

# Fresh sausage systems

All you need for the perfect fresh sausage

**TOWNSEND**  
FURTHER PROCESSING

**marel**



- Consistent quality
- Wide range of products
- Optimum food safety
- Ease of operation

# From start to finish

Marel Townsend Further Processing provides complete systems for the production of fresh sausage. From the starting-point – meat preparation – right up to the finishing touch of loading. If you are looking for innovation every step of the way, then the cutting edge technology from Marel Townsend Further Processing will be the perfect choice for you.

Whether you produce high or low volumes, using natural, collagen or alginate casings, forming or cutting the casing, our fresh sausage systems will meet with the highest expectations. Our sausage equipment is developed and produced according to a number of basic principles, such as accuracy and flexibility, as well as ease of installation, operation and cleaning. These solutions live up to the

high demands of the industry today, including high flexibility and food-safety standards. From breakfast sausages to merguez, chipolata and bratwurst, Marel Townsend Further Processing offers complete, integrated systems as well as stand-alone equipment for the production of fresh sausage.



## ■ Casing

Townsend Further Processing supplies modular systems both for traditional production using natural casing and for its innovative co-extrusion technique using alginate, collagen or hybrid casing. Many years of practical experience combined with the ability to think innovatively have resulted in reliable production systems and very consistent end products, all at the lowest possible cost.

### Natural casing

If you would like to make sausages with a firm bite, then natural casing is the best option. It is, however, also a more costly option and fairly labor-intensive although you can't beat natural casing for that "snap" when eating. This type of casing has a natural slight curvature and responds well to heating.

**One example of a fresh sausage system with which you can make natural casing products is:**  
**Pump >**  
**Triple Horn >**  
**FreshLinker >**  
**ModularLoader**



### Pump with grinder

A continuous supply of meat mix synchronized with output regardless of the desired meat structure is the base for truly flawless fresh sausage production. Thanks to their simple, sound design with excellent access for maintenance, the supply pumps are a reliable part of your production process. To achieve that perfect structure, you have the option of in-line grinding, which can be adjusted independently of the pump.





### The Triple Horn

Marel Townsend Further Processing has developed the Triple Horn for the preparation of natural and pre-formed casings. A semi automatic method, tried and tested over the years, it feeds casing of all calibers to be filled with meat mix without adversely affecting your production speed.

The Triple Horn is connected directly to the meat mix feed pump. As the casing on the uppermost stuffing tube is being filled, your production operative simply makes the next stuffing tube ready. When the uppermost casing has been filled, the Triple Horn turns a position further to the next available stuffing tube.



### FreshLinker

This unique, integrated sausage linker is part of a modular system that forms an entire sausage production line from the filling pump through to the loading, or hanging for further processing by cooking or smoking. It is an efficient machine that produces sausages with a twist at both ends. Changing to another product type, caliber or length can be easily done in a matter of minutes, making this an extremely flexible system that is also very accurate, producing sausages of an identical weight and length. Both natural and pre-formed collagen casings can be used with the FreshLinker.

- Benefits:
- Suitable for natural or pre-formed collagen casings
  - Easy change over to other product configuration
  - Sausages can be cut or twisted and hung.



### Alginate, collagen or hybrid gel (co-extrusion)

The casing gels applied during the co-extrusion process are a cost-effective option with optimal food safety. They are permeable to smoke and moisture and give an accurate weight and size control. Because these casings are formed through co-extrusion technology, they are produced endlessly. Alginate and collagen gels can either be used on their own or combined as a hybrid. Marel Townsend Further Processing is continually developing and improving these gels in order to optimize their adhesion to the meat mass, with constant color stability and an excellent bite.

