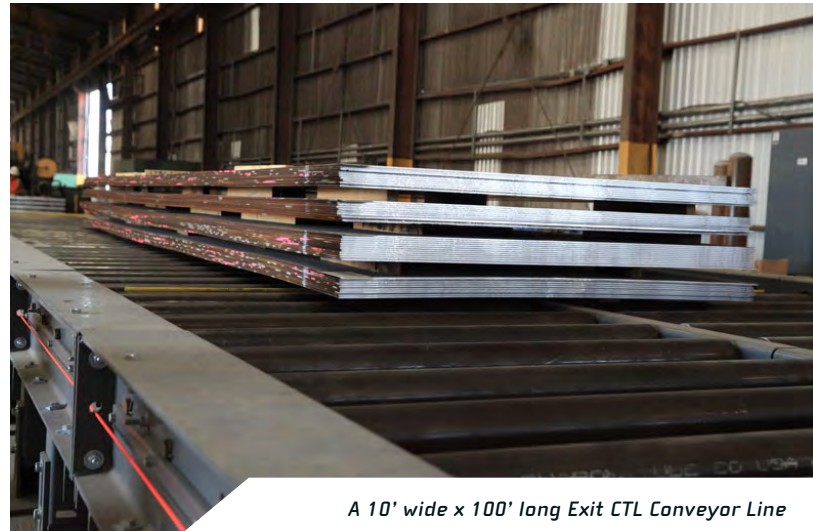
Roller Conveyors are heavily constructed to stand up to the wear and abuse of handling steel, and to last for many years of operation. Roller sizes, frames, and legs can be specified for extreme heavy duty applications.

Conveyor Sections are furnished in 10' or less modular sections that bolt together to form any length required. The modular design allows for easy reconfiguration and shipping. Standard roller widths are 22", 32", and 42". Roller spacings are determined by the application and type of material. Custom Conveyor widths, roller sizes, drives, and chain are available. All Roller Conveyors are manufactured to any height specification. The legs are equipped with leveling screws providing +/- 1 1/2" adjustment.

Powered Roller Conveyors are typically supplied with variable speed electric drives operated with a joystick for convenient and precise control. The drive chain is wrapped roller-to-roller and covered by removable formed chain guards.

IDLER ROLLER CONVEYOR

Idler Roller Conveyors are offered in all the same sizes and options as Powered sections. They provide a simple and inexpensive option for heavy-duty material handling and transition.



A 10' wide x 100' long Exit CTL Conveyor Line



A powered infeed and outfeed Roller Conveyor with Staging and Discharge Tables serving a saw

CONVEYOR SYSTEMS: *Roller Conveyor Variations*

Unique Roller Conveyor Variations to Allow Safe Servicing and Alter Material Flow

MOVEABLE CONVEYOR SECTION

A Moveable Idler Roller Conveyor Section rolls in and out of the way on a track to accommodate a pivoting miter saw and maintain ability to convey short pieces.



Movable Conveyor Section allows miter saw to pivot without interference

TURN-TABLE CONVEYOR SECTION

A Turntable Powered Roller Conveyor Section can accomplish a 90-degree material flow change.

PIVOT CONVEYOR SECTION

A Pivot Conveyor Section raises 90 degrees hydraulically to create a temporary aisle. Its live rollers remain connected to the conveyor drive for power.



Pivot Conveyor Section lifts 90 degrees



Turn-Table Conveyor Section rotates 90 degrees

CONVEYOR SYSTEMS: *Transfer & Cross Conveyors*

*Transfer and Cross
Conveyors Provide
Uninterrupted Material Flow
for Continuous Operation*

TRANSFER CONVEYORS

Transfer and Cross Conveyors are employed to accumulate, feed, and discharge material. They comprise of a series of arms with a powered chain linked to a common drive shaft that conveys the material laterally. The loads are carried on the chains in a continuous and sequential flow.

The arms can be furnished in specified quantities and spacings to handle virtually any range of lengths. Transfers are available in custom sizes and lengths, and up to 25,000lb. capacity per arm.

Transfer Conveyors typically serve roller conveyors for staging and discharge functions to processing machinery. The arms intersect the roller conveyor and feature lifting cylinders to raise and lower to affect loading.

CROSS CONVEYORS

Cross Conveyors, have practically unlimited accumulation capacity and are for bi-directional staging and discharge flow. They are well-suited to a multi-machine handling system. Cross Conveyors feature arms with lift-and-carry transports that convey material laterally. The transports lift the material and carry it over the length of the arms.

The number of arms can be arranged to support a wide range lengths. The arms can be supplied to any length. The transports can be designed to any width and up to 10,000#capacity each..



Transfer Conveyor System



Cross Conveyor System



Outdoor Lift-and-Carry Cross Conveyor

CONVEYOR SYSTEMS: Tube & Pipe Loaders

Systems Designed Exclusively for Handling Round Material

LOADING SYSTEMS

Loaders are an economical alternative to Transfer and Cross Conveyors for staging and feeding round material onto a Roller Conveyor by utilizing gravity flow properties. It comprises a staging magazine and lifting pawl. The magazine is a series of inclined skids on which material is staged and fed to the pawl. The pawl picks the material and elevates to a ramp whereby it rolls onto the Roller Conveyor.

