



# PPCC Manuals for: Installation, Maintenance, Safety, and Parts List

*Recommended Spare Parts in Highlighted Print*

## Slat Horizontal Conveyor Manual

Serial # \_\_\_\_\_

Model # **SS** \_\_\_\_\_

Computer Code \_\_\_\_\_

# SAFETY FIRST!



Failure to follow all safety stickers, placards and maintenance manual instructions may result in serious injury to operators or maintenance personnel.

## NOTE:

Equipment may start automatically if a sensing device, such as a photo-eye or proximity switch, is accidentally blocked. Equipment may start automatically when a zone is placed in the “automatic” mode. Disable control system outputs before working on any automatic equipment.

## **FOLLOW YOUR SAFETY PROCEDURES AND INSTRUCTIONS FOR ALL OPERATOR AND MAINTENANCE PROCEDURES.**

### **SOME SAFETY DO’S AND DON’TS:**

- **DO NOT** enter areas designated “Authorized Personnel Only” or confined spaces without prior authorization and without following (L.O.T.O.) procedures.
- **DO NOT** operate any equipment without all factory-supplied guards securely installed in their proper locations.
- **DO NOT** bypass or defeat any safety device at any time.
- **DO NOT** reset any tripped EMERGENCY STOP button or cable without first determining the cause of the trip.
- **DO NOT** reach over, around, or through any guard or safety barrier without first following proper (L.O.T.O.) procedures.
- **DO NOT** clean or work under any lift table without using proper maintenance stops.
- **DO NOT** walk, sit, ride, or climb on conveyor at any time.
- **DO NOT** remove or alter conveyor guards of safety barriers.
- **DO NOT** load conveyor beyond design limits.
- **DO** follow plant Lock-Out, Tag-out (L.O.T.O.) procedures when working on machinery, including pneumatic devices.
- **DO** disable the control circuit output before working on any conveyor.
- **DO** lock-out the main and any auxiliary control panels before working on any conveyor.
- **DO** be aware that hazardous voltages may still be present in control cabinets even if the disconnect is locked out.
- **DO** lock-out the air supply to all equipment before working on or around any pneumatic device.
- **DO** verify that the energy source to the equipment is off before beginning any work.
- **DO** keep clothing, hair, fingers, and other body parts away from conveyor at all times.
- **DO** use all required personal protective equipment at all times when working on equipment.
- **DO** allow only authorized maintenance personnel to service conveyor.
- **DO** know the location and function of all start/stop controls.
- **DO** keep all start/stop controls free of obstruction.
- **DO** keep all personnel clear of conveyor when starting.
- **DO** operate conveyor with trained personnel only.
- **DO** verify that all personnel are clear of conveyor before switching into automatic mode.

\*\*\*\*\*POWER-PACK CONVEYOR COMPANY\*\*\*\*\*  
\*\*\*\*\*IF IT’S NOT SAFE, DON’T DO IT\*\*\*\*\*

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## Caution Stickers



Located on side of Conveyor



Located on side of Conveyor



Located on Guard

Continuing Engineering Advances may cause changes to information shown.

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# Introduction



## Receiving Instructions:

**A.** Check the number of crates, boxes, skids, etc. received against the Bill of Lading, to make sure all items shipped have been received. Check to see if any equipment was damaged in transit. If damages occurred, note damages on freight bill and immediately contact the motor carrier to a file claim for the damages.

## Approval Drawings:

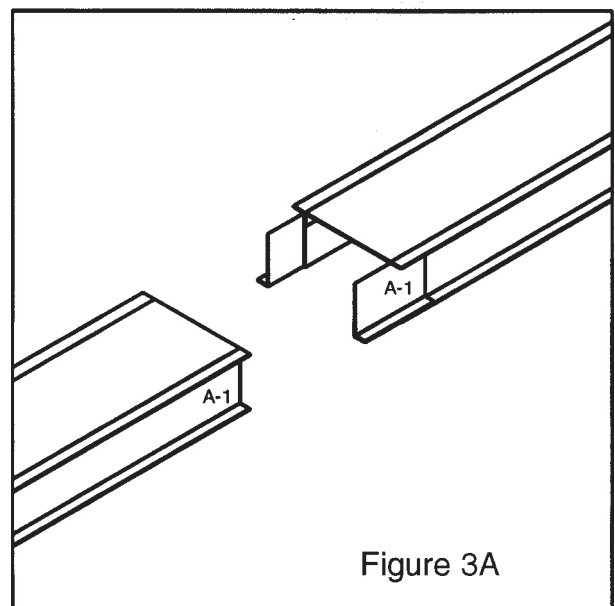
**B.** PPCC supplies approval drawings and a Bill of Material (BOM) on each conveyor to your engineering department for approval before fabrication. If you have a design or dimension question please refer to these drawings. For any additional assistance contact PPCC at (440) 975-9955 and ask for the Engineering Manager.