One example of a co-extrusion system is:  
Pump >  
QX Fresh System >  
Sausage Flowwrap Loader

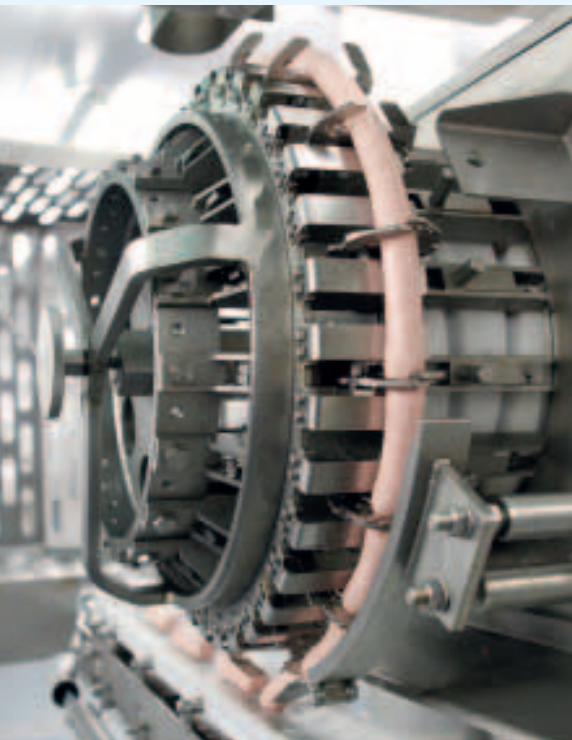


### QX Fresh System

The QX Fresh System is a complete system for the production of fresh sausage using co-extrusion. With the option of different casings, QX Fresh System offers you superior quality, optimum food safety and very low production costs.

Two separate pumps send the meat mix and the gel to the extrusion out-feed. The caliber of the sausage rope will be determined by the diameter of the out-feed; gel is applied directly to the rope and stabilizes during transport through a salt bath. With great precision the crimper wheel turns the endless rope of sausage into individual products with pleasantly rounded ends, ready for packing. Your casing can be made from alginate, collagen or a hybrid and can vary in thickness.

- Benefits:
- Consistent product
  - Top quality
  - No product loss
  - Crimper wheel portions individual sausages.



### Sausage Flowwrap Loader

The Sausage Flowwrap Loader collects and packs both traditional and co-extruded sausage of a consistent quality, length and a limited curve, transporting them to a flowwrapper.

Cut fresh sausages reach the Sausage Flowwrap Loader on a belt one behind the other, are then collected by layer and placed on a following belt. Placing one, two, three or four layers of a maximum of 24 products on this belt is possible without any manual correction being necessary. Sausage Flowwrap Loader will handle the most common calibers and a wide variety of trays.

Benefits:

- High speed, great accuracy
- Minimal contact by hand, excellent food safety
- Allows interrupted flow of product from the filler, however, is capable of maintaining continuous flow to the wrapper.



### ■ End

The ends of your sausages influence their appearance and also their cooking qualities. Your choice of end will be determined by the type of meat mass used and the pressure from within due to the extent to which the sausages will be stuffed. Marel Townsend Further Processing has developed innovative and flexible systems to complete your fresh sausages.

#### With a twist

If the consistency of your sausage requires a closed end, the best solution is to twist the sausages before cutting the links. Meat masses that are finer and 'over-stuffed' sausages are best prepared in this way in order to prevent the sausage contents from leaking out during the heating process.

**One example of a system with which you can make fresh sausages with a twist is: MasterTwist Pro > ModularLoader**



### MasterTwist Pro

The MasterTwist Pro is a complete system that consists of a filling pump, Triple Horn and a TurboTwist Pro for the portioning, twisting and, if required, cutting of fresh sausage. The system guarantees long trouble-free production runs of sausage of a fixed length, weight and volume. Its flexible speed settings mean that it is equally suitable for large and small volumes.

MasterTwist Pro's operation is based on constant pressure and speed when supplying the meat mix. Thanks to only limited pressure when filling, important savings can be made on casing quality with no negative consequences for the end product. When the sausage rope is cut into individual sausages, their twisted and closed ends remain completely intact.

Benefits:

- Accurate length and weight
- Quick and easy change of caliber
- Completely closed end product.





