

# Hygienic filling and packaging lines



**FlexLink®**



# The FlexLink dairy offer

We provide efficient dairy layouts with flexible production flows with high throughput, high hygienic standards, and the flexibility you need to satisfy consumer demands.

Our offer comprises line layouts, controls, handling functions, and the striking new hygienic conveyor. Based on your demands on output and flexibility, different line concepts offers the best solution.

## Line concepts to match your needs

3-dimensional logistic flows and space efficient solutions, offering compact footprint and a high capacity per m<sup>2</sup>.

3-dimensional lines and space efficient solutions offer a compact footprint and a high capacity per m<sup>2</sup>

Compact footprint. Functions are compact and all line layouts can be supplied in one level or in 3D setups.

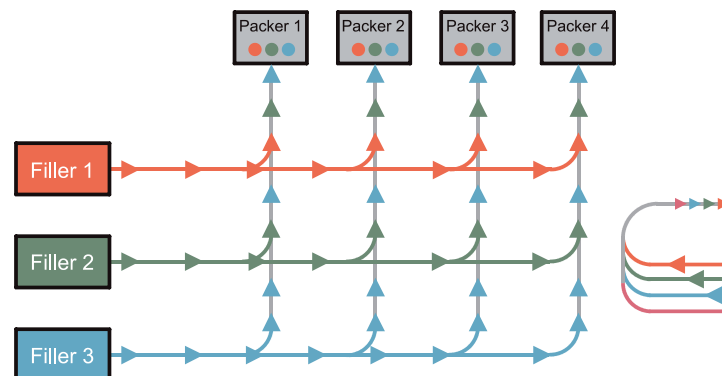
For steady production with few changeovers, a classic line is the ideal choice. It can be straight or with gates for increased flexibility.

For batch production with daily changeovers, the matrix layout offers fast and easy changeovers from one packer to another.

For the highest efficiency demands, a dynamic matrix offers full dynamic flexibility and the highest possible line efficiency. In addition, dynamic routing from any filler to any packer allows instant re-routing when a packer goes down and mixed packaging to customer order.

With separated temperature and hygiene zones, you will further enhance product shelf life, hygiene, and working environment.

Investments in efficient logistic solutions offer the ability to meet changing market needs and increased profitability in your operations.





**Examples of products in carton, bottle or tray handling solutions:**

- milk • cream • yogurt
- butter • margarine • ice-cream
- cheese • milk powder • juice
- soft drinks • water

**Standardized handling functions**

- Dynamic buffering on conveyors. No back pressure and in combination with chain washers you can skip chain lubrication entirely.
- Wedges for 3D layouts and constant elevation/loweration.
- FIFO buffer for balancing of production flows capacity < 14 000 pcs./h
- Diverters, diverting products in trains or individually capacity < 14 000 pcs./h
- Merge, combining 2 or 3 lanes to one capacity < 14 000 pcs./h
- Turning device for safe rotation of products.
- Unique design and a capacity < 14 000 pcs./h

The handling functions offers safe handling, high uptime, fast ramp-up, and a short delivery time.

**Conveyor platforms**

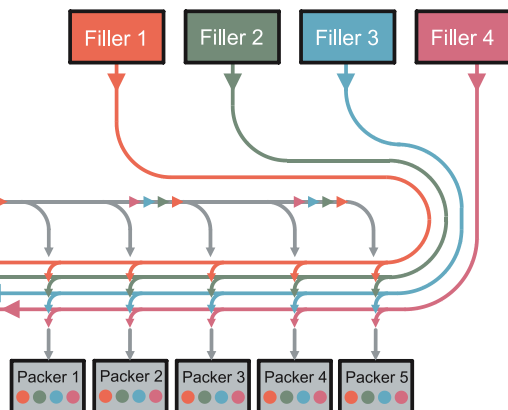
FlexLink offers two hygienic conveyor designs.

- Hygienic. A state of the art design with unique hygienic features and a self draining design. Designed according to the EHEDG\* guidelines integrated C.I.P. system as option.
- Wash down. A hygienic and washable conveyor system. Industry standard design and washing units as option.

\*) European Hygiene Engineering and Design Group, an EU machine directive for safe and hygienic machinery.

The dynamic matrix, see below right, combines a compact footprint with a high efficiency and flexibility.

Pack to customer order is another unique feature. Trays, trollies or else can be packed with mixed products directly from the line – without complex gantry system for re-packing from single product packages.



Keeping production flow at the right level

# Applications from the dairy industry

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High speed conveyor system for 200 ml to 1 litre milk cartons. Dynamic buffering and gates for a compact, flexible layout.



Margarine packaging offers increased



A matrix layout combines the fillers with packers, any filler to any packer but one at a time. Hygienic conveyor platform.



A high capacity in-line rinser cleaning six sizes between un-scrambler and filler.



production line: transfer to packaging area. The system  
based output and improved machine access.



In-line, high capacity buffering and loweration of ready made meals.



of empty PET bottles



Constant elevation allows compact, 3-dimensional  
layouts. Here elevation to an overhead transport to  
the palletizing area.



Fast and easy changeover between different  
packaging sizes. The Automatic Guiding Sys-  
tem (AGS) makes the re-setting in seconds.



# Hygienic conveyor systems

Our conveyor systems are designed to meet the highest industry requirement. And The systems are available in 'Hygienic' and 'Wash down' variants.

The 'Hygienic' has cutting edge design with self draining surfaces and a covered chain return. It is designed in accordance with the EHEDG criteria (EU machine directive for safe and hygienic machinery).

The 'Wash down' is easily cleanable and in line with today's industry standards.

| Wash down  | Hygienic   |
|--|--|
| <ul style="list-style-type: none"> <li>• Hygienic standard</li> <li>• Washable</li> <li>• Square cross section</li> <li>• Easy attachment</li> <li>• Option: chain washer</li> <li>• Widths: 63, 83, 103 mm</li> </ul> | <ul style="list-style-type: none"> <li>• Unique hygiene levels</li> <li>• Easy to clean</li> <li>• Self draining section design</li> <li>• Covered chain return</li> <li>• Option: automatic cleaning, CIP               <ul style="list-style-type: none"> <li>-50% warm water,</li> <li>-80% detergents</li> </ul> </li> <li>• Width: 83 mm</li> <li>• Option: chain washer</li> </ul> |



The chain and other composite components are as option available in materials preventing bacterial growth.

## No need for lubrication

The system can be run completely without lubrication systems even at high speeds or with low fat products. This is enabled through the combination of smooth chain surfaces, dynamic buffering, and efficient cleaning systems.



All FlexLink conveyors are designed to ensure high line efficiency through a high capacity and stable product handling. The versatility and ease of configuration allows for efficient layouts and a higher capacity per m<sup>2</sup>.

## Benefits:

- High line efficiency
- High throughput
- Compact layouts
- No lubrication
- Good production hygiene
- Significantly reduced warm water and detergents consumption



# Standard functions



## DFC diverter

Dividing the flow on a FlexLink conveyor into two lines.



## FIFO buffer

Efficient line balancing with a FIFO buffer.



## Turning device

Turning products 90° at high capacity, up to 14 000 products/h. Patents pending.



## Choke belt diverter

High capacity combining of products from two or three lanes into one.



## Constant elevation

Space efficient elevation and overhead distribution.



## Chain washer

Integrated chain washer.