



FLEXIBLE SCREW CONVEYORS



1-888-FLEXICON • SALES@FLEXICON.COM

Flexicon® Flexible Screw Conveyors

Move virtually any free-flowing or non-free-flowing bulk material

Flexicon flexible screw conveyors offer efficiency and versatility, conveying bulk materials ranging from large pellets to sub-micron powders—both free-flowing and non-free-flowing—including difficult-to-handle products that pack, cake, seize, fluidize, plug, or smear, with no separation of blends.

The only moving part contacting material in a Flexicon flexible screw conveyor is the rugged flexible screw which is driven by an electric motor. As it rotates, the screw propels material and self-centers within the conveyor tube, providing constant clearance between itself and the tube wall. This simple design does not require the internal bearings, seals and numerous moving parts found in bucket elevators and rigid auger conveyors—parts that can add initial cost, require maintenance, wear out, breed contamination and/or break down.

Enclosed tube prevents contamination

A Flexicon flexible screw conveyor is totally enclosed, dust-free, and mess-free, preventing contamination of your bulk products and plant environment, while preserving the moisture and temperature levels of materials being conveyed.

Compare the smooth interior surfaces of a Flexicon flexible screw conveyor with potential contamination sources found in other conveyors, and you may specify the Flexicon flexible screw conveyor on the basis of product purity alone.

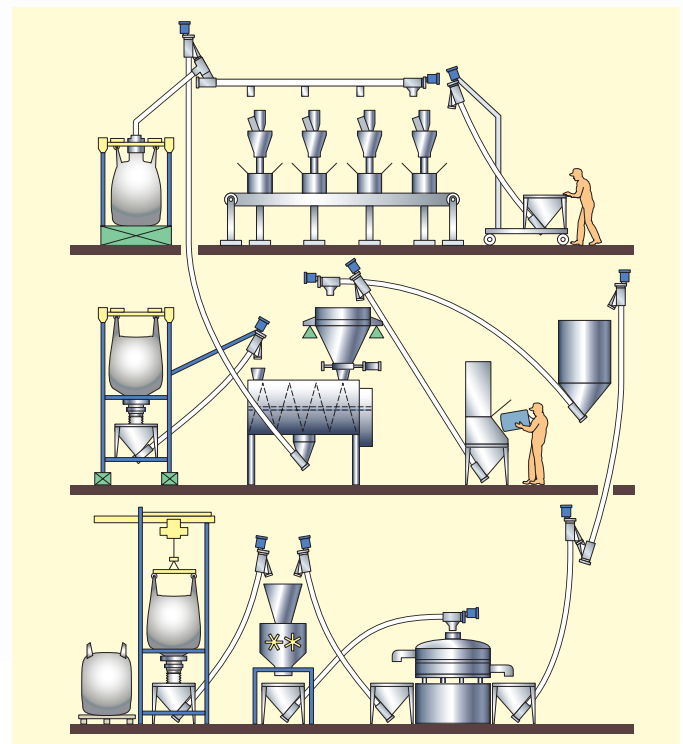
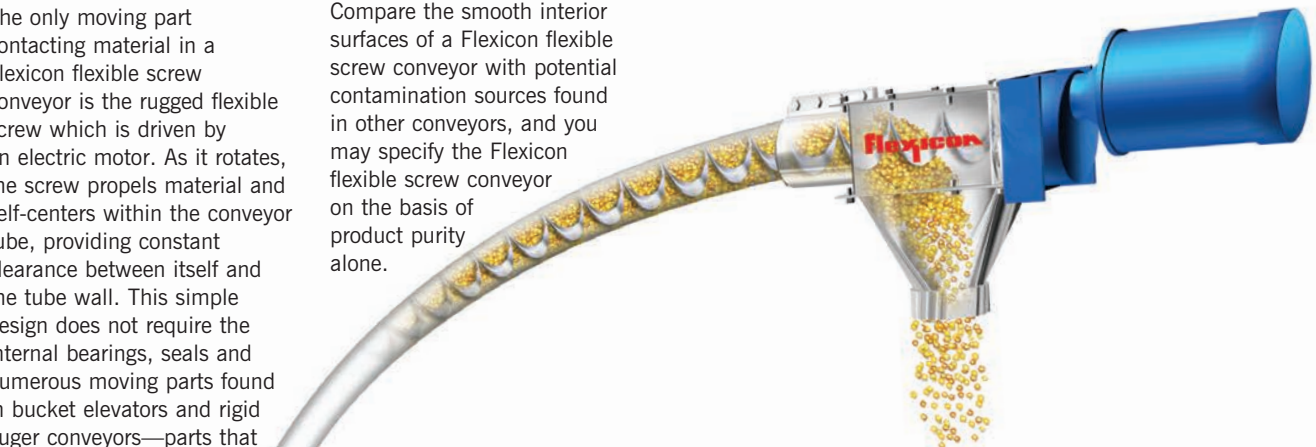
Gentle material handling and blending