### ModularLoader

The ModularLoader is a completely automated continuous sausage tray loading system. It is the first fully automatic fresh sausage loader and can handle a broad range of curved and straight sausages, including natural casing sausages. It has a fully adjustable top conveyor belt that gets a grip on the sausage immediately after it is formed by the previous machine in order to increase the speed of the individual sausage. At this point there is a quality control Vision System consisting of a scanner to prevent sausages that are out of specification from being packed. Side belts guide the sausage into the open pocket of a revolver head where they are lined up. Next they are collected in the chambers of an index chain before being transported to the outfeed section. A piston goes through the chambers and pushes a set of the correct number of sausages into a waiting tray. This makes it possible to load multiple tray configurations with one single index chain. The ModularLoader ensures perfect product presentation and its high degree of automation contributes to the quality of the end product.

Benefits:

- Suitable for both straight and curved sausages
- Quality control system
- Easy to adjust to different diameter/length or number of sausages in a tray.



### Without a twist

For a coarser meat mass or a particular appearance, a pinched end to your sausages can be desirable. The opening at the ends will be minimal and gives the ends a naturally rounded appearance.

**One example of a system with which you can make fresh sausages without a twist is:**  
**Pump >**  
**CoexSkin >**  
**MasterLink >**  
**Sausage Tray Loader**



### CoexSkin

With the CoexSkin Marel Townsend Further Processing has launched a machine for high production speeds and even better product quality. Savings in casings and production are truly revolutionary, giving you a consistent end product at all times. Two pumps supply the meat mass and the alginate casing gel, which adheres superbly to the meat mass. The diameter of the extrusion out-feed will determine the caliber of the sausage rope to which, while it is being formed, a layer of gel is applied. As it is passed through a salt bath the casing acquires exactly the required stability. When compared to conventional production methods, cost savings are significant and food safety aspects unequalled. The resulting sausages respond extremely well to heating. Due to the superior adhesion of the casing, sausages remain straight, exhibit very little shrinkage and retain moisture well, giving you a juicy, tasty sausage.

Benefits:

- Endless production
- Spectacular savings in casings and labor
- Excellent adhesion to the meat mass
- Very flexible adjustment of length and diameter.

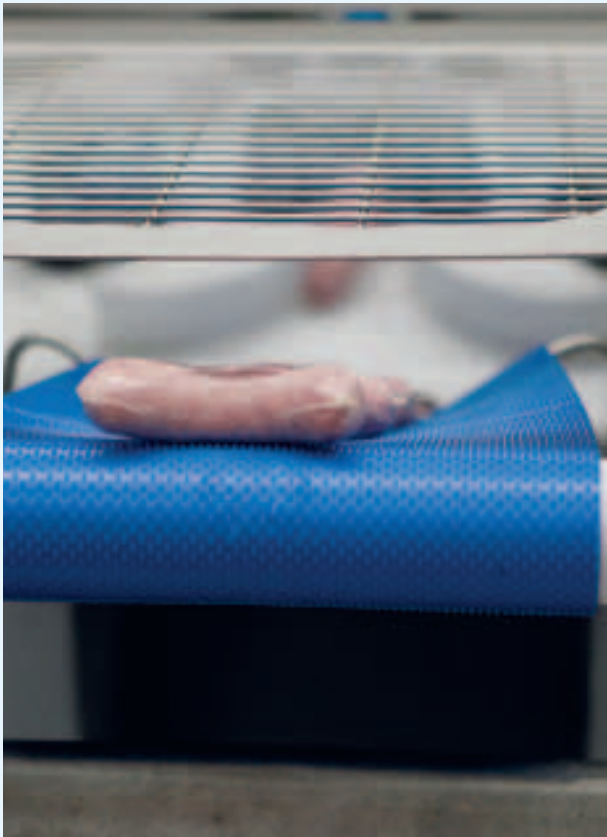


MasterLink

The MasterLink can be used to produce fresh sausages with natural, alginate or collagen casings without a twist. It can also be placed behind the CoexSkin as a cutter. A constant length and weight are guaranteed by this in-line portioner. It is installed after the filling pump and cuts a continuous stream of fresh sausage to a preset fixed length. The machine ensures an attractive “natural” round shape at the end of each sausage regardless of the type of casing used, with great savings on casings. MasterLink can be used in traditional sausage production, but can also be linked up to a co-extrusion system.