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# Installation

## Match Mark Numbers

All body sections are match marked with letters and numbers as follows: A-1 to A-1 etc. at body splice. See figure 3A.



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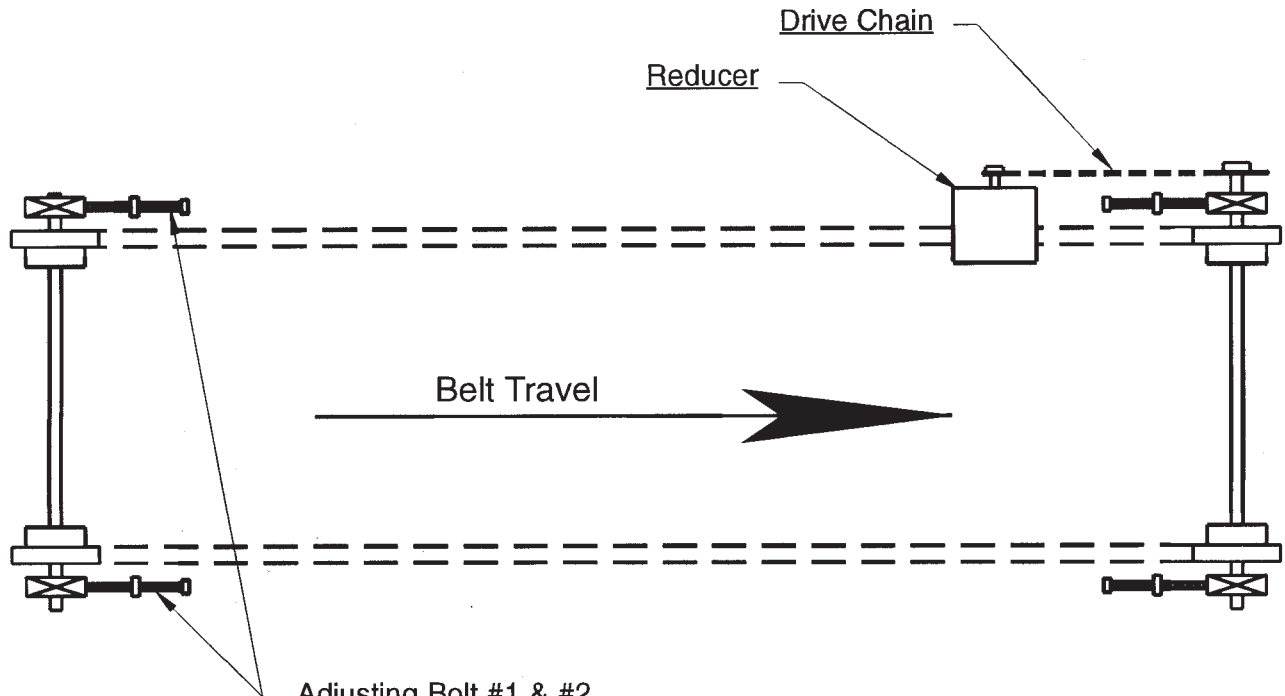
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# Operations



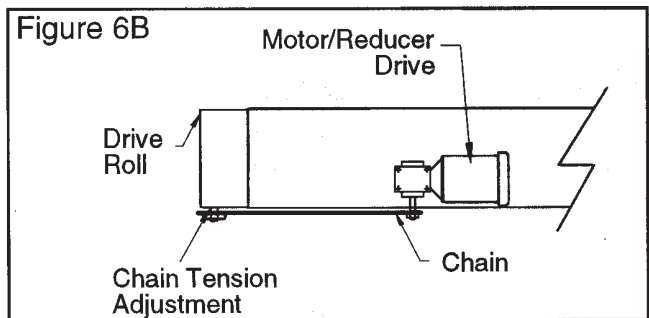
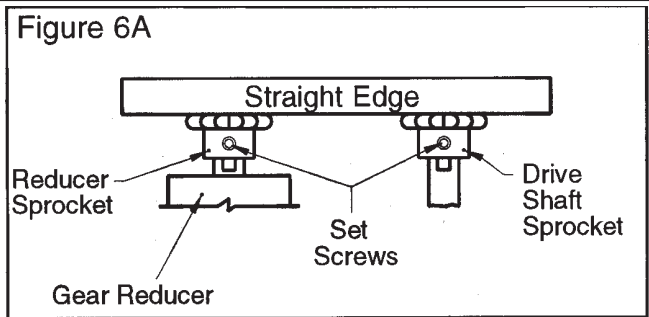
## Adjust Chain Belt Conveyor Tension