Flexicon flexible screw conveyors can handle your materials gently, because the flexible screw self-centers as it rotates. This can provide ample clearance between the screw and tube wall to prevent grinding, crushing, and other product damage.

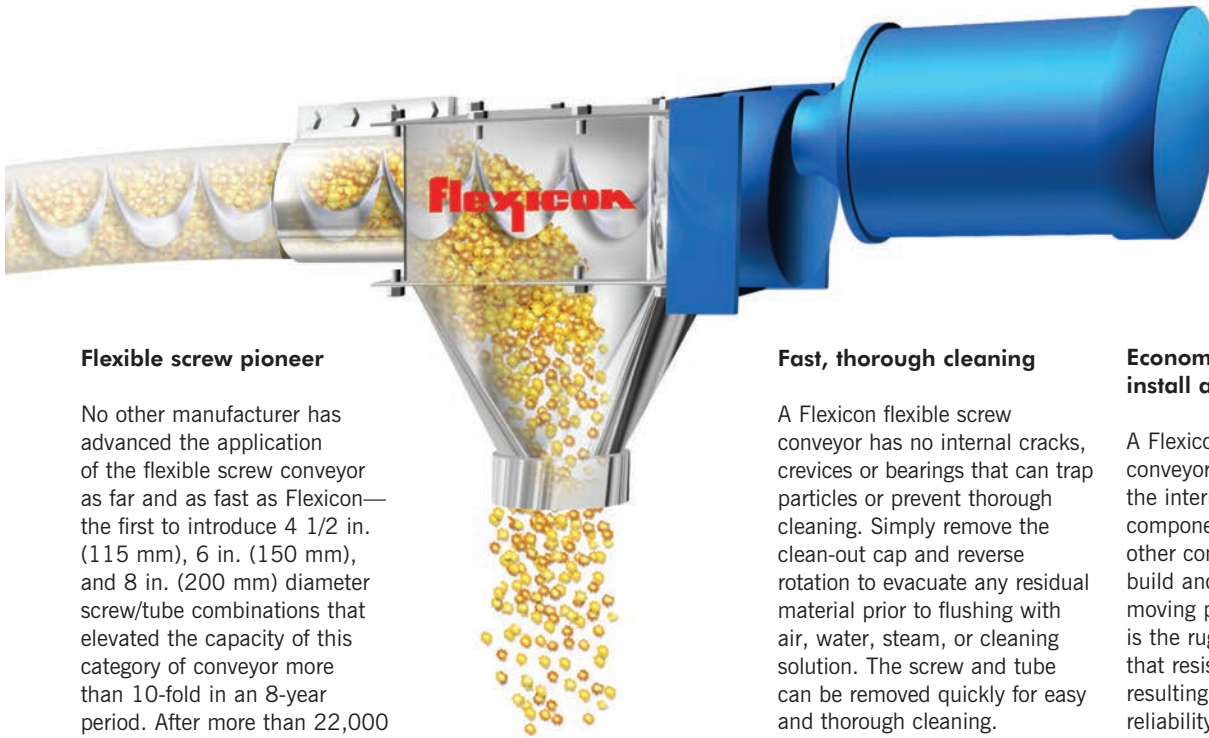
In addition, the gentle rolling action created by the screw prevents the separation of blends throughout the entire length of the conveyor.

