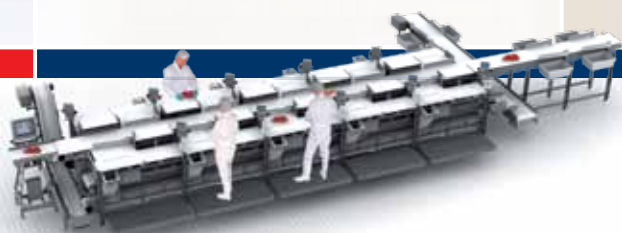


Marel StreamLine

Flexible and intelligent trimming concept



- Increased yield, throughput and quality
- Optimization of raw material yield
- Compact and easy to clean
- Monitoring of individual operators



Monitor, measure, maximise

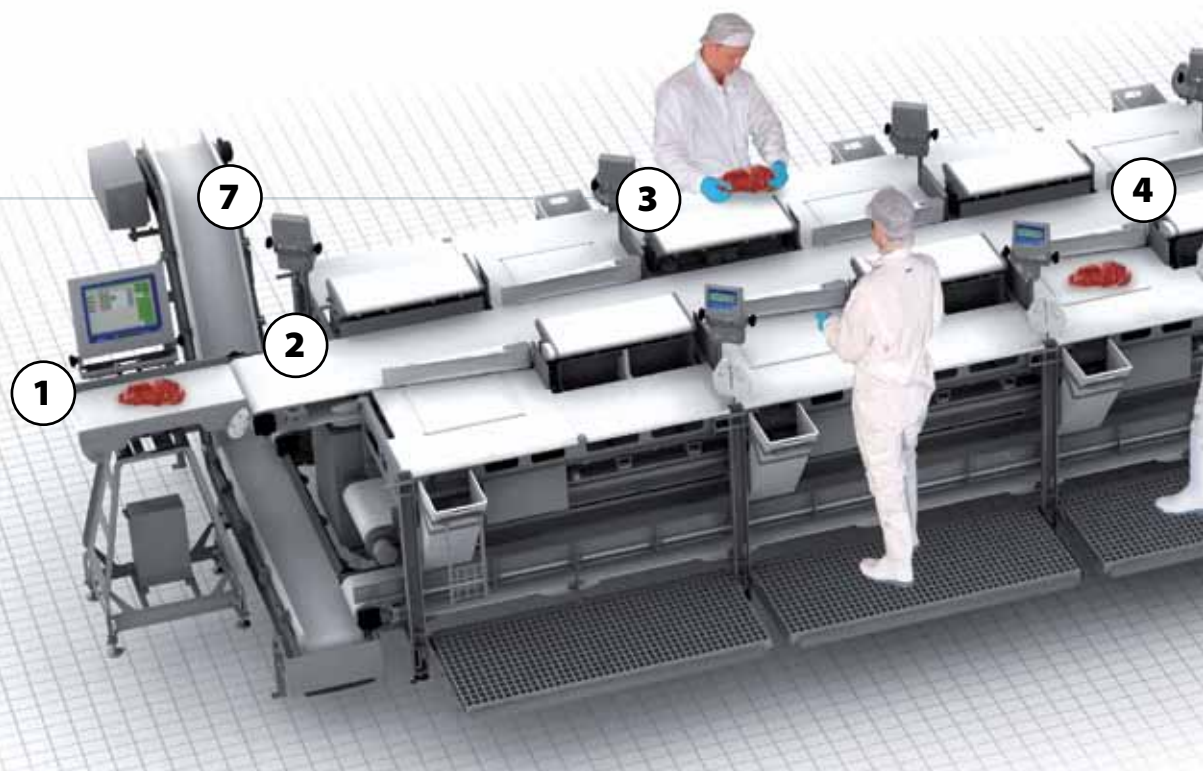
StreamLine, the innovative trimming line from Marel Food Systems, enables meat processors to monitor and collect data on yield, throughput and quality throughout the entire processing cycle, such as during trimming, denuding and touch-up.