Benefits:

- Suitable for very short to long sausages
- Length can be adjusted during production
- Enormous savings on casings
- High production speeds possible.



Sausage Tray Loader

The Sausage Tray Loader collects and packs both traditional as well as co-extruded sausage of a consistent quality, length and a limited curve. Cut fresh sausages reach the Sausage Tray Loader on a belt, one behind the other, are then collected by layer and placed in a tray. Filling trays with one, two or three layers of a maximum of twelve products is possible without any manual correction being necessary. The Sausage Tray Loader will handle the most common calibers and a wide variety of trays. Using the optional Vision Grading, product that falls outside your criteria will be removed automatically from the supply line.

Benefits:

- High speed, great accuracy
- Minimal contact by hand, excellent food safety
- Suitable for all casing types.



Length and caliber

Sausages can be made in any number of different lengths and calibers, from short sausages to long, rolled-up ones. On our fresh sausage systems you can produce sausages in any length and caliber you require, whereby the only limits imposed will be in your choice of casing. Our product specialists can advise you on which system will best suit your wishes where length and caliber is concerned.



Fresh sausage systems from Marel Townsend Further Processing

Whatever the casing, end, length or caliber of your fresh sausages, we can advise you on the system that best suits your needs. With many years of experience and a wide variety of innovative equipment, Marel Townsend Further Processing can provide the fresh sausage system so that you can make sausages efficiently and cost-effectively. We are always developing and improving the sausage systems that we make, by listening to our customers and experiencing ourselves how we can help you to optimize your production of fresh sausage.

Marel Townsend Further Processing has a complete range of equipment, which is set up as a modular system. Due to this, the system can be put together in a way that best suits your production situation.

**The various machines seen in the examples of fresh sausage systems in this brochure can be combined in many different ways.**

Having one of our complete systems means the machines are synchronized with each other and therefore, can work faster. This also results in a minimum of waste, giving you the highest possible yield.

Benefits:

- Synchronized equipment, faster
- Minimum waste, high yield
- Good communication between machines, efficient.

## Contact details

### Townsend Further Processing

Design, manufacture, worldwide sales and service of further processing systems for portioning, marinating, coating, heat treatment and sausage-making for poultry, red meat and fish.

### Marel Townsend Further Processing B.V.

P.O. Box 233, 5830 AE Boxmeer  
The Netherlands  
T: +31 485 586 122  
F: +31 485 586 655  
E: [info.townsend@marel.com](mailto:info.townsend@marel.com)  
[marel.com/townsend](http://marel.com/townsend)

Townsend Further Processing is a trade name of Marel Townsend Further Processing B.V. © Copyright Marel Townsend Further Processing B.V. The Netherlands, 2010: all rights are reserved. Any reproduction or modification, of all or part of this brochure, regardless of the method of reproduction or modification used and regardless of the carrier used, is strictly prohibited, unless written authorization by Marel Townsend Further Processing B.V. has been obtained beforehand. Those acting in breach of this notice expose themselves to criminal and civil prosecution, in accordance with the international conventions and copyright laws.

The data published herein answer to most recent information at the moment of publishing and are subject to future modifications. Townsend Further Processing reserves the right to modify the construction and the execution of their products at any time without any obligation on their part to modify any equipment delivered before accordingly. The data mentioned are meant as an indication only. Townsend Further Processing assumes no responsibility for errors or omissions in the data published or use of the data published. The publication of these data may not be interpreted as a warranty or guarantee of any kind (either express or implied).