Convey in any direction

Whereas many conveyors have limited angles of incline and/or straight-only conveying paths, Flexicon flexible screw conveyors can move material vertically, horizontally, or at any angle—over, under, or around obstructions, through small holes in walls or ceilings.

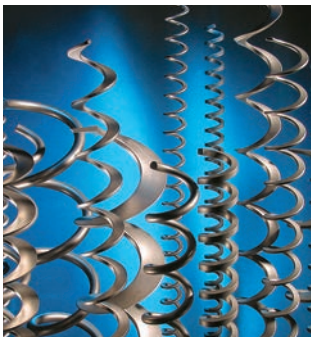


1-888-FLEXICON • SALES@FLEXICON.COM



Flexible screw pioneer

No other manufacturer has advanced the application of the flexible screw conveyor as far and as fast as Flexicon—the first to introduce 4 1/2 in. (115 mm), 6 in. (150 mm), and 8 in. (200 mm) diameter screw/tube combinations that elevated the capacity of this category of conveyor more than 10-fold in an 8-year period. After more than 22,000 installations worldwide involving a gamut of bulk materials, Flexicon has amassed a wealth of performance data on flexible screws—many of which have been engineered, machined and formed to Flexicon specifications. To you, it means that Flexicon has most likely solved your problem in the most efficient and cost-effective manner possible—or can do so as a matter of routine.



Flexicon stocks an unequalled selection of standard and custom flexible screws to match the flow characteristics of each bulk material, yielding the greatest conveying efficiency.

High reliability, low maintenance

A Flexicon flexible screw conveyor has no internal bearings, seals, buckets or other potentially problematic components to wear, break down, or require maintenance. The only moving part contacting material is a rugged flexible screw which resists wear and fatigue, and is driven by an electric motor above the point at which material exits the conveyor.

Even under a full load of moist, dense product—depending on application parameters—a Flexicon flexible screw conveyor can start and stop repeatedly with no binding or damage to the unit. The result is a conveyor without load limitations that runs dependably, boosting productivity while cutting maintenance.

Fast, thorough cleaning

A Flexicon flexible screw conveyor has no internal cracks, crevices or bearings that can trap particles or prevent thorough cleaning. Simply remove the clean-out cap and reverse rotation to evacuate any residual material prior to flushing with air, water, steam, or cleaning solution. The screw and tube can be removed quickly for easy and thorough cleaning.

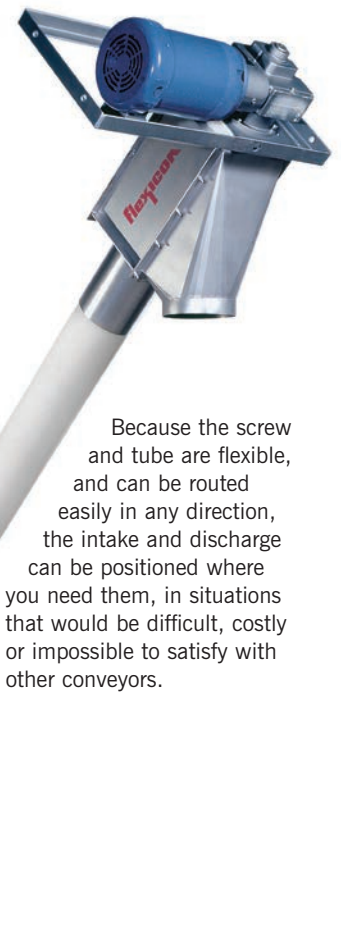
To suit your cleanliness requirements, all Flexicon flexible screw conveyors are available in carbon steel with durable industrial finishes, or in stainless steel with industrial or sanitary finishes, including USDA accepted and 3-A certified designs and construction. (See Sanitary Construction and Finishes, page 28.)

