

# Salmon filleting

Superior filleting with optimum yield



- Efficient, high-quality filleting
- Back and belly trimming
- High yield
- Up to 25 fish per minute
- Small footprint

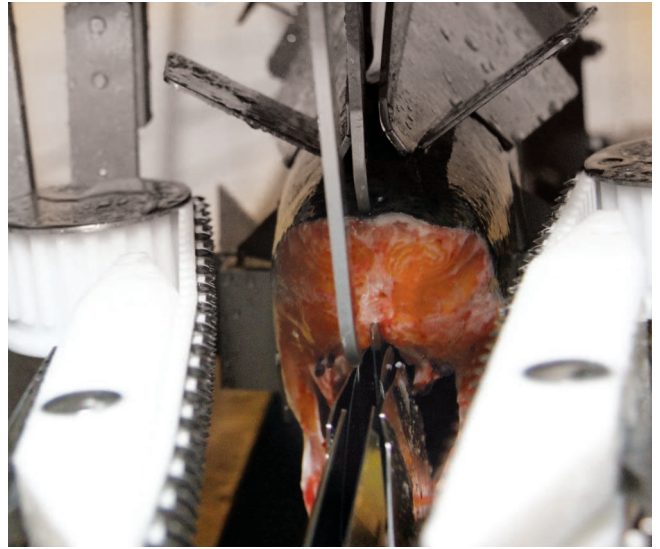
# Filleting machines for salmon and trout

## The essence of filleting

Filleting machines have been a part of the Marel Salmon division since the very beginning, and today they are among our key products.

Precise and efficient filleting is essential to obtaining high yield, and we have the experience and know-how to supply our customers with the very best filleting solution.

Our third generation filleting machine delivers high-quality fillets and makes the filleting process extremely efficient and advanced with a high level of automation.



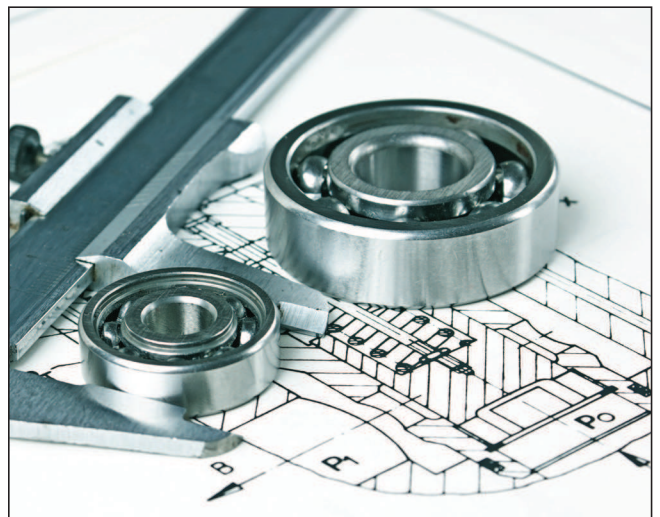
## Convenient design

Marel Salmon's filleting machines are sturdy and reliable, while also designed to have a small footprint.

The machines are made from strong stainless steel with a smooth and easy-to-clean surface. Dampers make it easy to open the cabinet for internal cleaning and maintenance. All materials are FDA-approved and meet the industry's strict hygiene demands.

They have integrated compressors, a dryer system and an electrical cabinet for easy installation.

Processors also benefit from the machine's low energy and water consumption, helping them meet the environmental requirements for fish processing.





# Range and solutions

Since Marel launched its first filleting machine in 1996, the company has continuously developed and improved the machines, ensuring they constantly meet the requirements of a modern production line.

The Marel range of filleting machines consists of two main models: the CT 2630 and MS 2730, both designed for salmon and trout.

The CT 2630, with mechanical adjustment, has a combination of band knives and circular knives, which produces high quality products with a high yield.

The advanced MS 2730 model, with electrical adjustment of all settings, makes filleting highly automated and achieves even greater yield and throughput.