**Belt Tension:** Increase belt tension by taking an even number of turns on adjusting bolts #1 & #2 at end opposite drive. If chain runs over to one side of sprocket take more turns on side chain tends to run over to. **er tight- ening belt will cause excessive wear on conveyor components.**

## Drive Chain Alignment & Tension

The drive chain and sprockets should be checked periodically for proper tension and alignment. Improper adjustment will cause premature wear to the drive components. See page 5 for proper chain tension instructions.



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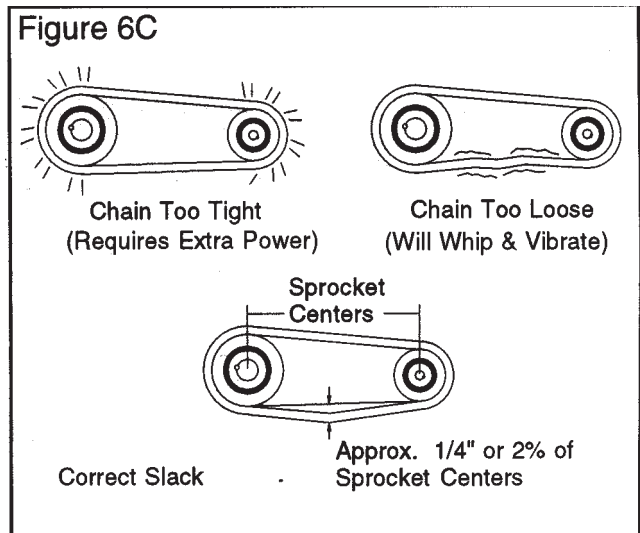
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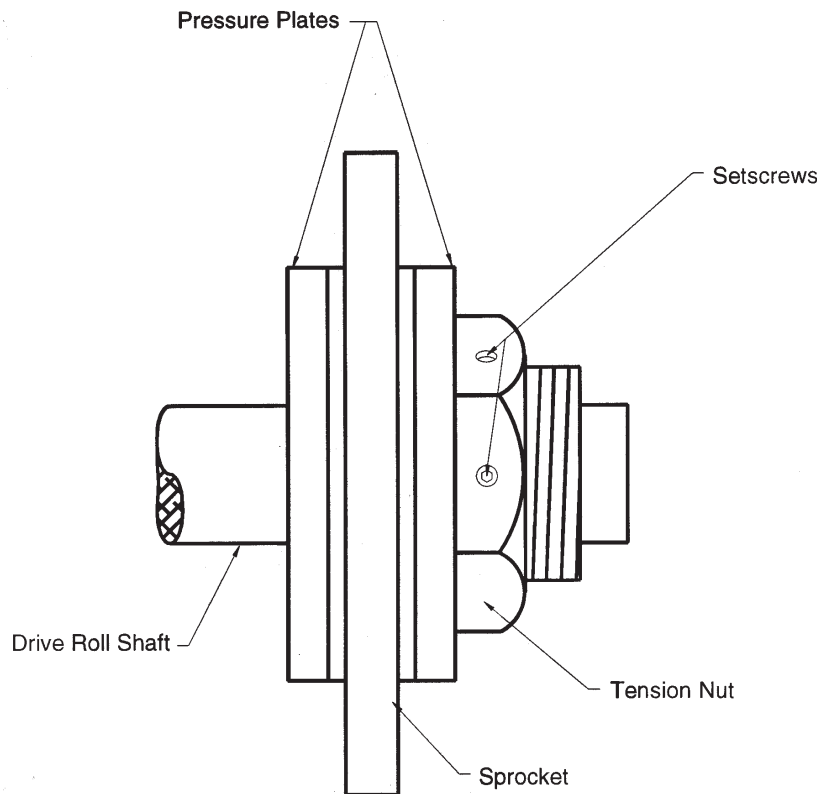
## TO MAKE ADJUSTMENTS