Volumetric feeding conveyors

Flexicon flexible screw volumetric feeding conveyors provide simultaneous metering and conveying of bulk solid products. The units are equipped with variable speed drives and hoppers with flow promotion devices for continuous feeding of both free- and non-free-flowing materials.

Economical to purchase, install and operate

A Flexicon flexible screw conveyor does not require the internal and external components that can make other conveyors expensive to build and operate. The only moving part contacting material is the rugged flexible screw that resists wear and fatigue, resulting in extraordinary reliability and minimal maintenance.



Because the screw and tube are flexible, and can be routed easily in any direction, the intake and discharge can be positioned where you need them, in situations that would be difficult, costly or impossible to satisfy with other conveyors.

1-888-FLEXICON • SALES@FLEXICON.COM



High capacity flexible screw conveyor with downspout removed to demonstrate flow of material.



Mobile and custom configurations

All Flexicon flexible screw conveyors are available on caster-mounted frames with conveyor support masts for in-plant mobility, reducing the need for multiple stationary units.

Both mobile and stationary units are readily customized using interchangeable screws, conveyor tubes, drive motors, hoppers, flow-promotion devices, sensors, controllers, and other components to satisfy the most diverse and demanding end-use requirements.

Multiple discharge point systems

Horizontally-oriented Flexicon flexible screw conveyors can feed multiple packaging machines, molding machines, and other process equipment. The system can convey bulk material over short to medium distances, feed multiple discharge points selectively, or top off all points on a timed cycle through manual or automatic slide gate valves.



Divergent angles of Flexicon's high flow hopper design reduce the ability of non-free-flowing materials to establish a bridge between the hopper sidewalls, instead causing material to topple and flow toward and down the steep backwall, increasing the flow of bulk materials while decreasing residual material in the hopper.



Flexicon offers a multitude of mechanical and pneumatic hopper accessories to promote the flow of poor-flowing or non-free-flowing materials. This hopper features dual agitators with interlocking paddles that de-agglomerate bulk material, promoting void-free charging of mechanical conveyor intake adapters.



Flexicon's Low Profile Flexible Screw Conveyor positions the drive motor at the inlet end of the conveyor tube, allowing the discharge end to fit within limited headroom areas often encountered above weigh hoppers or other receiving vessels.

BEV-CON™ Conveyors

Handle difficult-to-convey bulk materials

BEV-CON™ flexible screw conveyors handle powder and bulk materials that tend to pack, cake, smear, plug, fluidize or separate. The BEV-CON design also makes it well suited for the conveying of products that tend to break or crumble.

Materials suited to the special capabilities of a BEV-CON conveyor range from sub-micron powders to large pellets, and include:

▪ FOODS

(Human and Animal Consumption, Dairy and Non-Dairy Products, Beverages)

- Cake Mixes
- Soup, Bouillon and Gravy Mixes
- Cocoa Powder
- Cheese
- Candy and Nuts
- Milk Powder
- Dehydrated, Frozen or Raw Fruits
- Pasta Elbows
- Dehydrated, Frozen or Raw Vegetables
- Animal Feed
- Dog and Cat Food
- Hop Pellets
- Spices

▪ NON-FOODS (Organic and Inorganic Chemicals, Pharmaceuticals, Household Products, etc.)

- Titanium Dioxide
- Carbon Black
- Calcium Carbonate
- Powdered Lime
- Crumb Rubber
- Detergent Powders
- Sulfur
- Talc
- Zinc Oxide
- Wax Pellets
- Glue Pellets
- Clays
- Pigments

Versatile configurations conform to your application

BEV-CON units have a straight conveyor tube which is generally supported by attaching the drive/discharge end to an overhead joist, tank rim or any other solid structure.

The conveyor tube may be routed through small openings in walls or ceilings. BEV-CON conveyors are also available on frames with masts and casters for in-plant mobility.

