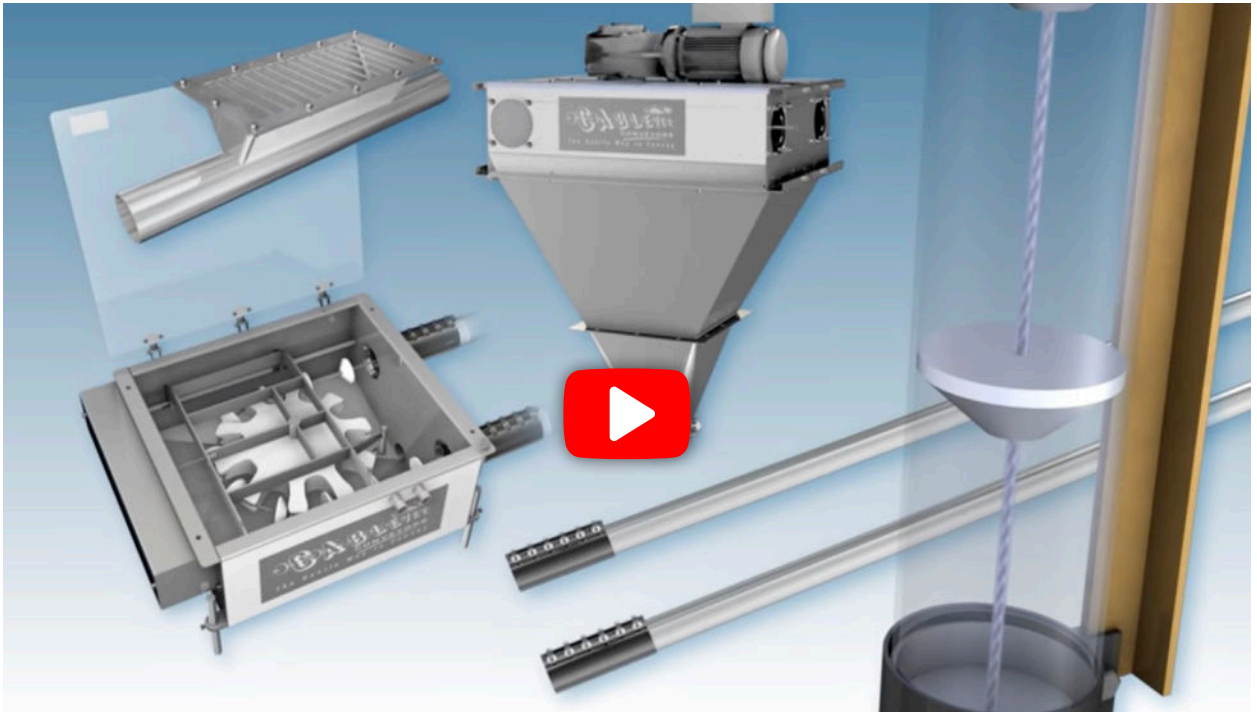




PROPER INSTALLATION
*is Key to Streamline Operations
and Optimize Efficiencies*



The Gentle Way to Convey®



The importance of proper installation cannot be overemphasized. Most service calls and often conveyor failure both can be traced to improper installation. In addition, an improper installation or one that is not supervised will void the system warranty. The best time to fix a problem is before it begins. Proper installation under professional supervision can help promote plant efficiencies, help avoid prematurely worn parts or worse, complete system failure. Learn what to expect from supervised installation with a Cablevey expert technician.

Before diving into the topic, a brief overview of the system itself can help operators understand what to expect from the system and the parts that will require installation.

What is a Tubular Conveyor?



A tubular cable and disc, drag style conveyor operates within an enclosed tube, either stainless steel, fiberglass or plastic, depending on the end use application. Inside the tube, a cable runs the length of the tube with multiple discs spaced evenly along the length of the cable. The cable itself is stainless steel, sealed within a nylon jacket, to prevent food particles or debris from accumulating in the cable strands.

The ends of the tubular conveyor form an endless loop, powered by a motor-driven sprocket that sits within a drive or turnaround unit. A modular system design that offers flexibility for horizontal or vertical movement also allows for changes in the number and position of inlets, discharges or outlets, and conveyor length and route possibilities.

Material enters through an inlet into the space between the discs, which then gently propel the material forward to the next processing or packaging station. Once past the inlet, the tubes are fully enclosed, to help:

- Minimize contamination risks
- Dramatically reduce exposure to ambient conditions
- Virtually eliminate dust, to enhance sanitation, reduce health risks and cut the risk of explosions
- Help facilities comply with FSMA and FDA requirements.



The disc or flight propulsion gently conveys friable materials from inlet to discharge, cutting breakage to as little as less than one percent, compared to product waste from breakage experienced with other systems that rely on forced air or freefall designs. Any amount of breakage or product waste cuts profitability.

The tubular drag style conveyor's solid circular discs or flights:

- Ease material movement
- Reduce product degradation
- Protects integrity of mixes and blends

Warranty Coverage

The installation manual includes a copy of the warranty. The gear motor is warranted for one year, while the system components are warranted under normal use and service for 90 days from the date of purchase, when the system is installed within its recommended limitations. Part of this recommendation includes supervised installation.

Each system also includes identification plates to help aid service calls. This identification plate is located on the drive unit on the motor. It includes pertinent information such as the machine serial number, its manufacture date, contact information for Cablevey and more.

