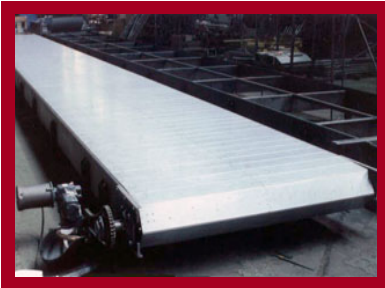


ARMORBELT®

Heavy Duty Belt Conveyor



Cargoflo



6' Wide/ 6" Pitch Belt



Armorbelt Laminator



Aluminum Belt Conveyor



Material Handling Conveyor



54' long Armorbelt Production Line fills and tests air conditioning coils.

Metal Slat Conveyors



Vertical Armorbelt

EQUIPMENT
TO IMPROVE
PRODUCTIVITY

KORNYLAK CORPORATION

www.kornylak.com | 513-863-1277 | kornylak@kornylak.com

400 Heaton Street
Hamilton, Ohio 45011 U.S.A.

ARMORBELT

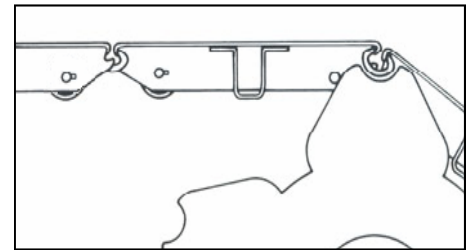
About the Armorbelt

The belt is smooth, hard zinc-coated steel which resists damage from strapping, projecting nails, oil, solvents, impact, heat, or cold. The bright reflective surface is ideal for infrared oven conveying. Freedom from rust means no product discoloration. It's smooth surface permits easy loading, unloading, indexing, or backing up of packages. Reinforced belt construction imparts high rigidity with low weight. Belt links snap together rapidly without tools. The patented chainless design is the strongest sectional belt available. Its greater pivot surface practically eliminates wear. Hardened steel ball-bearing rollers running on a smooth steel track keep horsepower to an unbelievably low level. Any combination of horizontal, inclined, and vertical paths is possible in a one piece conveyor. Belt joint stays tight around end sprockets for maximum safety. Narrow depth and standard 10' long frame spacing are ideal for production line conveyors. Jigs fastened to the belt make it a moving production line. Optional outlets mounted on the belt permit conveyorized testing. The positive sprocket drive assures exact speed synchronization and permits automatic holdback on inclined and vertical conveyors. An automatic take up compensates for heat expansion in ovens.

Installation and maintenance costs are minimized by the rapid belt assembly, one piece frame in 10' sections, fully adjustable legs with floor lagging pads, grease-sealed ball bearings, easy replacement of damaged belt links. No need to worry about belt tracking - the belt does not stretch, is not affected by humidity, and is not pushed out of line by loading from the side or uneven load distribution.

Characteristics

- Slats offered in zinc-coated steel, stainless steel, and extruded aluminum
- Optional: Cover materials, weldnuts, and slat attachments
- Smooth, hard, low friction surface
- Self Tracking
- Resists oil and solvents, and wipes clean
- Withstands extreme heat, cold
- Will not cut, tear, stretch
- High load capacity
- Low power requirements
- Rapid assembly
- Unitized for easy alteration
- Compact, totally enclosed
- Automatic takeup
- Concave and convex vertical



Armorbelt has a much simpler, stronger and longer wearing joint than other types of production conveyors. The belt is its own chain. The slats are links which are flexibly joined by strong full width "C"-shaped connectors. This eliminates the need for conventional chain pins, bushings, spacers and side plates and saves space and expense.