A wide variety of conveyor tubes, drive motors, hoppers, and bag dump dust collectors, in a range of sizes, shapes and materials, enables Flexicon to custom build a BEV-CON conveyor to your specific requirements.

BEV-CON conveyors are available in carbon steel with durable industrial finishes, or stainless steel in industrial or sanitary finishes, including USDA accepted and 3-A certified designs and construction.



This BEV-CON conveyor is equipped with a highly specialized flexible screw matched to material characteristics and other application requirements.



Moist, sticky materials

Friable materials

Materials that pack, cake, smear or plug



BEV-CON Conveyors can transport difficult-to-handle bulk materials vertically, horizontally or at any angle. This low-incline, mobile configuration is USDA accepted and 3-A certified, and allows dust-free connections to upstream and downstream equipment.

1-888-FLEXICON • SALES@FLEXICON.COM

Configurations (Page 1 of 4)



*Flexible Screw Conveyor
with Bag Dump Station*



*Tilt-Down, Mobile
Flexible Screw Conveyor*



*Sanitary Bag Dump
Weigh Batch System*



*Flexible Screw Conveyors for
Difficult-To-Handle Materials*



*Low Incline, Mobile
Flexible Screw Conveyor*



*Flexible Screw Conveyor with
Manual Dumping Station*



*Flexible Screw Conveyor
with Single-Trip
Bulk Bag Unloader*



*Sanitary Mobile
Flexible Screw Conveyor*



*Flexible Screw Conveyor
with Drum Dump Feeder*

Configurations (Page 2 of 4)



*Low Profile
Flexible Screw Conveyor*



*Flexible Screw Conveyors
for Weigh Batching*



*Tilt-Down, Mobile
Flexible Screw Conveyor*



*Flexible Screw Conveyor
with Low-Cost, Half
Frame Unloader*



*Flexible Screw Conveyor
with Bulk Bag Filler*



*Flexible Screw Conveyor
with Bag Dumping System*



*Flexible Screw Conveyor
with Bag Dump Station*



*Mobile Flexible Screw Conveyor
with Half Frame Discharger*



*Flexible Screw Conveyor
with Loss-of-Weight
Bulk Bag Unloader*

Configurations (Page 3 of 4)



*Flexible Screw Conveyors
for Weigh Batching/Blending*



*Flexible Screw Conveyor
with Mobile Bag Dump Station*



*Low Profile
Flexible Screw Conveyors
for Weigh Batching*



*Flexible Screw Conveyor
with Bulk Bag Filling System for
Ultra-Heavy-Duty Applications*



*Flexible Screw Conveyors
for Weigh Batching*



*Flexible Screw Conveyors
for Solid-Liquid Educator*



*Flexible Screw and Pneumatic
Conveyors for Weigh Batching*



*Flexible Screw Conveyors
for Weigh Batching*

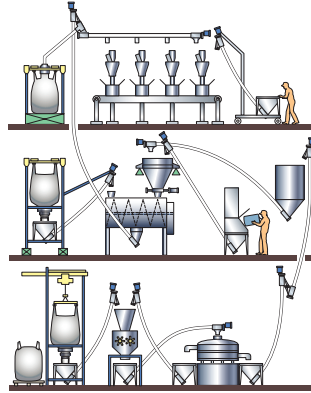


*Flexible Screw Conveyors
for Plant-Wide Weigh Batching*

Configurations (Page 4 of 4)



*Flexible Screw Conveyors
for Recirculating
Spreader-Feeder*



*Engineered, Integrated
Bulk Handling Systems*

Broad Range of Bulk Handling Equipment and Systems



FLEXICON® Flexible Screw Conveyors transport free- and non-free-flowing bulk solid materials from large pellets to sub-micron powders, including products that pack, cake or smear, with no separation of blends.



FLEXI-DISC® Tubular Cable Conveyors gently slide friable bulk material through smooth stainless tubing at any angle to single/multiple points.



