

The Right Equipment for the Job

Helix[®] Flexible Screw Conveyor

Simply and easily convey bulk solids.

- **Excellent for batch, intermittent and continuous conveying.**
An economical option for conveying powders, crystals, pellets, friable material, flakes, granules and much more.
- **Simple, yet rugged construction keeps costs low and reliability high.**
A helicoid screw rotates inside a fixed tube. Fewer components minimize maintenance. The conveyor's stainless steel construction stands up to a continuous flow of abrasive materials.
- **Convey materials over distances up to 80 ft (24.4 m)**
and discharge heights up to 40 ft (12.2 m).
- **Easy to clean.**
Disassemble conveyor in 5 minutes for thorough wash down.

STANDARD MODELS EXAMPLES OF HELIX FLEXIBLE SCREW CONVEYORS



We offer a true performance guarantee ensuring your Hapman equipment achieves the specific results it was designed and manufactured to deliver. And if you need technical support, call us. We are available 24/7.



We're here to make a difference

Contact Mike Zeluff at 269-382-8268
or by e-mail at mzeluff@hapman.com.

hapman.com



a  global company

Helix® Flexible Screw Conveyors

Helix Types

Hi/Lo portable Helix



U.S. Patent No. 7,866,456

Quick auger changeout, and easy to clean.

Batch changeovers and meeting stringent sanitation regulations are easy with the Hi/Lo Helix.

- Clean easily. No need for ladders or special tools to clean this conveyor. The electric actuator automatically lowers the auger to an easy-to-access height.
- Move from room to room. Fully assembled conveyor fits through standard-height doors.
- Reach discharge height up to 12 ft (3.66 m).

Loss-in-weight Helix



Move and dose material in one conveyor.

The Loss-In-Weight (LIW) Helix is a fully automated dosing system that is equipped with programmable logic and system integration tie-in functionality. The LIW Helix has load cells built into the hopper base. The flexible screw conveyor carries the material to an elevated point at the required flow rate. The batching functionality of the LIW Helix allows for the measurement and automation of a dosed amount of material while conveying simultaneously.

- The LIW Helix is available from 3 to 8 inches (7.6 cm to 20.32 cm) nominal case diameter with average capacity ranges from .05 ft³/min to 25 ft³/min (.014 m³/min to .707 m³/min) and a discharge height of 12 feet (3.66 m).
- Hopper sizes range from 10 ft³ up to 60 ft³ (.283 m³ to 1.7 m³).
- Hi-Lo option is available for easy raise and lower of the conveyor for cleaning or auger change out.
- Available with 304 or 316 stainless steel hopper flexible connections, automated and manual discharge, shut-off valves, and more.

Push Helix conveyors



Convey horizontally from a storage point to process.

Hapman's Push Helix is ideal for batching applications that require controlled horizontal delivery without the need for precision metering or elevated conveying. Ideal for powders, crystals, pellets, friable material, flakes, granules, and more.

- Available in stainless steel, with auger sizes ranging from 2 to 8 inches (5.08 cm to 20.32 cm).
- Custom engineered designs are available for more challenging applications and materials, or processes requiring larger capacities.
- Features a 20:1 turn-down range to accommodate processes requiring a versatile range for conveying material from the load point and into a process or delivery destination.

Poly component Helix conveyors



The light-duty, low-cost quick-ship conveying choice.

Save up to 25% when you choose the P300 Series instead of our 300 Series stainless steel models. Its FDA-approved UHMW polyethylene discharge and hopper lower the price while providing excellent material flow and durable operation.

- Convey 0.5 to 1.5 ft³/min (0.014 to 0.042 m³/min) in a completely enclosed conveyor.
- Meet FDA regulations. Lightweight, easy-to-maintain UHMW polyethylene resists stains and sanitizes easily.
- Access components for cleaning without using special tools. Quick disconnects make cleaning and servicing easier.
- Operate safely with the automatic power safety cut-off on the stainless steel grate and sturdy heavy-duty stainless steel frame.
- Design to your specifications. Use in conjunction with Hapman bag dump stations, dust collectors and bulk bag unloading stations. Optional mounting brackets and supports are also available.



USDA compliant Helix conveyors



USDA dairy grade, sanitary conveyor.

This unit is certified for USDA Dairy Grading applications. When you need to move bulk dairy powders or products in your facility, we can design equipment to meet all of the sanitary conditions that keep your facility food-safe and regulation compliant.