Applications

- **Oven Conveying-** The zinc coated steel belt or stainless steel belt allows Armorbelt to be used as an oven conveyor up to 350°, and the bright reflective surface of the belts is ideal for infrared or conventional ovens. Armorbelt also offers a perforated steel belt for even heating of all surfaces. The conveyor frame can also act as a plenum for internal process heating.
- **Cooling Conveyor-** Armorbelt's unique design allows it to go straight out of the oven and into the freezer without harming the steel belts or losing belt tension.
- **Drying Conveyor-** Armorbelt is the ideal drying conveyor with a smooth, hard metal surface, rounded slat joints, the minimal clearance of only .030" between slats, and .075" minimal clearance between edges of the belt and conveyor frame. You also have the ability to seal the belt joints with a flexible material. After use, the hard metal surfaces are easily washed or scraped clean.
- **Material Handling-** It has the ability to move objects ranging from individual nuts and bolts to 55 gallon drums, and is also effective at transporting odd shaped packages. The hard steel belt has a clean, smooth surface that allows easy loading and unloading of these packages without concern of damaging the belt.
- **Production, Assembly, and Test Operations-** The steel belt allows fixtures to be bolted or welded directly to the belt. Indexing is also available.

Design Advantages

Ball Bearing Rollers Enable Heavy Loads

A heavy load capacity is provided by the use of Ball Bearing Belt Rollers. These belt rollers allow 4 times the load capacity of a standard belt conveyor of the same horsepower. The ball bearing rollers have an optional automatic lubrication feature for extreme duty processing.

Light Weight Steel Belts

Light weight zinc coated or stainless steel belt links are strong and provide high load capacity, long life, and flexible, tight joints. The belt slats have a smooth, hard, low friction surface for easy on/off loading.



Carries ounces to tons.

Positive self-tracking and Low Maintenance

Allows side loading and unloading.

Automatic Belt Adjustment

This feature compensates for expansion and contraction of the belt when used as an oven or cooling conveyor.

Unitized Construction

Unitized construction means cost savings, simplified alteration, and fast and easy assembly of the conveyor. Internal bracing provides a permanent square frame for each 10' long welded section.

Multiple Speed Selections

Variable speed, fixed speed and indexing are available to accomplish your production conveyor needs.

Positive Drive For A Chainless Conveyor

Positive drive eliminates belt slip and permits movement of heavy loads. Special sprocket design prevents tooth jumping at overload.

An optional drive that is totally enclosed within the conveyor is also available for safety purposes.

Convenient, Multiple Controls (Fixed or Variable Speed)

Convenient controls can be located in a separate enclosure, or on a recessed panel in the conveyor frame for safety and appearance: Start button, forward/reverse lever, speed adjusting knob, calibrated speed dial, reset button. Panel interlock disconnects power for safety. An optional safety switch cord can be placed on both sides of the conveyor for convenient stopping of the conveyor from any workstation along its length.

Modifications And Special Conveyor Requirements Are Not A Problem

Special conveyor requirements are not a problem. Armorbelt's versatility allows for numerous modifications to meet your specific requirements. Armorbelt can run as a horizontal, incline, or vertical conveyor.

Uniqueness of Design

Light Weight And High Load Capacity

The steel belt links are light in weight with an extremely high load carrying capacity. Because Armorbelt uses a full width connector, and runs on ball bearing rollers, its belt has approximately four times the total load capacity of a chain and slat conveyor of equal tensile strength. The total load capacity of a 6" pitch Armorbelt is 16,000 pounds maximum, and an Armorbelt with a 12" pitch has a maximum load of 64,000. The beam strength of Armorbelt is high because of the stiffener welded to the bottom of each slat. For specific beam strengths of the slats, please consult our factory.

Lower Horsepower And Power Requirements

The lightweight metal slats and hardened steel rollers give Armorbelt a lower horsepower requirement than chain or standard belt conveyors. The belt running friction of Armorbelt is .027, while the running friction of a standard chain and slat conveyor is .087. Armorbelt conveyor system requires only 1/4 the horsepower needed by ordinary chain and slat conveyors and only 1/20 the horsepower needed by fabric belt or slider bed conveyors.

Dimensions of Standard Armorbelt

Belt- 3", 6", and 12" pitch. Zinc coated steel.

Also furnished in stainless steel and aluminum.

