

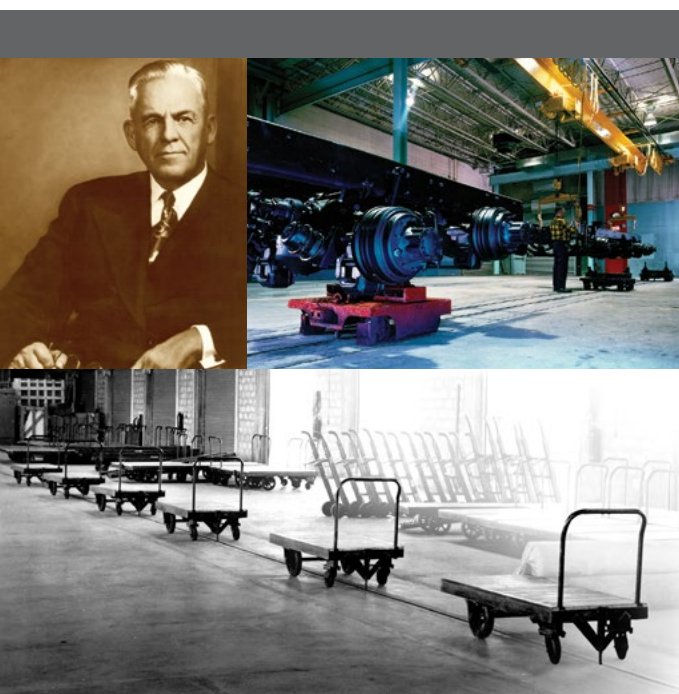
Towline Systems

Towveyor® Conveyors & Shallo-Tow™ Conveyors
Economical & Efficient Material Transport



DAIFUKU

A Tradition of Innovation



Since 1919, we have been at the forefront of the material handling industry. Jervis B. Webb adapted a forged rivetless chain conveyor used in the mining industry to the rugged needs of the automotive industry, helping revolutionize mass production.

Today, our world-class material handling solutions allow customers all over the globe to increase productivity and reduce costs. Daifuku Company Ltd., is the largest material handling company in the world.

High Volume, Unattended Transport

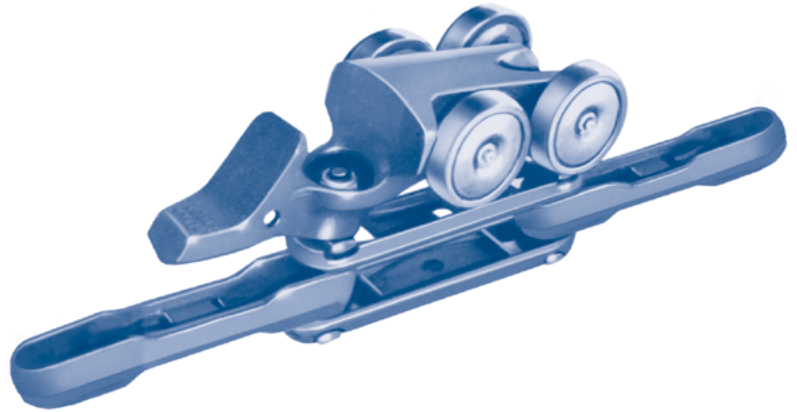
For decades, towline conveyor systems have played a significant role in the successful automation of warehouse and distribution facilities, plants, freight terminals and newspaper printing plants. Towline systems help reduce operating costs, enhance productivity, improve inventory control and increase workflow efficiency. For even greater versatility, towline systems may also be linked with host computers.

Towveyor[®] and Shallo-Tow[™] conveyors are simple, easy-to-maintain, non-synchronous towline systems that provide high-volume, unattended material transport via tow carts that move above in-floor tracks. Tow cart load surfaces can be customized to hold roller beds, turntables, tilt tops and racks.

These proven towline systems offer accumulation, live storage and automatic dispatching to accommodate a wide range of production-oriented environments. Applications include sorting, transporting, order picking, automatic loading/unloading, storage and retrieval, as well as assembly operations – particularly in finishing environments.



Towveyor® Conveyors



Non-powered bump-off spurs divert carts a short distance into the spur. Succeeding carts advance them by low-impact bumping. Pushing bumpers are installed on carts to protect the tow pin. Lockouts are also included to prevent jams. Spring bumpers are recommended to reduce shock and noise.

Fully-powered spurs convey carts to the last empty position where they are disengaged from the chain by an air-operated “stop” device.

Individual carts can be stopped while the power chain continues to run. This allows carts ahead of the stoppage point to continue on their way.