PNEUMATI-CON® Pneumatic Conveying Systems move a broad range of bulk materials over short or long distances, between single or multiple inlet and discharge points in low to high capacities.



SWING-DOWN®, REAR-POST and TWIN-CENTERPOST™ Bulk Bag Fillers can fill one bulk bag per week or 20 per hour at the lowest cost per bag. Numerous performance options.



BLOCK-BUSTER® Bulk Bag Conditioners loosen solidified material. Variable height turntable positions bag for conditioning on all sides at all heights.



BULK-OUT® Bulk Bag Dischargers unload free- and non-free-flowing solids from bulk bags automatically. Allows untying, discharging, retying and collapsing.



FLEXICON® Manual Dumping Stations allow dust-free dumping of bulk material from bags and other containers. Automatic filter cleaning allows continuous, efficient operation.

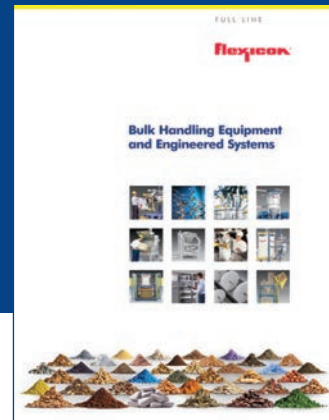


TIP-TITE® Container Dumpers empty bulk material from drums into vessels up to 10 ft (3 m) high. Dust-tight (shown) or open chute models.



FLEXICON® Weigh Batching Systems weigh and blend bulk ingredients automatically. Gain-in-weight (shown) and loss-of-weight systems available.

CLICK OR CALL 1-888-FLEXICON FOR 36 PAGE FLEXICON FULL LINE BROCHURE



Flexicon products are manufactured on four continents, and marketed through an extensive sales network throughout Europe, Australia, Southeast Asia, Africa and North/Central/South America.

HH-0728B

USA

FLEXICON CORPORATION
Tel: +1 610 814 2400
E-mail: sales@flexicon.com
Web: www.flexicon.com

UK

FLEXICON (EUROPE) LTD
Tel: +44 (0)1227 374710
E-mail: sales@flexicon.co.uk
Web: www.flexicon.co.uk

AUSTRALIA

FLEXICON CORPORATION
(AUSTRALIA) PTY LIMITED
Tel: +61 (0)7 3879 4180
E-mail: sales@flexicon.com.au
Web: www.flexicon.com.au

SOUTH AFRICA

FLEXICON AFRICA (PTY) LTD
Tel: +27 (0)41 453 1871
E-mail: sales@flexicon.co.za
Web: www.flexicon.co.za

CHILE

FLEXICON CHILE LIMITADA
Tel: +56 2 2415 1286
E-mail: ventas@flexicon.com
Web: www.flexicon.com

SPAIN

FLEXICON EUROPE SPAIN
Tel: +34 930 020 509
E-mail: ventas@flexicon.es
Web: www.flexicon.es

FRANCE

FLEXICON EUROPE SAS
Tel: +33 (0)7 61 36 56 12
E-mail: ventes@flexicon.fr
Web: www.flexicon.fr

GERMANY

FLEXICON EUROPE GmbH
Tel: +49 173 900 78 76
E-mail: vertrieb@flexiconeurope.de
Web: www.flexicondeutschland.de

SINGAPORE

FLEXICON SINGAPORE PTE LTD
Tel: +65 6778 9225
E-mail: sales@flexicon.com.sg
Web: www.flexicon.com.sg

INDONESIA

FLEXICON SINGAPORE PTE LTD
Tel: +62 81 1103 2400
E-mail: sales@flexicon.co.id
Web: www.flexicon.co.id

WEBSITES BY LANGUAGE:

ENGLISH:

www.flexicon.com
www.flexicon.co.uk
www.flexicon.co.za
www.flexicon.com.au
www.flexicon.com.sg
www.flexicon.co.id

FRENCH:

www.flexicon.fr

GERMAN:

www.flexicondeutschland.de

SPANISH:

www.flexicon.es

