

Marel StreamLine

Flexible and intelligent trimming concept



- Increased yield, throughput and quality
- Real-time performance monitoring
- Cost-effective with short payback time
- Compact and easy to clean



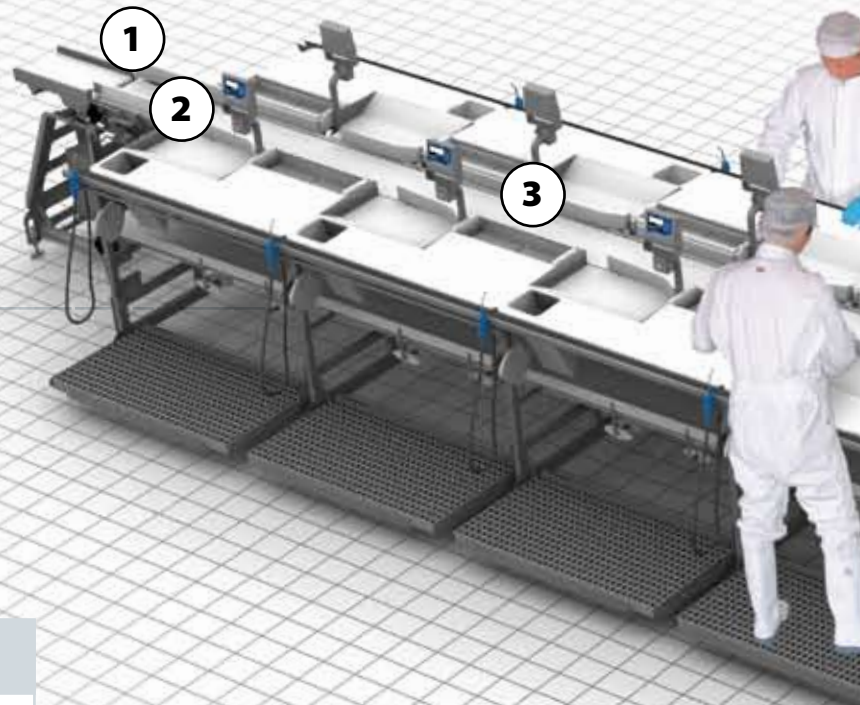
Monitor, measure, maximise

StreamLine, the innovative new fish processing line from Marel Food Systems, combines a unique set of features.

- Extremely flexible and can be used for most filleting and trimming processes.
- Customized to fit every processor's needs.
- Yield and throughput of individual operators is monitored in real-time, enabling managers to make the necessary adjustments to ensure that the line operates at peak efficiency.
- Simple and ergonomic design makes it easy to clean and economical to maintain.

- Integrates seamlessly with Innova, Marel Food Systems' state-of-the-art production management software, which monitors and collects data on yield, throughput and quality throughout the entire processing cycle.

Tried and tested in the fish industry for decades, Marel Food Systems' flowlines have also been welcomed in the meat and poultry industries with great success. We have installed over 160 processing lines worldwide.



1 INFEEED STATION

The infeed station contains an infeed scale that weighs the raw material coming in.

2 CONVEYOR BELT

The line is equipped with one conveyor for infeed and outfeed of primary material. Having fewer conveyors facilitates cleaning.

3 PROCESSING STATION

The processing stations are built-in and located along the conveyor. They are equipped with arms that drive the fillets/whole fish into the infeed buffer. The operator performs the intended operation and places the processed piece in a buffer. The contents of the buffer are periodically released onto the conveyor. The trim, skin and bones are dropped through a chute onto a secondary conveyor.

4 OUTWEIGHING STATION

Processed pieces or portions are weighed at the outweighing station. From there, the product can be sent to the quality control station or processing/packing stations.

5 QUALITY CONTROL STATION

The main purpose of the QC station is to ensure that the increased throughput and yield does not affect the quality of the material.

6 TRIM CONVEYOR

Secondary material, such as trim, skin and bones, is carried off by a conveyor to selected locations.



“ The Marel flowline allows us to monitor each operator and to use a bonus payment plan to reward the best performers. There's no question that added incentive translates immediately to higher yield and throughput. ”

- Gudmundur Stefán Jónsson, General Manager
at Norðurströnd ehf. in Iceland.

Benefits

StreamLine fully utilizes the capabilities of each employee and allows the best workers to shine.