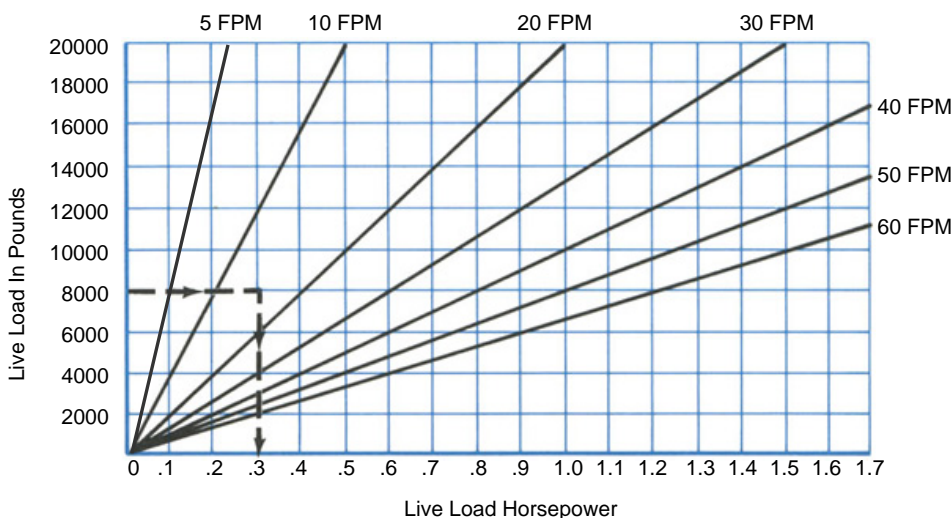
6" pitch is most economical, and popular. 3" pitch is used when a narrow body depth is desired. 12" pitch is used for heavy loads.

Width (inches)- 6, 12, 15, 18, 21, 24, 30, 36, 42, 48, 54, 60, 72, 84

Other widths available on order

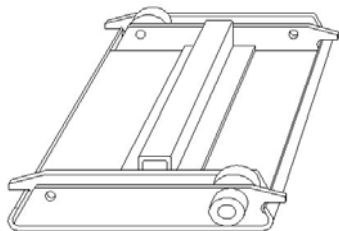
Length- 3' to 200'

Height- Specified by the customer. Standard adjustable legs allow for heights plus or minus 4" of the specified height.

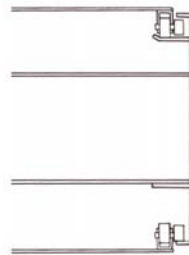


Simple side guides mounted on an Armorbelt

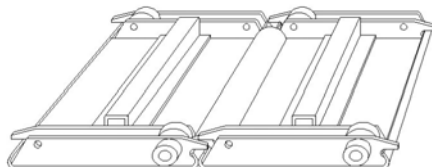
ARMORBELT UP CLOSE



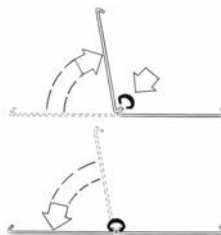
Two rollers mounted diagonally on each slat for stability and high load capacity. Long wheel brackets stiffen the slat.



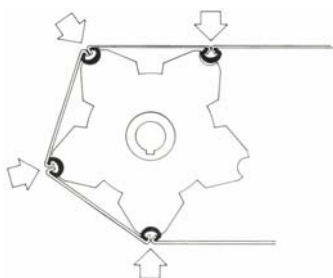
Rollers run on smooth steel track for efficiency. Guide lip provides automatic belt tracking. Return belt is self supporting for cleanliness. Optional seals and diversion slots prevent small assembly screws or debris from getting caught.



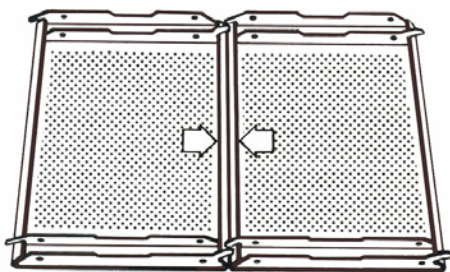
Connector locks between end brackets. Outboard return rollers also permit vertical curves.