The magazine skids are tailored in length and quantity per requirement. The lifting pawl can also be supplied to handle most any range of lengths and weight. Thus, the Loading System can be designed to handle a combination of remnants and stock lengths. The pawl is hydraulically powered to raise and lower as well as index to the width of the load. The standard indexing range is 0 to 16" wide with adjustability to lift a single diameter or several pieces at a time.

Loading Systems are supplied with controls and Hydraulic Power Unit.



Loaders are capable of handling a variety of lengths and dimensions of round material; both individually and in bundles



Pipe Loader with staging table and lifting pawls

CONVEYOR SYSTEMS: *Bundling & Order Filling*

Bundling and Order Filling Systems for Packaging

MILL PACKAGING & EXIT LINES

Tube mill Exit and Packaging Lines are tailored to handle a range of sizes and lengths. The System can package both structural and mechanical tubing and in multiple bundle configurations. They are integrated to the mill to match speed and size, and have automated controls.

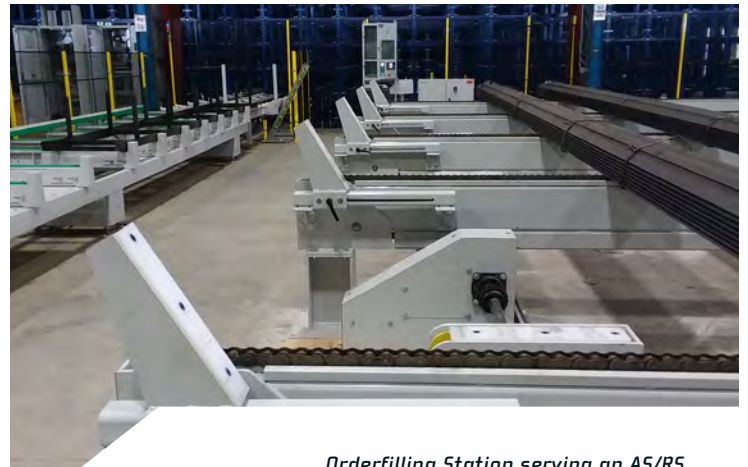
Automated Packaging systems eliminate manual labor and to reduce handling bottlenecks in tube and pipe mills. Material is received and discharged onto an Accumulating Conveyor to flow to a Bundler. The Bundler forms the material into layers and stacks them to create a complete bundle. Both hex and square/rectangular bundle configurations are possible. Once the bundle is built, a transport shuttles it laterally to a banding station. The banded bundle is then loaded onto a Discharge Conveyor to accumulate for bulk handling.

ORDERFILLING SYSTEM

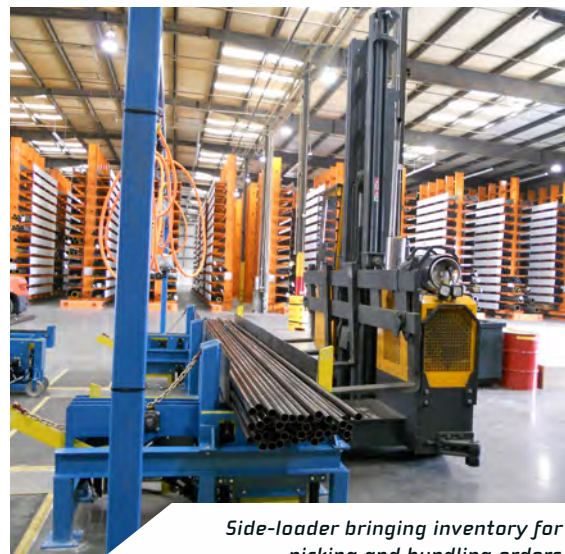
Stations are designed to serve sideloader, automated storage and retrieval systems (AS/RS), and overhead crane handling methods where orders are filled from stock inventory. They include picking and bundling devices, banding, and order accumulating conveyors. Stations are custom tailored to the application.



Transfer System accumulates and stacks pipe and tube into bundles



Orderfilling Station serving an AS/RS



Side-loader bringing inventory for picking and bundling orders

CONVEYOR SYSTEMS: Conveyor Accessories

Devices to Support Material Alignment, Staging, and Discharging Processes



Saw Infeed Roller Conveyor with Load Rails

LOAD RAILS & DISCHARGE TABLES

Skids are stationary arms that bolt to the side of infeed and outfeed Roller Conveyors for staging and discharge functions, respectively. Skids can be supplied in custom lengths, quantities, and spacings as desired. A plate option is available for a solid surface. They provide a simple and inexpensive means to feed and remove material.

THE PUSHBAR EJECTOR

The Pushbar Ejector System is a less expensive option to Transfer and Cross Conveyors used to discharge material. It is employed on outfeed Roller Conveyors to remove material and is effective for short pieces.

The Pushbar mounts just above the rollers and electrically sweeps across the Conveyors "pushing" material onto discharge skids. It can be furnished in lengths up to 40' and a 10,000lb capacity. With a quick safe motion, the system reduces human interface and increases productivity.