- Access internal components quickly, and easily. Quick-release tri-clover connectors let you dismantle the conveyor without tools, so it's 100% open for cleaning or maintenance in a few minutes.
- Meet dairy-grade standards on all product contact surfaces. Hapman is the industry's only flexible screw conveyor manufacturer listed by the USDA for Dairy Grade applications.
- Ability to sanitize all components to your requirements.



Ships in 2 days or less!

The Hapman Helix Flexible Screw Conveyor is designed to offer customers an economical conveying method that can be applied to most types of dry material conveying applications. The Helix 300 and 400 stainless, and 300 poly models ship within one to two days. For specially designed models, our engineers and manufacturing staff work closely together to deliver your conveyor when you need it.

Options

- Select from a range of hoppers in standard and custom sizes, as well as flanged inlets.
- Available in stainless steel, carbon steel and polyethylene models.
- Optional mobile base provides a discharge height of 12 ft (3.66 m).
- Keep high-moisture or sluggish materials flowing with ribbon and pin agitators.
- Fit under low ceilings with optional right angle drive.
- Hopper-mounted air pads force air along the hopper wall, fluidizing the material for optimal conveying.
- UHMW-PE center core limits the amount of material entering the conveyor, mitigating challenges when conveying very dense material, or highly aerated or fluid material.
- Exclusive quick-release T-handle discharge box allows for tool-less entry to the auger.



Conical Hopper



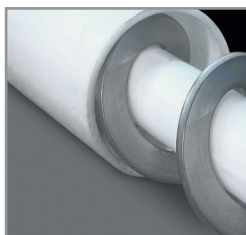
Right Angle Drive



T-Handle Discharge Box



Mobile Base and Bulk Hopper



UHMW-PE Center Core



Hopper Mounted Air Pads



Pin Agitator



Ribbon Agitator



Vibratory Hopper



Free material test

A material flow analysis is the best way to determine effective flow from the hopper through the conveyor. A comprehensive report is provided upon completion with a recommendation for any options or flow aids. To request your free material test, [visit **hapman.com/material-test**](https://www.hapman.com/material-test).

Specifications

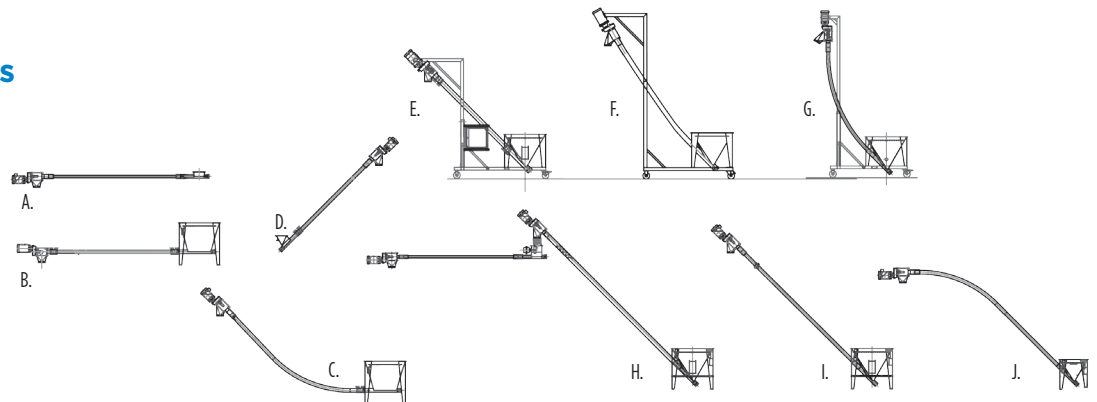
Series Model No.	250	300	400	500	600	800
Casing O.D.	2.32 in (5.872 cm)	2.96 in (7.518 cm)	4.20 in (10.668 cm)	4.70 in (11.938 cm)	6.625 in (16.827 cm)	8.625 in (21.907 cm)
Bend Radius	6 ft (1.828 m)	10 ft (3.084 m)	20 ft (6.096 m)	N/A	N/A	N/A
Capacity ¹	15-45 ft ³ /h (0.425-1.274 m ³ /h)	30-70 ft ³ /h (0.850-1.982 m ³ /h)	60-240 ft ³ /h (1.70-6.796 m ³ /h)	120-360 ft ³ /h (3.40-10.194 m ³ /h)	120-600 ft ³ /h (3.40-16.99 m ³ /h)	360-1800 ft ³ /h (10.194-50.97 m ³ /h)
Component Material	Stainless	Polyethylene or Stainless	Stainless	Stainless	Stainless	Stainless
Food Grade Finish (120 Grit)	✓	✓	✓	✓	✓	✓
Sanitary Grade Finish (150 Grit)	✓	✓	✓	✓	✓	✓
USDA Dairy Grade Finish (180 Grit)	✓	✓	✓	✓	✓	N/A
Hi/Lo Tilting Base	✓	✓	✓	✓	✓	N/A ²
Optional Mobile Base	✓	✓	✓	✓	✓	✓
48-hour Quick Ship	N/A	Stainless and Polyethylene	Stainless	N/A	N/A	N/A