Marel filleting machines are all made to easily fit into an existing or new filleting line. We have a large number of standard solutions to meet our customers' different needs in both manual and automatic trimming. Marel delivers and installs complete filleting lines that cover all processes from deheading to packing and labeling.



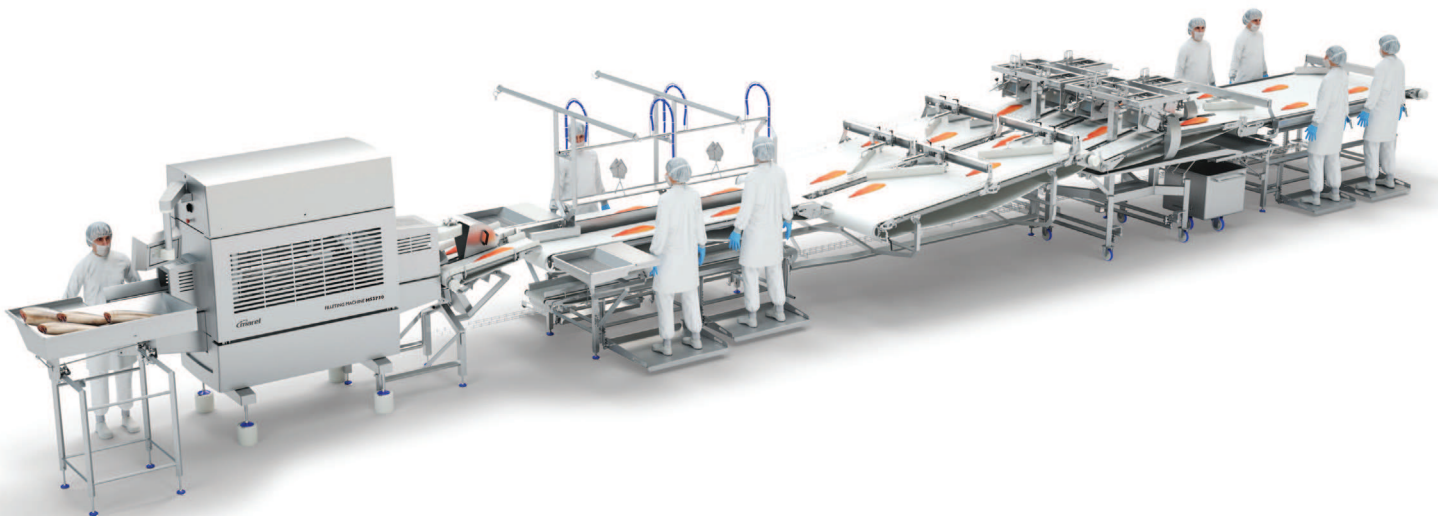
CT 2630



Grinder for the circular knives



MS 2730



The MS 2730 filleting machine in a filleting line with trimming and pinboning

# Efficient, high-quality filleting

## Automatic size adjustment

### MS 2730

The fish is fed into the machine belly down, which makes the infeed much easier and faster. An additional set of circular knives cuts the fish from vent to tail. This cut raises yield, as the meat close to the center bone is included in the fillets.

For the belly bone cut, 4 sets of finger pressures secure maximum control of the fish and enable optimum cutting of both pre-rigor and post-rigor fillets. The result is high-quality fillets with higher yield and output.

The MS 2730 automatically adjusts to various fish sizes, so there is no need to make any adjustments once the program has been switched on. The MS2730 can process up to 25 fish per minute depending on the length of the fish.

With the built-in system for measuring the fish's profile and size, the electronically controlled cutting tools can automatically adjust the filleting program to the fish's size and shape. The result is higher throughput, quality and yield depending on trim specifications.