Installation Process

Cablevey tubular drag style conveyors can be installed in a new facility or facility extension. However, the conveyor systems most often are installed to replace a different, existing style conveyor, or to help increase production. The types of conveyors it replaces can represent many kinds, such as bucket elevators, screw augers, or pneumatic systems. The reasons for replacement can vary from a desire to improve product quality by decreasing breakages or foreign contaminants, to improving energy efficiencies and meeting sanitary compliance.

System design is complete at this stage, taking into careful consideration the materials being conveyed, the distance and the available plant footprint, especially when fitting within existing space for another system replacement.

Just prior to installation, the Cablevey technician will review the engineering diagram. The operator or plant manager is provided with a comprehensive 17-point checklist to follow to ensure a smooth installation process. This checklist includes information about ways to properly cut and hang the tubes, how to set up the drive and turnaround, prepare the electrical system and essential equipment required for the installation itself.

The installation manual supplied with each system sold is a comprehensive guide containing step-by-step instructions with diagrams and photos to aid the process. These [installation manuals](#) are available on the company website.

Supervised Installation



Some facilities have a dedicated team assigned to installs, while other facilities might need a recommendation for a team of millwrights. In either case, the best possible practice is to have a Cablevey technician provide supervision for the installation. A tubular drag style conveyor system is uniquely designed and engineered. All it takes is one gap between conveyor sections or tubes to create a large issue, and this can happen with the most experienced millwright team or skilled pipe fitters.

Supervised installation is required to maintain the system warranty. In addition, it supplies the operating facility with the opportunity to conduct system verification. The supervision technician will run a camera through the installation to verify it for tube abutment, to ensure there are no gaps. The camera supplies a video of the length of the system, supplying the facts and data needed to correct it.

Troubleshooting Potential Issues

Gaps between the tubing can allow dust to escape, damage or lose product, reduce system efficiencies or, at worst, cause premature system failure. Components will wear out and contaminants can enter in, to the point where bits of metal can enter the tubing causing metal tube scraping, scraps of metal falling into tubing gaps, and causing material contamination, and eventual system failure.



Often, improper installation issues are not immediately visible. Premature failure will exhibit itself as components wear out faster than their anticipated lifespan. For example, a cable designed to last two years might only last six months instead. Or in an effort to fix an issue, an operator might compensate by putting more tension on the cable to lift discs back into line. This exceeds the recommended tension, and the cable wears out, or stretches and then sags. This is preventable through system verification via supervised installation and easier to address at installation, than to fix when the system fails.

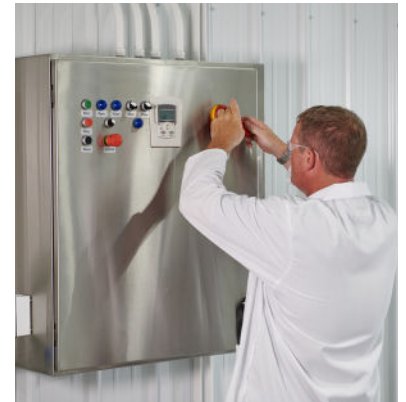
The difference between the initial sale and the supervised installation is a visual and practical check to ensure that it will be accessible for service and maintenance. Sometimes the main impact is the system's height, and whether the conveyor can be accessed with a lift or via a mezzanine. Or the fit might be very tight when a conveying line is added between other production equipment on the processing floor. In either case, supervised installation takes into consideration the system's accessibility. It is at this point that on occasion, the installation supervisor might need to extend the system, shift it slightly or even change the system layout. Any changes at this stage are verified by our applications department.

Commissioning the New Conveyor

Machine commissioning involves a complete system check prior to running the conveyor. A dry run ensures the cable moves smoothly, the turnaround carriage remains still, and the amp draw meets levels projected for the model installed. A sample run involves the same factors with product in the system, to troubleshoot any potential problems and remedy the issue prior to the first production run.

As production progresses, many customers opt for an annual service agreement, of particular value when a company owns and operates multiple conveyor lines within one or more facilities.

The value of a service agreement grows exponentially in a tight labor market, when preventive maintenance is a rare luxury. Companies that are short-staffed find themselves in the unenviable position of choosing or being forced to run to failure instead of following the recommended, regular, preventive maintenance schedule. A service agreement supplies relief in a tight labor market using qualified Cablevey technicians to help keep systems operating at peak efficiencies.



Reliable, Gentle Conveyance of Friable Materials



Cablevey Conveyors have earned a reputation for reliability and gentle conveyance for fragile materials, particularly within the food processing industry. Thousands of installations in more than 65 countries worldwide convey more than 1,000 different types of materials, from breakfast cereals to snacks, nuts, grains, seeds, powders, pet foods, coffee and more. The nature of these conveyed materials means that any gap or system discrepancy due to improper installation can rapidly unravel all of the benefits the system is designed to supply.

Streamlining processing operations, to avoid potential downtime, in the future, or worse — a complete system breakdown, will keep your conveyor running optimally. This will help maintain profitability through uninterrupted productivity because of proper system installation.

ABOUT CABLEVEY CONVEYORS

Cablevey Conveyors is a global specialty conveyor manufacturer that designs, engineers, assembles, and services tubular drag cable and disc conveyor systems. With customers in more than 66 countries, the company specializes in moving materials for food/beverage and industrial powder processors that seek food-grade conveying performance with clean, fast, energy-efficient, and cost-effective systems. Learn more at www.cablevey.com.

