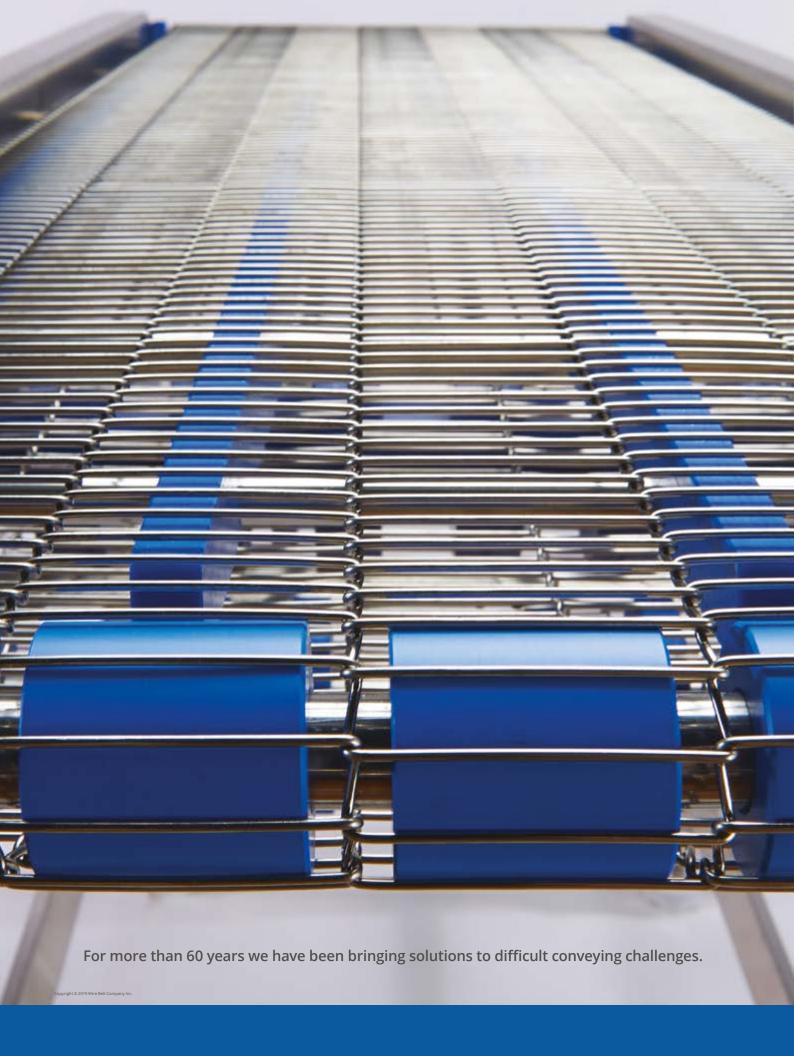




# Wire Belt Conveyor Solutions

Enhanced hygienic design





# Wire Belt Conveyor Solutions

Modern highly automated manufacturing systems pose significant handling challenges in transporting product from one process to the next – but this is where Wire Belt conveyors excel. From complex issues such as changing flow direction of the product, altering the spacing between product or adjusting their orientation, to straightforward procedures such as adjusting speeds and feed rates or simply transferring product from one segment of the operation to another, there is a Wire Belt conveyor for every application.

For more than 60 years Wire Belt has been bringing solutions to difficult conveying challenges in industries as varied as food processing, electronics, and automotive. Back in 1952 Wire Belt set the pace with the Flex-Turn® conveyor, which turned the production line through 90 degrees, saving footprint and costs. Today Wire Belt leads the market in developing new conveyor systems that utilise the latest construction methods and technologies to meet and exceed customer requirements, best practice methods, regulations and standards.



# Hygienic Design

Wire Belt is at the forefront of innovation in the conveyor sector. Our Enhanced Hygienic range of conveyors delivers the highest possible hygiene control, meeting and exceeding the guidelines set out by the EHEDG (European Hygienic Engineering & Design Group) and other advisory bodies.







#### Ladder-Flex™ Conveyors - Model 200

Ladder-Flex™ Spreading, Converging and Diverging Conveyors offer custom designed solutions for product transport and positioning.

The necessity to spread, separate or converge products while they are moving on a production line is a major requirement for a wide range of food, confectionery and industrial applications. In many cases this allows processors to run narrower conveyors saving factory floor space.

Wire Belt's answer is a positively driven non-slip spreader or converger using Ladder-Flex™ stainless steel belting. The conveyor comprises rows of belting running on a food grade high density blue polyethylene support surface and a series of small stainless steel sprockets driving within the mesh of the belt strands. The conveyors can be custom built to suit the product being handled.

# **Advantages:**

- Custom-designed to accommodate your specific processing application
- Non-slip, positive drive
- Tight transfers with adjacent conveyors and processing equipment
- Easy to clean and maintain
- Smooth, gentle product handling for fragile products
- Stainless steel and UHMW-PE construction
- Height adjustable standard 870 1070mm
- Product is fully supported across conveyor surface
- Swivel lockable castors are available
- Inclining/declining options available
- Typical belt speeds up to 25 metres per minute\*

<sup>\*</sup> Please contact Technical Sales to discuss faster applications.