VERTICAL GUIDE ROLLERS

Vertical Guide Rollers align material into a machine's datum typically on the infeed side. They are very effective when used in conjunction with Transfer and Cross Conveyors to square material as they feed. The standard height is 12" though they can be customized in size and design. Quantity is based on range of lengths.



A Pushbar Ejector System pushes cuts onto Discharge Skids



Vertical Guide Rollers square material on Infeed Roller Conveyor



CONVEYOR SYSTEMS: *Conveyor Accessories*

Conveyor Accessories to Enhance Efficiency and Productivity

COOLANT RECOVERY SYSTEMS

Coolant Recovery Systems are offered for Roller Conveyors to capture and return coolant. The system comprises a drip pan under the rollers with spigots, pvc fittings, and pipe to plumb recovered coolant back to the saw.

FILLER PLATES

Filler Plates, in both removable and fixed designs, fill the gaps between rollers to support shorts and remnant material. They can also serve as a platform.

LIFT ROLLERS

Lift Rollers can be added to assist material movement into and away from the machines they serve. They lift hydraulically with a ½" stroke and 5,000lb capacity. Lift Rollers are live when furnished with Powered Roller Conveyors.

SQUARING SYSTEMS

Squaring Systems are hydraulically powered arms that push material against a sturdy backstop to align material into a machine. The entire assembly is fitted to a Roller Conveyor.



Filler Plates at the end of a CTL Exit Line Roller Conveyor System



Squaring System for beam on a Roller Conveyor

CONVEYOR SYSTEMS: Conveyor Accessories

Conveyor Options to Enhance Safety

Conveyors come with many standard features such as formed chain guards, E Stop control, control safeguards, signage, and protective barriers. Many optional items are available to further enhance safe operation. All of these are integrated into the system controls.

SAFETY GATE

For egress through a Roller Conveyor. It is a light weight barrier mounted between roller sections that rise manually to create a walkway. It has an electrical connection to the conveyor control to shut down power when raised for safe egress. Power is automatically restored when lowered. A floor mounted cross-under drive is available to maintain the drive connection.

SAFETY MATS & LIGHT CURTAINS

To stop conveyor operation in designated areas when entered. They are actuated when the mat is stepped upon and the light curtain barrier is broken.

END STOP WITH SENSOR

A physical stop to prevent material conveying off the end. It includes a sensor to stop the Roller Conveyor in advance of material impact.

FLASHING LIGHTS & HORNS

To signal system operation. These devices can be arranged to engage in advance and during operation.



Open Safety Gate on a Roller Conveyor System



Safety Gate in closed position on a Roller Conveyor System



CONVEYOR SYSTEMS: System Controls

System Controls Designed and Built to the Client's Requirements

All powered conveyors come with a main power control panel and console built with quality industrial electrical components to meet National Fire Protection Association (NFPA), National Electric Code (NEC), and Underwriters Laboratories (UL) standards. All control panels are UL508A listed. The panels are custom designed and built to our client's specific needs, prioritizing safety, reliability, and efficiency.

All consoles are configured to operate multiple pieces of equipment and are equipped with an E-Stop button.

Roller Conveyors feature a joystick control providing convenient variable speed operation, allowing better and faster positioning of material and less wear on the drive.

UL CERTIFIED PANELS

REMOTE CONSOLES

Provides multiple operating stations for a system.

TOUCH SCREENS

Intuitive and accessible interface programmed with custom visual graphics, dashboards, and real-time machine status reporting.

PROGRAMMABLE LOGIC CONTROLLERS (PLC)

PLC integration consolidates controls from existing/ independent systems or processes into a custom, multifunctional base of operations providing both individual and simultaneous operation of equipment.

CUSTOM ENGRAVED LEGEND PLATES

REQUESTED MANUFACTURER BRANDS



*Control Console for Roller
Conveyor with a Measuring System*



*Touch Screen Console displaying tube
bundling configurations*

CONVEYOR SYSTEMS: Measuring Systems

Measuring Systems to Enhance Saw Processing

POWERED WORKSTOP

The Powered Workstop provides convenience, precision, and efficiency for saw processing in fabrication facilities and metal service centers. It is operated from an operator's console with controls for its positioning, clamping, lowering and raising. The Workstop is mounted to a track attached to the Outfeed Roller Conveyor. It can be supplied to any length, is ruggedly constructed, and is equipped with slow-down and stop sensors to minimize impact. The advanced measuring system includes a closed-circuit camera that displays a tape measure readout on a monitor at the console. A material contact light confirms material is in position.

MANUAL WORKSTOP

The Manual Workstop is a basic measuring system for light duty applications. It is recommended only with Idler Roller Conveyors and the cutting of smaller bars, shapes, and tubes. Like the Powered Workstop, it is mounted to a track attached to the Outfeed Roller Conveyor, but it is manually aligned to a tape measure on the track, clamped with a locking lever, lowered and raised.

**Measuring Systems are designed exclusively
for Steel Storage Systems' Conveyors**



A Powered Workstop on the Outfeed Roller Conveyor System with Transfers



A Powered Workstop Display on a Conveyor System console