- 1... Remove chain guard.
- 2... Check sprocket alignment by placing a straight edge across the face of both sprockets (Figure 6A). Loosen set screws and adjust as needed. Retighten set screws.
- 3... To adjust chain tension, loosen bolts on motor base. Tighten until desired chain tension is reached (Figure 6C). Retighten mounting belt.
- 4... Lubricate chain per maintenance instructions.
- 5... Replace chain guard so that it does not interfere with drive.

**CAUTION!**  
NEVER REMOVE CHAIN GUARDS WHILE THE CONVEYOR IS OPERATING. ALWAYS REPLACE GUARDS AFTER ADJUSTMENTS ARE MADE.



## Torque Limiter



To tighten the torque limiter, loosen both setscrews, tighten tension nut to increase torque pressure, then retighten setscrews.

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# Electrical Controls

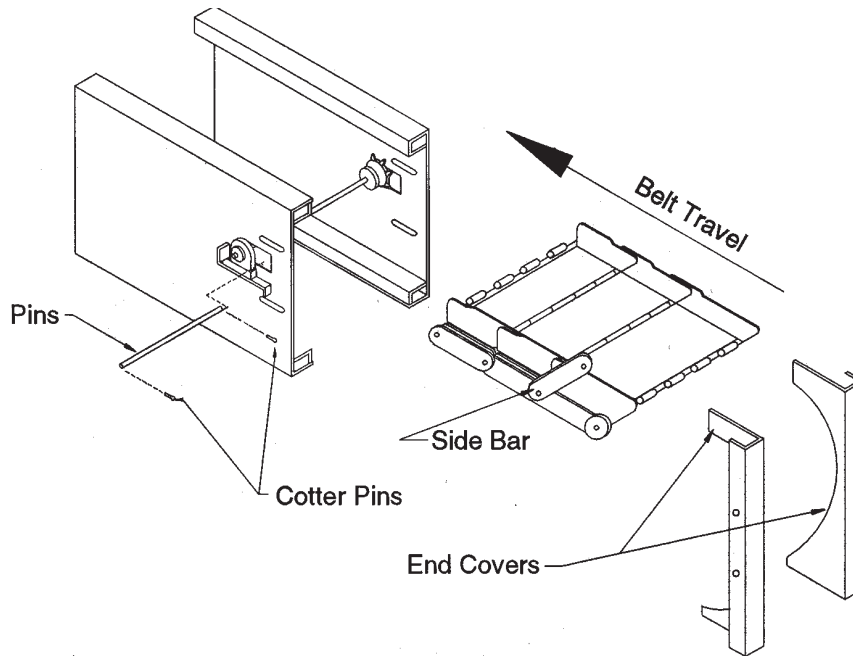


If controls are supplied with your equipment, see wiring diagram located in door of control panel.

## Start-Up

Before conveyor is turned on, remove any foreign objects on conveyor belt. After conveyor has been turned on, check your plant to conveyor motor amp draws to make sure your plant has sufficient power requirements.

## Remove & Install Steel Hinge Belt



### 1. MAKE SURE MAIN POWER SWITCH IS SHUT OFF & LOCKED OUT.

2. Remove end covers.
3. Loosen belt tension at footend of conveyor. Footend of conveyor is end opposite motor end of conveyor.
4. Remove cotter pin on both sides of hinge pin.
5. Pull belt hinge pin out by flipping up outside side bar and pulling out pin. Belt will now be separated for removal.
6. Disconnect drive chain as follows:

**CAUTION:** On incline conveyors belt will have tendency to run down conveyor when drive chain is not connected to drive sprocket. Safety chain should be used at all times to prevent run away belt.

7. Pull belt through end of conveyor (if necessary with aid of cable puller).
8. Heavy belts may have to be removed in small sections for ease of handling.
9. If a new belt is to be installed, you can add new sections of belt to the end of the old belt. When you are removing old sections of belt, you will be threading new sections of belt into the conveyor frame at the same time.

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# Reducer, Bearing, Chain & Motor



## Reducer:

Check reducer oil level periodically. See reducer manual for type of oil required.