## Unique cutting principle

### CT 2630

Due to its combination of band knives and circular knives, the CT 2630 treats fillets very gently. The fish is placed in the infeed chute, belly side up. The feeding belts convey the fish to the cutting section, where the band knives automatically adjust to the size and shape of the fish. The circular knives cut as close to the backbone of the fish as possible to achieve a clean cut with maximum yield.

The CT 2630 is extremely flexible and can process most common kinds of salmon and trout, capable of running different trims according to individual customer requests.



Different trims made on the CT 2630

## Easy and safe operation

With Marel filleting machines there is no need for time-consuming readjustment. On the MS 2730 all operations are managed by a multilingual color touch screen which is easy and safe for the operator to use. The different parameters for new programs, such as dimensions, tool positions, pressures for belly trim and speed are entered and stored, making it very easy to change the settings during production if necessary.

The filleting machine comes with various programs installed for automatic adjustment and for predefined fish sizes.



Control panel on the CT 2630



Touch screen panel on the MS 2730

# Options for greater automation

## Optimum fixed-pace infeed

Marel offers an automatic infeed system for filleting solutions that include the automatic Salmon Deheader MS 2720 or the PacerInfeeder MS 2725 in front of the MS 2730. The auto infeed unit turns the fish upright so that it always enters the filleting machine in the correct position and at the right speed for optimum filleting results.

The PacerInfeeder ensures a smooth infeed of salmon into the filleting machine. It adjusts the pace to the settings of the filleting machine running at up to 25 fish per minute.

The PacerInfeeder improves the performance of the filleting machine and makes the infeed effortless and independent of operator skills. Salmon is released at the set pace into the automatic infeed unit.

The PacerInfeeder can be combined with manual deheading to secure a steady flow on the line. This can reduce labor costs and raise product quality as the salmon is automatically transferred into the PacerInfeeder without the need for manual handling.



PacerInfeeder

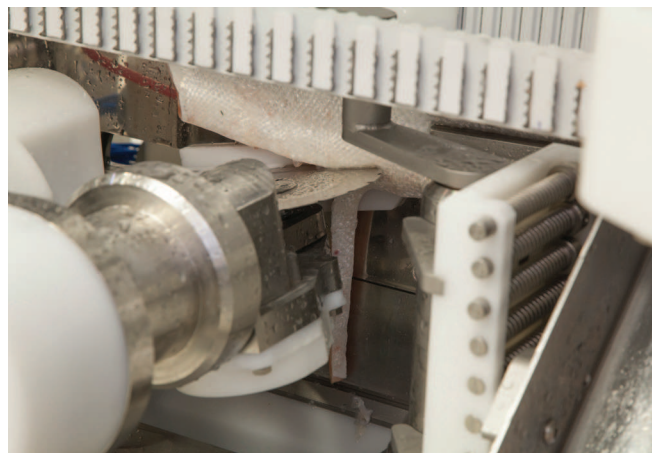
## Back and belly trimming tools

Tools for trimming the back and the belly of the salmon can be included for the MS 2730. The height of each fish is measured at the infeed, and the trim cuts are made based on this measurement by two sets of circular knives. Fillets are delivered with the back and belly trimmed according to the preselected settings. This significantly reduces the cost of manual trimming.

The filleting machine can be delivered with or without the two trimming tools, or with only one of the tools. An MS 2730 that has been installed without the trim tools can be rebuilt at a later stage to include them. This doesn't alter the size of the machine, because both trim tools fit into the standard MS 2730 machine. With the trim tools installed, the MS 2730 still performs at a high capacity of up to 20 fish per minute.