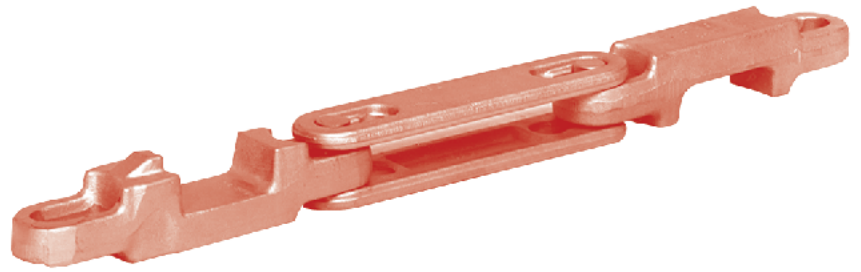
The high-carbon, heat-treated Microloy® 678 rivetless chain can be assembled by hand, without tools, and can accommodate practically any desired spacing of load-carrying carts. The telescoping feature of the chain eliminates the need for take-up, reducing pit requirements.

The Towveyor track is of welded construction with two three-inch channels and high carbon steel top bars. The track is specially designed for many years of reliable service. Standard pusher and idler trolleys operate in three-inch channels for most applications.

The pusher trolley frame and counterweight dog are made of malleable iron with a specially-hardened pushing surface for long wear life.



Shallo-Tow™ Conveyors



Shallo-Tow conveyors are light-duty, low-profile conveyors designed for use in facilities where track depth and quick installation are most important.

Shallo-Tow conveyors have a track depth of approximately three inches and function without trolleys. The chain assembly slides along lubricated wear bars within its low profile track.

The standard Shallo-Tow track is self-anchoring, eliminating the need for concrete anchors.

Shallo-Tow chain is made from heat-treated, forged steel. It consists of four basic parts: center, side, pusher links and a chain pin. The chain requires no special tools and can be assembled or disassembled by hand. Like the Towveyor chain, the telescoping feature of the Shallo-Tow chain eliminates the need for take-up, reducing pit requirements.

The Shallo-Tow track is formed of alloy steel and has replaceable wear bars. It is adaptable to most industrial applications, except those where grit and abrasive materials are encountered.



Towline Conveyor

Features

- **Roller Turns:** Roller turns are used for horizontal changes of direction. Our chain design allows for a smooth transition through turns without the need for special escort chains. Roller turns feature removable cover plates that allow easy clean out, maintenance and inspection. The wear surface of the top bar of the roller turn is made with specially treated high carbon steel.
- **Towline Drive:** Constant speed or variable speed caterpillar-type drives feature high carbon, heat-treated steel caterpillar dogs. The RC-160 roller chain is patented with an anti-back flex design.



With a Daifuku
towline conveyor
system, you can:

- Reduce Operating Costs
- Enhance Productivity
- Improve Inventory Control
- Increase Work Flow Efficiency

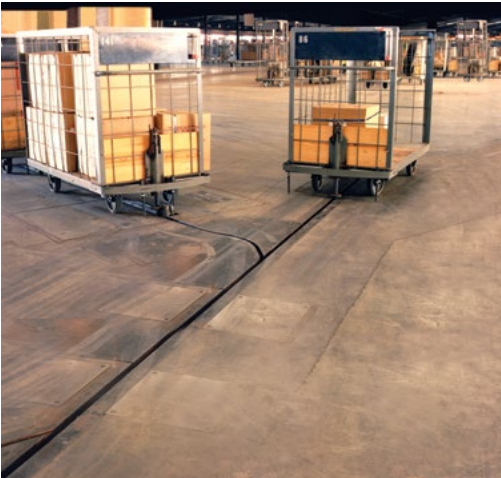
Benefits

- **Cleaner operation:** No unpleasant fumes, oil deposits, or batteries to recharge.
- **Reduced aisle congestion:** The tow carts move along set paths, reducing traffic congestion, confusion and product damage.
- **Increased productivity:** Tow carts pace material flow evenly and smoothly throughout the plant, reducing manual handling.
- **Heavy-duty load capacity:** Cart capacity ranges from 400 to 2,000 pounds, but heavier loads can be accommodated. Contact our sales engineers for design options.
- **Live storage:** Tow carts continually circulate to provide live storage during peak operation periods.
- **Economical installation/operation:** Towline conveyor systems require minimal construction time and they can be installed in either new or existing facilities. In addition, system maintenance does not require highly trained technicians. As a result, your own plant personnel can easily handle normal maintenance requirements.



Applications for towline conveyor systems include:

- Sorting
- Transporting
- Order Picking
- Automatic Loading/Unloading
- Storage and Retrieval
- Assembly Operations
- Finishing



Daifuku Automotive America Corporation can custom design, manufacture and install complete Towline conveyor systems, including simple or sophisticated controls, to suit your production requirements.

DAIFUKU

30100 Cabot Drive
Novi, MI 48377
248-553-1232 phone
dacproductsales@daifukuna.com
www.Daifuku.com

Towveyor®, Microloy® and Shallo-Tow™ Lubripin and Microloy are trademarks of DAIFUKU or one of its subsidiaries.

NOTICE: The information, data and specifications in this brochure are subject to change without notice and should not be used for construction purposes. Daifuku does not represent or warrant that selection of components or accessories set forth in this brochure will necessarily result in proper installation, operation and/or maintenance of such equipment or system, and Daifuku disclaims responsibility for any and all damages and injuries resulting from selection, design, installation, operation or maintenance performed by non-Daifuku personnel.

© 2024
Bulletin #9273 010124