#### LADDER-FLEX™ CONVEYORS

#### **Specifications:**

Type of configuration:

The standard design is a 'fan-type' spreader or converger which positions product evenly on either side of the conveyor centreline.

- Alternatively, chains can be arranged into individual lanes to spread/converge product from specific infeed positions. This configuration is known as a 'lane-type' spreader or converger
- A variety of other configurations are available to meet other product positioning needs. For example, the left edge orientation could remain constant, while the product spreads toward the right edge.

Our standard drive motors and controllers are supplied with IP66 enclosure protection and OS2 surface protection (drive motor only) to ensure suitability for intensive wash down processes. If required, customer specified drive systems can be fitted to suit each individual application.



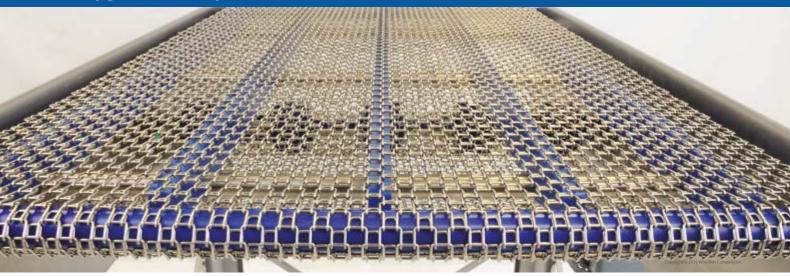
A variable-frequency drive (VFD) can be fitted alongside the drive motor to provide a stop/start function and speed control. As standard, this is housed inside our Standard Conveyor Control Panel, featuring a fully stainless steel enclosure and emergency stop button. Alternatively, an Invertek E3 Optidrive controller can be supplied with plastic enclosure and no emergency stop function.

As standard, Ladder-Flex<sup>TM</sup> conveyors are supplied with height adjustable footpads with fixing holes. As an optional extra, Ladder-Flex<sup>TM</sup> conveyors can be supplied with lockable, swivel castors with brakes.

#### Material:

Conveyor frame construction from stainless steel. Support surface is high density food grade blue polyethylene.





#### Straight Conveyors - Model 200

Custom designed for your application.

Wire Belt offers a range of straight conveyors designed to ensure efficient operation, improved belt life and maximum cleaning ability. Our straight conveyors feature an open construction with the belt being supported on food grade high density blue polyethylene wear strips clipped to the stainless steel framework.

All our conveyors are suitable for use in hygiene-sensitive environments common to the food and pharmaceutical industries.

# **Advantages:**

- Custom-designed to accommodate your specific processing application
- Non-slip, positive drive
- Tight transfers with adjacent conveyors and processing equipment
- Easy to clean and maintain
- Hygienic open structure offering access to all areas for ease of cleaning
- Open section leg frame.
- A wide range of optional features ensure versatility to satisfy most requirements
- Can be fitted with various options of conveyor belt to suit your needs.
- Stainless steel and UHMW-PE construction
- · Height adjustable standard 870 1070mm
- Swivel lockable castors are available
- Inclining/declining options available
- Typical belt speeds up to 25 metres per minute\*

<sup>\*</sup> Please contact Technical Sales to discuss faster applications.

#### STRAIGHT CONVEYORS

#### **Specifications:**

Our straight conveyors are fitted with Flat-Flex® stainless steel conveyor belting as standard, however alternative belt types are available such as Compact-Grid™, Eye-Flex® and Honeycomb. Please speak to our Technical Sales department to select the best belt for your application.

Our standard drive motors and controllers are supplied with IP66 enclosure protection and OS2 surface protection (drive motor only) to ensure suitability for intensive wash down processes. If required, customer specified drive systems can be fitted to suit each individual application.

A variable-frequency drive (VFD) can be fitted alongside the drive motor to provide a stop/start function and speed control. As standard, this is housed inside our Standard Conveyor Control Panel, featuring a fully stainless steel enclosure and emergency stop button. Alternatively, an Invertek E3 Optidrive controller can be supplied with plastic enclosure and no emergency stop function.

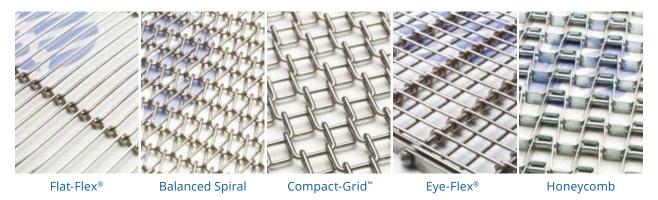
As standard, straight conveyors are supplied with height adjustable footpads with fixing holes. As an optional extra, straight conveyors can be supplied with lockable, swivel castors with brakes.



#### Material:

Conveyor frame construction from stainless steel. Support surface is high density food grade blue polyethylene.

# Available fitted with many different belt options to suit your application:



Our conveyors can be fitted with many other belting options such as plastic modular, balanced weave and other belting types to suit the needs of your application.





#### Flex-Turn® Conveyors

The hygienic way to convey around corners whilst maintaining product orientation and spacing.