## Bearings:

Return idler bearings are either free running ball bearings and need no lubrication or they are cartridge style bearings pre-lubricated at the factory for the life of the bearing under normal operating conditions.

All pillow block and flanged bearings are pre-lubricated at the factory for operating life of the bearing under normal conditions. Grease fittings are also supplied on these bearings, so under extreme operating conditions bearings can be inspected and greased with a lithium base grease conforming to a NLGI grade 2 consistency, as required.

**CAUTION: OVER GREASING WILL CAUSE GREASE SEAL TO BREAK AND BEARING MAY FREEZE-UP FROM LOSS OF GREASE.**

## Chain:

It is recommended that the drive chain be lubricated with SAE-30 oil approximately every 40 hours of operation. Under extreme conditions, more frequent lubrication may be required.

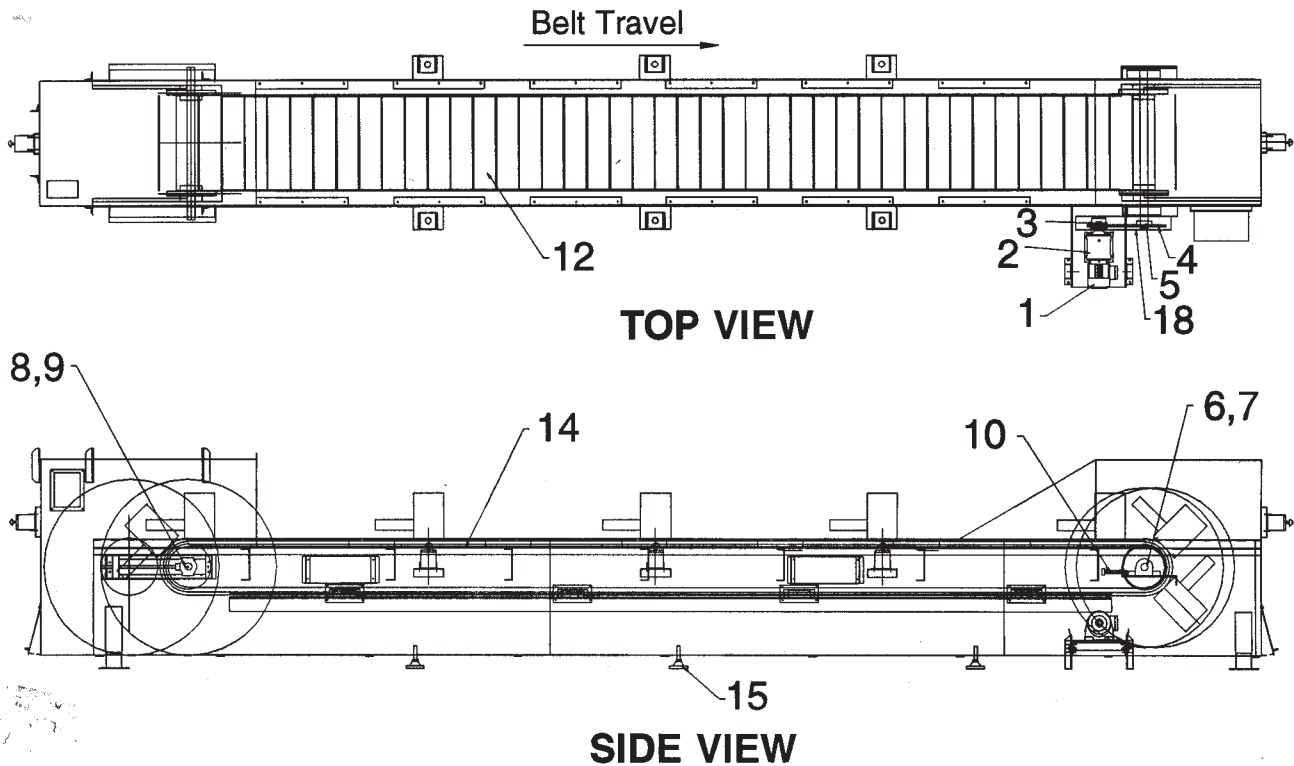
## Motor:

See motor manual.