¹ Based on free-flowing granular material. Actual capacity will vary with material characteristics.

² Series 800 mobile bases allow up to 10' discharge height.

Basic Conveyor Paths

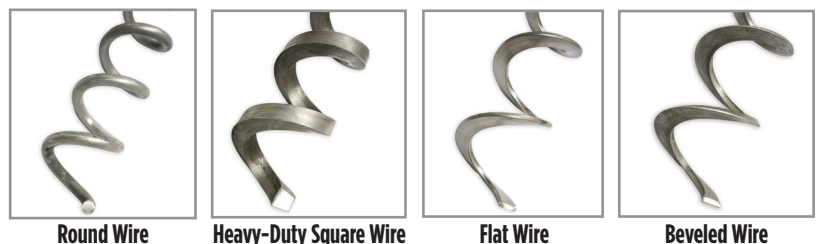
Combination paths are also possible to ensure your product reaches its destination.



Auger Selection

Hapman offers a wide range of auger styles and sizes to fit in casing diameters from 2 to 8 inches (5 to 20 cm). We'll help you select the best one for your application.

- Round Wire: best for granular materials such as salt or sugar.
- Heavy-Duty Square Wire: for heavy, abrasive material.
- Flat Wire: works well with fine powders; provides the highest conveyor capacity.
- Beveled Wire: use to transport sticky material.



Round Wire

Heavy-Duty Square Wire

Flat Wire

Beveled Wire

One conveyor. Many options.

Here are just a few examples of the cost-effective ways the Helix is used in practice.



Hapman's Helix Flexible Screw Conveyor installed at the Guixens Food Group Facility in Tampa, Florida.

Guixens Food Group

Guixens Food Group, located in Miami and Tampa, Florida, specializes in processing and delivering specialty and imported dry food products to both chain and independent supermarkets. The facility — which conveys eight different products with eight different consistencies — required a very versatile conveyor that could be tailored to each bulk material.

The Helix was the conveyor of choice for this facility for two reasons: it offers a variety of interchangeable augers designed to handle specific material characteristics without product degradation or binding; and it is quick and easy to disassemble and sanitize between product changeouts.

Because of the variety of products being packaged at the Guixens facility, two types of flat wire augers with different diameters were selected to accommodate the specific material characteristics. The larger diameter screw is used for rice, oatmeal, fine and coarse cornmeal, and ultra-fine corn flour. The smaller screw is used specifically for beans to prevent breakage and ensure high product quality.

"I don't think any other conveyor system could give us the flexibility, ease of cleaning, and simplicity of the Hapman," said Manuel Guixens, who has been using a Helix in his facilities for many years. "It's so simple, there's nothing to go wrong."



Hapman's Helix Flexible Screw Conveyor installed on a popcorn packaging line.

Popcorn packaging line

Hapman's P300 Helix conveyor is shown here as part of an integrated delivery system conveying salt and popcorn, and is used for refilling a Hapman supplied holding hopper above our customers popcorn packaging line. The Helix conveyor operates as an intermittent refill device that is sized to stay ahead of the packaging line. Working off of a high level sensor in the holding hopper, it conveys on demand. This 3" (7.62 cm) conveyor delivers material at a refill rate of about 600 lbs/hour (272 kg/hour).

See more equipment at hapman.com

Hapman offers a complete line of material handling equipment that easily integrates into existing systems, including:

- Tubular Drag Conveyors
- En-Masse Conveyors
- Bag Dump Stations
- Feeders
- Bulk Bag Unloaders
- Bulk Bag Fillers
- Bag Compactors
- Lump Breakers
- And More