Field-proven and dependable Flex-Turn® units gently convey products around corners while maintaining proper product alignment. They offer the tightest level transfer diameter and smallest inside turning radius available with an open mesh belt. Smooth, non-collapsing product handling minimises potential damage to delicate products. The compact design solves tight production line space problems.

# **Advantages:**

- Gentle handling minimises product damage
- Tight transfers with adjacent conveyors and processing equipment
- Maintains product orientation and spacing around turns
- Unique non-collapsing tapered-pitch belt
- Easy to use, clean, and maintain
- Stainless steel and UHMW-PE construction
- · Height adjustable standard 870 1070mm
- Swivel lockable castors are available
- Typical belt speeds up to 11 metres per minute (at inside edge)

#### **FLEX-TURN® CONVEYORS**

### **Specifications:**

The Flex-Turn® range offers choices of size, belt width and configuration, providing a turn conveyor to suit almost every situation. Turns through 90° or 180° are standard, although other angles from 45° to 180° are available.

Our Flex-Turn conveyors are available with three different belt supports:

 The Series 600 Flex-Turn® conveyor is an open, stainless steel framed turn conveyor with polyethylene belt supports. This open structure allows for the easy removal of debris, and facilitates washing and draining.

 The Series 700 Flex-Turn® conveyor has a solid polyethylene top. This prevents the product from falling through, or becoming entangled with the strands of the belt.

The Series 800 Flex-Turn® conveyor has a solid stainless-steel top, with stainless steel running rails. This option is particularly suited in some meat processing situations.



With a total of thirteen different sizes of belt, left and right hand can be specified and a range of angles between 45° to 180°, there is a Flex-Turn® Conveyor for almost every application. Our standard drive motors and controllers are supplied with IP66 enclosure protection and OS2 surface protection (drive motor only) to ensure suitability for intensive wash down processes. If required, customer specified drive systems can be fitted to suit each individual application.

A variable-frequency drive (VFD) can be fitted alongside the drive motor to provide a stop/start function and speed control. As standard, this is housed inside our Standard Conveyor Control Panel, featuring a fully stainless steel enclosure and emergency stop button. Alternatively, an Invertek E3 Optidrive controller can be supplied with plastic enclosure and no emergency stop function.

As standard, Flex-Turn® conveyors are supplied with height adjustable footpads with fixing holes. As an optional extra, Flex-Turn® conveyors can be supplied with lockable, swivel castors with brakes.



#### **Material:**

Conveyor frame construction from stainless steel. Support surface is high density food grade blue polyethylene.

#### **Available Sizes:**

Three Inside Radii are available, each with a selection of belt widths:

Model 616, 716 & 816 Specifications						
Belt Width	Inside Radius	Available Angles				
254 mm	406 mm	45° to 180°				
406 mm	406 mm	45° to 180°				
610 mm	406 mm	45° to 180°				
864 mm	406 mm	45° to 180°				
1092 mm	406 mm	45° to 90°				
1270 mm	406 mm	45° to 90°				

- Handles loads up to 12 kg/sq. metre at belt speeds typically from 3 to 11 metres per minute at the inside radius.
- Wire belt used is Flat-Flex® stainless steel tapered mesh approximate 10mm pitch at inside radius and up to 19mm at outside, wire diameter 1.83mm.
- Transfer roller diameter is 38mm

Model 632, 732 & 832 Specifications						
Belt Width	Inside Radius	Available Angles				
381 mm	812 mm	45° to 180°				
622 mm	812 mm	45° to 180°				
864 mm	812mm	45° to 180°				

- Handles loads up to 12 kg/sq. metre at belt speeds typically from 3 to 11 metres per minute at the inside radius.
- Wire belt used is Flat-Flex® stainless steel tapered mesh approximate 10 mm pitch at inside radius and up to 19 mm at outside, wire diameter 2.08 mm.
- Transfer roller diameter is 38mm

Model 680, 780 & 880 Specifications						
Belt Width	Inside Radius	Available Angles				
400 mm	800 mm	45° to 180°				
600 mm	800 mm	45° to 180°				
900 mm	800 mm	45° to 90°				
1000 mm	800 mm	45° to 90°				

- Handles loads up to 9 kg/sq. metre at belt speeds typically from 3 to 11 metres per minute at the inside radius.
- Wire belt used is Flat-Flex® stainless steel tapered mesh approximate 6.5 mm pitch at inside radius and up to 10.5 mm at outside, wire diameter 1.6 mm.
- Specifically designed to support smaller, delicate products
- Transfer roller diameter is 25mm

# **Warranty and Spare Parts**

All Wire Belt conveyors come with a 12-month warranty covering parts and workmanship. We also offer an optional range of recommended spares parts package, details can be supplied upon request.

To discuss your requirements and application challenges, contact your local representation or our technical sales team on +44 (0) 1795 421771 or email us at sales@wirebelt.co.uk. We will gladly review your design concepts and sketches, and provide the innovative, problem-solving conveying solutions you need and want.



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Our policy is one of continuous improvement and we reserve the right to change specifications at any time and without notice, or modify these to suit manufacturing processes