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## Parts List & Spare Parts

Reference No.	Quantity	Description
1	1	<b>Motor</b>
2	1	<b>Reducer</b>
3	1	Reducer Sprocket
4	1	Roller Chain
5	1	Conveyor Sprocket
6	1	Drive Sprocket
7	2	<b>Drive Sprocket Bearings</b>
8	1	Tail Sprocket
9	2	<b>Tail Sprocket Bearings</b>
10	4	Adjusting Set Screws
12	1	Belt
14	-	Conveyor Frame Complete (1'-10' sections)
15	-	Leveling Pad

Recommended Spare Parts in Highlighted Print.  
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# Ask About These Additional Creative Solutions To Material Handling Problems

Power-Pack offers you a broad range of material handling products, accessories and technologies. Each one is designed to meet specific conveying needs while meeting your company's production requirements and long-term operating costs as well.

## **SlimLine Conveyors**

These low profile units are designed for part, slug or scrap removal from under stamping presses or other applications that require a compact and reliable conveyor. They feature a sleek design, rugged construction and a wide selection to choose from.

## **Universal Conveyors**

The common frame design used in all 12 models of belt and roller Universal conveyors provides economy and durability for today – and quick interchangeability to meet new needs in the future. Each model can be selected for light, standard or heavy duty applications.

## **Welded Construction Conveyors**

When specifications call for "one piece formed body and welded construction throughout," Power-Pack welded construction conveyors are the right choice. They are available in light, standard and heavy duty construction. Stainless steel models are also available.

## **Specific Application And OEM Conveyors**

Power-Pack offers a wide selection of pre-engineered bulk material handling, part handling, manufacturing and processing conveyors. Each one, including bucket, magnetic and steel hinge belt types can be modified to meet your specific application needs.

## **Conveyor Types Available**

Horizontal Slider Bed  
Horizontal Flanged Belt  
Horizontal "V" Tracking  
Incline  
Cleated Incline  
Gravity  
Horizontal Belt Over Roller  
Belt Driven Live Roller  
Zero Pressure  
Chain Driven Live Roller  
Skewed Chain Driven Live Roller  
Wire Mesh Horizontal  
Wire Mesh Incline  
Wire Mesh Cleated Incline  
Wire Mesh "L" Style  
Wire Mesh "Z" Style  
Floor To Floor  
Cleated Incline With Nose Over  
Table Top Horizontal  
Table Top Curve  
Die  
SlimLine Horizontal  
SlimLine Incline  
SlimLine Cleated Incline  
Steel Hinge Belt Conveyor  
Steel Hinge Belt Incline  
Steel Hinge Cleated Incline  
Steel Hinge "L" Style  
Steel Hinge "Z" Style  
Self-Cleaning Horizontal  
Self-Cleaning Incline  
Self-Cleaning Cleated Incline  
Flanged Trough Horizontal  
Flanged Trough Cleated Incline  
Corrugated Horizontal  
Corrugated Incline  
Corrugated Cleated Incline  
Corrugated "L" Style  
Corrugated "S" Style  
Troughing Idler Horizontal  
Troughing Idler Incline  
Troughing Cleated Incline  
Magnetic Horizontal  
Magnetic Incline  
Magnetic Cleated Incline  
Magnetic Incline W/Nose Over  
Magnetic Vertical  
Drag Chain Horizontal  
Drag Chain Incline  
Drag Chain "L" Style  
Roller Chain Horizontal  
Slat Horizontal  
Bucket Elevator  
Belt Curves  
Wash Conveyor  
Roller Flight

## **Conveyor Components**

If your company is looking to build its own conveyors – these pre-engineered modules can help reduce engineering and assembly time. Included are: Power-Pack's patented drive and take-up pulley assemblies, motor packages, leg supports, frames, belts, rollers and more.

## **Trailer Mounted Sequencing Conveyors**

These unique mobile conveyors are specially designed to provide fast plant-to-plant loading of components for just-in-time delivery to line set.

## **Custom Conveyors**

Need a special conveyor design for an in-plant or OEM application? Power-Pack's 60-plus years of material handling, manufacturing and processing experience is at your disposal to design and manufacture a cost-effective solution.

## **Systems – Synchronized, High Throughput and Storage & Retrieval**

Power-Pack systems engineers specialize in creating advanced systems to reduce manufacturing and inventory costs. Innovative systems which can help your company rapidly meet new market demands or competitive pressures.

## **Preview The Newest Innovations**

To keep your engineering staff abreast of the latest material handling technology, ask for our latest video tape titled: "Advanced Handling Systems."



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Quality Service,  
Innovative Design:**

**The Power-Pack Difference**