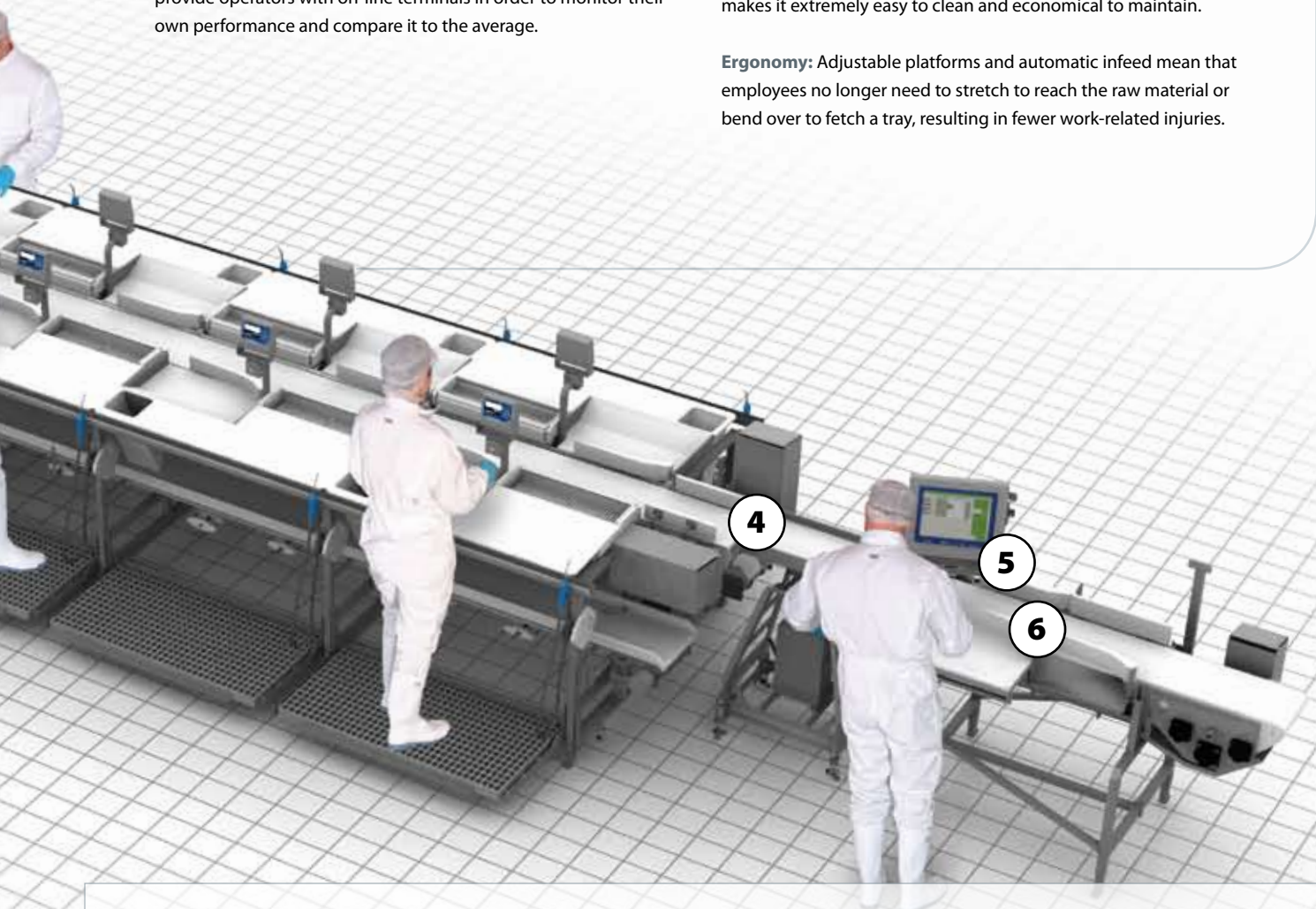
- Production speed is not dictated by the slowest worker on the line but is rather determined by the sum of the contributions of each operator.
- Individual monitoring of each operator allows managers to install bonus payment plans for added incentive. An available option is to provide operators with on-line terminals in order to monitor their own performance and compare it to the average.

Throughput and yield: Individual monitoring and the ability of operators to compare their own performance against the average is the most important contributing factor to increasing overall throughput and yield.

Quality: Random and anonymous on-line quality checks of each operator is an available option. Combined with individual monitoring, this results in higher value products.

Hygiene and economy: StreamLine's simple and hygienic design – with fewer conveyors and less steel than traditional flowlines – makes it extremely easy to clean and economical to maintain.

Ergonomy: Adjustable platforms and automatic infeed mean that employees no longer need to stretch to reach the raw material or bend over to fetch a tray, resulting in fewer work-related injuries.



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 since 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.



Compatible with Innova

– Intelligent production control system

Innova ties it all together

Innova, the intelligent production management software, integrates seamlessly with StreamLine to ensure optimal performance.



Innova provides the complete IT solution for the modern food processor. 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. Critical KPIs 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.

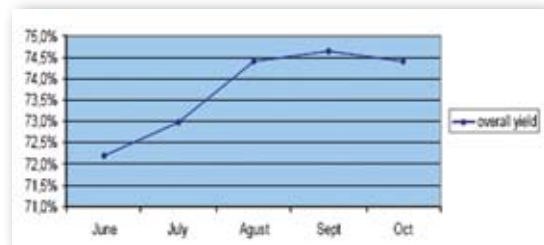
There is also a built-in traceability mechanism at all levels, ensuring that all product information is registered throughout the entire production process, making recall easier if needed. Innova can generate a variety of user-friendly reports.

Case study

A customer who had previously been using a tray system for filleting recently acquired a new Marel hand-filleting flowline. The customer had been bringing the fish in trays and filleting it directly back into trays before sending it on for further processing. The main downside of the system was that there was no individual monitoring and a lot of accumulation of the raw material in the trays, resulting in a considerable amount of driploss. It was also difficult to keep track of the processing time of the product. The yield achieved with this process was around 72%.

When the new hand-filleting line was installed, the yield increased to 74.4%. This was mainly the result of increased individual performance monitoring of the operators, reduced driploss during the process and strengthened quality control.

Yield trend by month



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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