StreamLine can be configured for a variety of applications, including PAD, deboning and trimming. This allows processors to cater entirely to their customers' specifications. Ultimately, the flexibility of the line also leads to a higher quality end product by giving processors the ability to maximize the selection of cuts into highest price products and to minimise red meat loss.

With StreamLine, processors can monitor yield and throughput of individual operators in real-time.

Innova - Intelligent production management

StreamLine is controlled by Innova, the intelligent production management software. Innova and StreamLine operate seamlessly together to ensure successful operation and data collection. Innova provides the complete IT solution for the modern food processor to optimize profits and overall production performance. It covers the entire value chain in the production cycle, from reception of supplies to product dispatch, providing all key performance indicators (KPIs) for each stage.



1 CONVEYOR SCALE AND CONTROLLER

The In-feed weighing unit delivers sections of beef to the StreamLine, which selects the right trimming specification to optimize the raw material yield.

2 CONVEYOR BELT

The line is equipped with one main product conveyor. Having just one conveyor facilitates cleaning and reduces the footprint on the factory floor.

3 PROCESSING STATION

The processing stations are built-in and located along the conveyor. They are equipped with arms that drive the meat products into the in-feed buffer. When the meat arrives at the station, the display is automatically updated, showing the type and operation to be performed. Each station can be programmed, thereby increasing speed and efficiency and optimizing the product value.



“ What’s not measured is not managed, and by implementing the StreamLine, we can measure each process in our production. ”

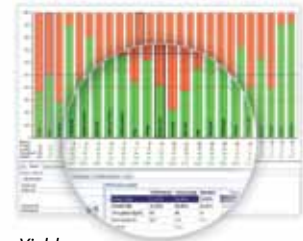
Rupert West, Group IT manager, Linden Foods

Critical KPI's are closely monitored and controlled in real-time. These include: yields, throughput and efficiency, giveaway and loss of sales, quality, stock levels and movements and profitability.

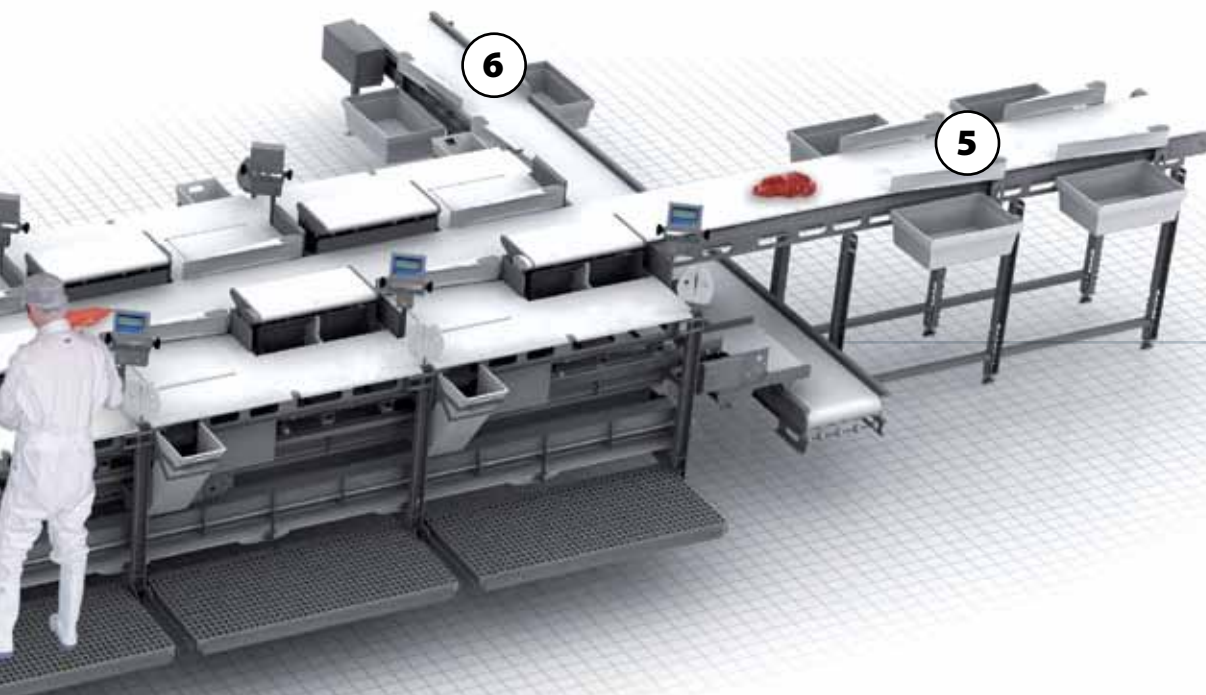
There is also a built-in traceability mechanism at all levels, ensuring that all product information is registered throughout the entire production process, making recall easier if needed. In the Innova system, an operational specification is defined for every possible operation on all primal types.