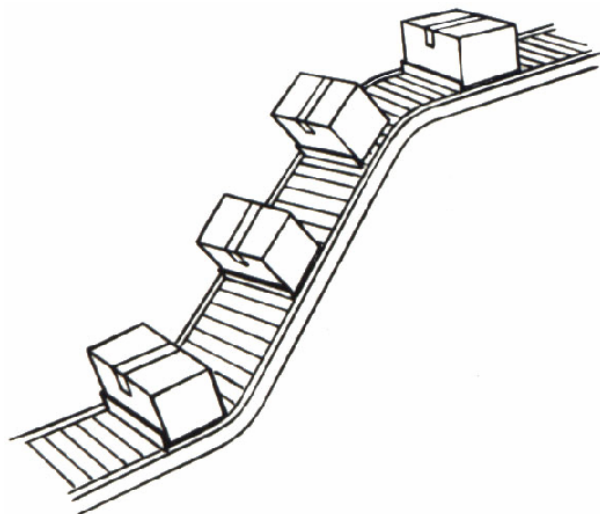
The connector at the joint provides high tensile strength and rapid, no-tool assembly. The connector extends the entire width of the belt, providing longer life compared to those connected by a chain pin. The joint also stays tight, while permitting flexibility in both directions.



Sprocket drive for no slip, load holdback on inclined conveyors and exact speed synchronization.

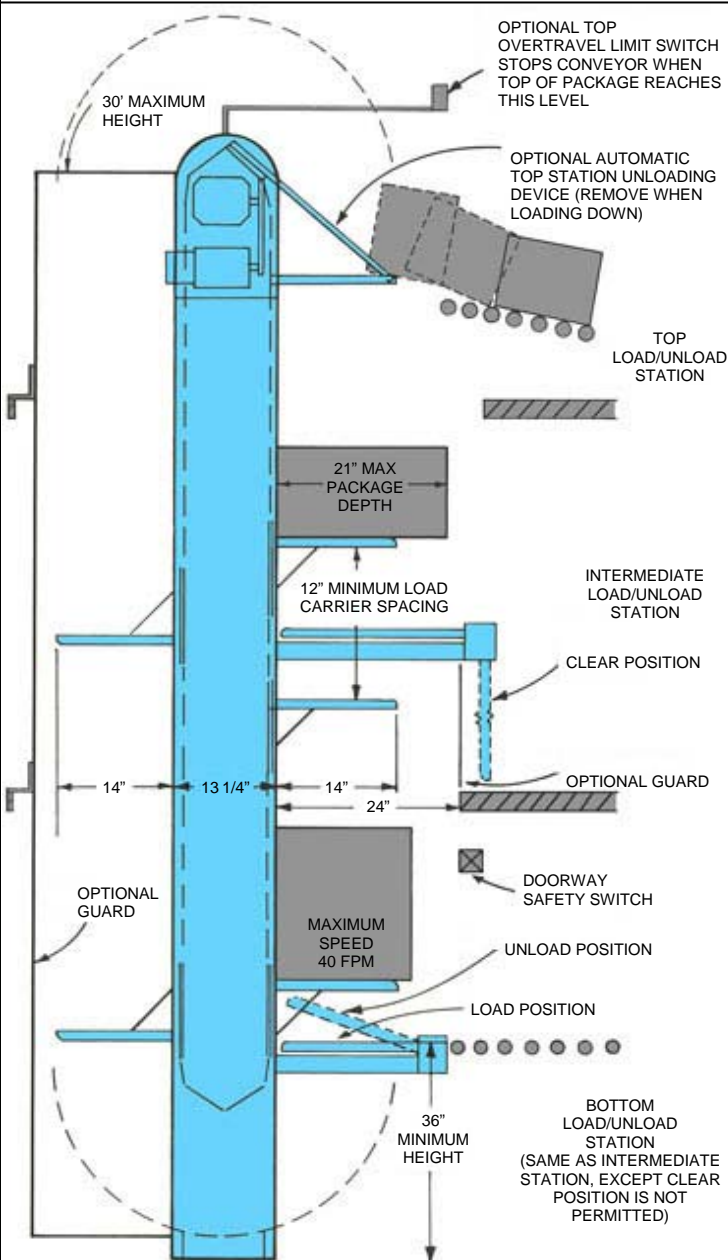


Perforated belts allow for better air or fluid circulation. They have been used in separation processes.



Above: Illustration shows Armorbelt's ability to be used in an inclined position for material handling.

Right: A detailed diagram of a vertical Armorbelt.



Kornylak Corporation
400 Heaton Street
Hamilton, Ohio 45011

Phone: 513-863-1277
Toll Free: 800-837-5676
Fax: 513-863-7644

www.kornylak.com
kornylak@kornylak.com