

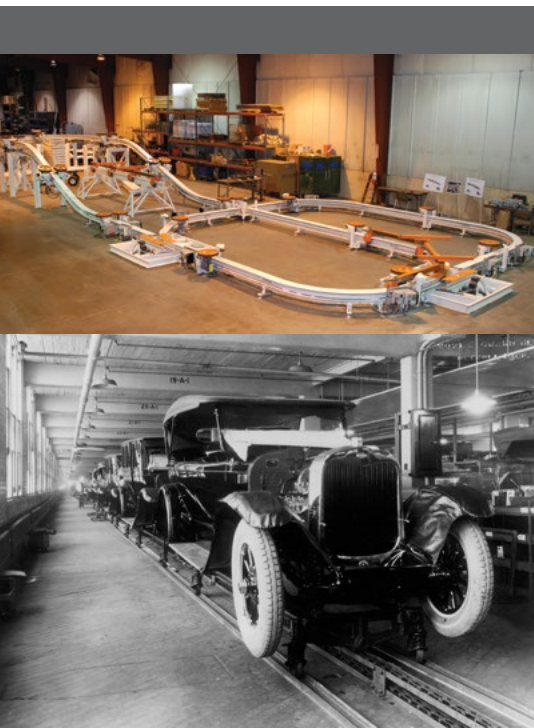
# Friction Drive Conveyor System

Clean, Quiet and Cost-Effective Conveyors



**DAIFUKU**

# Cost-Effective, Low-Maintenance Conveyor



Since 1919, Jervis B. Webb Company has been at the forefront of the material handling industry. The founder, Jervis B. Webb, revolutionized mass production when he adapted the rivetless chain conveyor for the automotive industry.

Today, we continue to lead the industry in developing cutting-edge conveyor systems, including our friction drive conveyor. Unlike traditional conveyors that use chains, the friction conveyor utilizes a drive wheel that comes in contact with a load bar to move loads on a carrier. Our friction drive conveyor system is more cost-effective, flexible and easier to maintain than traditional chain conveyor because it uses fewer and easier-to-replace parts. It also has the ability to travel on inclines and declines and is quieter and cleaner than chain conveyors, which need to be lubricated more frequently.

Friction conveyors offer smooth continuous flow and feature variable frequency drives to adjust conveyor speeds as necessary.

# Alternative for Chain and Skid Conveyors

Friction drive conveyor is an ideal alternative for overhead and inverted power & free conveyors. By using track switches and drives that act like stops, the friction conveyor can operate like a traditional power & free conveyor but is cleaner, quieter and lower maintenance. Similarly, by incorporating turntables, horizontal shuttles and vertical drop/lifts in the system, friction conveyor can operate like a traditional skid conveyor.

## Benefits

- **Lower Maintenance – less and easy-to-replace parts**
- **Faster Delivery Speeds - up to 240 feet per minute**
- **Quieter - eliminates chain and carrier accumulation impact noise**
- **Cleaner – eliminates need to lubricate chain**
- **Less Expensive – rail is standard wide flange beam**
- **Increased Flexibility – path is easily increased or reconfigured**
- **Simple Controls – single sensor per motor for delivery, double sensors per motor for accumulation and distributed motor control**
- **Low Profile – greater flexibility for product work heights**
- **Energy Efficient – eliminates continuous moving chain**
- **Easier, Cost-Effective Installation – modular construction with no offline drives or power only chain track**
- **Ability to Reverse – carriers can move forward and backward**

# How It Works

Friction drive conveyor systems convert the traction output of the conveyor's motors into thrust force to move carriers throughout the system. The new technology eliminates the need for chains, instead utilizing motors with a drive wheel that comes in contact with a load bar to drive the carrier. With friction conveyors, each carrier uses a drive. To reduce the number of friction drives, multiple carriers can be latched together like a train requiring just one drive for the train.

## Features

- **Light-duty friction conveyor maximum load capacity is 500 lbs.**
- **Heavy-duty friction conveyor maximum load capacity is 2500 lbs.**
- **Maximum speed is 240 feet per minute.**
- **Control design is simplified by keeping the friction drive mounting distances equal to the carrier load bar lengths.**
- **Track switches feature a simple, shuttle-type design that uses either an air cylinder or electric motor.**
- **Urethane load wheels greatly reduce the noise created by moving carriers and allow the use of mild steel track, which is readily available. Urethane wheels also have the ability to travel over minor track misalignments.**
- **Easier to install and more cost-effective due to wide flange track, which requires fewer supports.**





# Endless Applications

Friction drive conveyors can be used in endless applications to move everything from car bodies to small appliances. Friction conveyors can also be integrated seamlessly with power & free and chain conveyors in the same system to accommodate harsh environments such as ovens and paint booths. Friction conveyor is ideal for long distances and is less expensive than using power & free and chain conveyors throughout a system.

## Potential Industries

**Automotive**

**Appliances**

**Electronics**

**Aerospace**

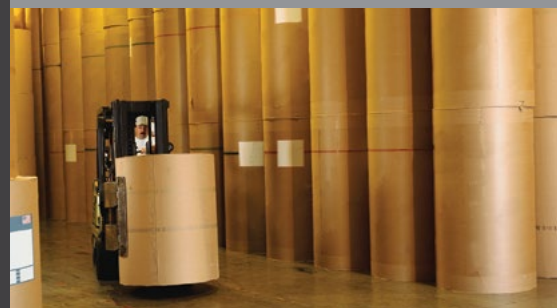
**Consumer Goods**

**Paper**

**Food and Beverage**

**General Manufacturing**

**Warehousing/Distribution**



**Decline** – ability to travel down declines



**Carrier** – load capacity up to 2500 lbs.



**Urethane Load Wheels** – reduce noise



**Friction Drive Wheel**  
– comes in contact with load bar to move carrier





# Friction Drive Conveyor System

**Incline** – ability to travel up inclines



**Track Switch** – allows friction conveyor to operate like power & free

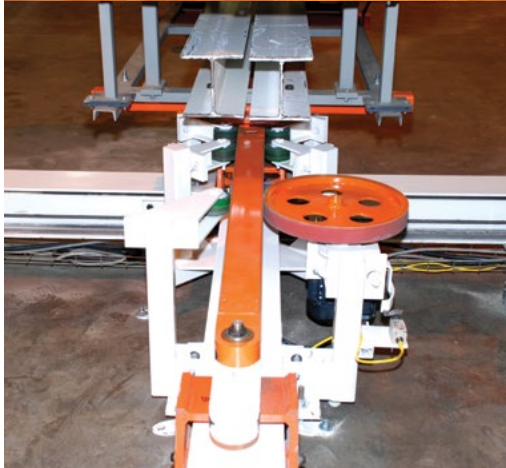


**Drive** – max speed 240 FPM



**Track** – can use standard, readily available I-beam





**We can custom design, manufacture and install complete friction drive conveyor systems to suit your needs.**

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