Throughput



Yield



4 SCALE AND BUFFER CONVEYOR

The built-in scale and buffer conveyor allow for complete traceability and yield monitoring of each operator. Once an operator has completed the trimming on a product, he places it on the scale. If the weight is within user-defined limits, Innova registers it automatically. Otherwise the operator reconfirms the piece manually on the terminal and the product is dropped back onto the product conveyor heading to the next station or straight to packing. Trim is placed in a trim buffer and dropped onto a trim conveyor.

5 PRIMAL PACKING

Individual primals are delivered to designated packing gates either for bulk or individual packing.

6 TRIM SORTING

Trim and fat can either be delivered in controlled batches to a packing station where yield from individual operators is captured, or it can be delivered in bulk to a manual sorting station.

7 TAKE AWAY CONVEYOR FOR BONES AND WASTE



Compatible with Innova
– Intelligent production control system



“What’s not measured is not managed, and by implementing the StreamLine system, we believe we can measure each process in our production”

Linden Foods produces high quality retail products for UK and Ireland supermarkets. The company processes over 1,400 cattle and 2,500 lambs per week and debones up to 500 tons per week. They recently took steps to not only maximise the selection of cuts into the highest value products but also to minimise red meat waste, by installing the StreamLine trimming system. “Lean Manufacturing is a philosophy that we have adopted and are keen to implement at any opportunity within our manufacturing process,” explains Rupert West, group IT manager for Linden Foods. “Lean management means focusing on getting the right things, to the right place, at the right time, in the right quantity to achieve perfect work flow while minimizing waste and maintaining flexibility. I feel that the StreamLine from Marel is able to help deliver that.”

Performance monitoring & line setup

StreamLine is designed to meet customer requirements for a reliable, flexible and easily configured system that enables boning hall managers to view real time performance information down to each individual operator on the line. For example, an untrimmed primal that

requires splitting, trimming, membrane skinning, touch up and finally packing is monitored every step of the way. The Innova production management software collects all the relevant data and provides all the key performance indicators, including yield, throughput and processing time. Rupert West stresses the importance of monitoring within the food processing industry and explains, “What’s not measured is not managed, and by implementing the Streamline system, we believe we can measure each process in our production”.

Payback

StreamLine is cost-effective, with a short payback time, primarily due to three factors:

- With individual performance monitoring, processors can expect to see improvements in yield of between 2 to 4%.
- Throughput should increase by 15-30%.
- StreamLine is attractively priced as its simple and compact design makes it less costly to produce than conventional processing lines.

In most cases, payback can be expected to be achieved well within one year.



Marel Food Systems

The leading global provider of advanced equipment and systems for the food processing industry.

We are innovative in everything we do and with our extensive global sales and service network spanning more than 40 countries, we work side-by-side with our customers to extend the boundaries of food processing performance. We provide ONE STOP for all your processing needs.

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RETURN ON INNOVATION