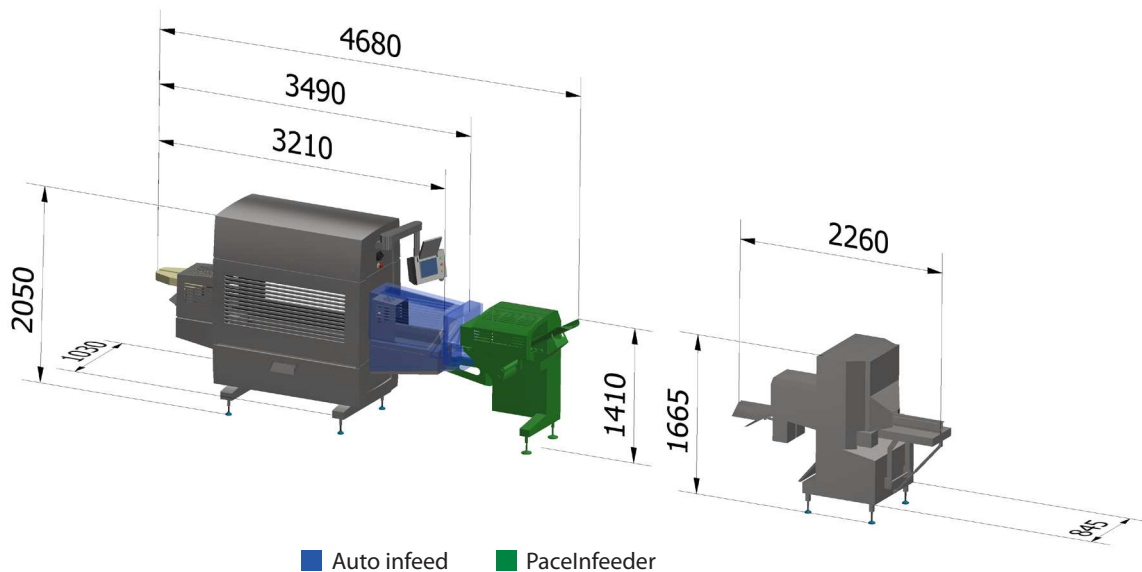
Back trimming



Belly trimming



# Technical data



## Specifications

	MS 2730	CT 2630
Fish size:	1.5 to 8 kg*	2 to 7 kg
Capacity:	Up to 25 fish/minute With trim tools up to 20 fish/minute **	Up to 20 fish/minute
Electricity:	3x400V + N + PE / 3x220V + PE	3x400V + PE / 3x220V + PE
Power consumption:	7.0 kW	4.0 kW
Water consumption:	15 liters/minute	10 liters/minute
Air supply:	Integrated compressor	Integrated compressor
Weight:	Approx. 1450 kg / 1780 kg (incl. trim tools)	Approx. 675 kg

\* With average fish size 4 kg and length of 670 mm.

\*\* Within standard fish sizes.

## Key features

### MS 2730

- Extra set of round knives for higher yield
- User-friendly touch screen
- Automatic adjustment to various fish sizes
- Optional back and belly trimming tools
- Optional automatic infeed
- Compatible with Innova software
- Small footprint

### CT 2630

- Combination of circular knives and band knives
- Easy access for cleaning
- Small footprint

# Control your yield performance

## Monitoring production

Innova food processing software controls the filleting process by setting up filleting programs for MS2730 Filleting Machine. Innova provides a comprehensive real-time reporting function that gives the operator a complete overview of the filleting process.

Real-time data generates reports on throughput, yield, and volume, as well as the standard overview and lists. This data can be viewed via dashboards. Based on these valuable KPIs provided by Innova, you can make intelligent decisions on how to optimize your filleting results.

## With Innova you can:

- Monitor KPIs in real time
- Register the height, width and length of fish
- Register fillets (pcs.)
- Register alarms and active/inactive time
- Create reports on various KPIs

## Manual yield control

The salmon filleting yield control solution is used as a receiving station at the filleting machine and monitors yield for individual batches of salmon received under a specific PO, lot or batch number. After initial weighing of whole fish the system will record the exact weights of specific parts of the salmon including heads, frames, belly trim, fillets etc. and it will report total yield.

## Innova Life Cycle Support

With Innova Life Cycle Support, you can reduce operational and financial risk, and gain better control of IT costs. Innova Life Cycle Support offers remote and telephone support during normal working hours.

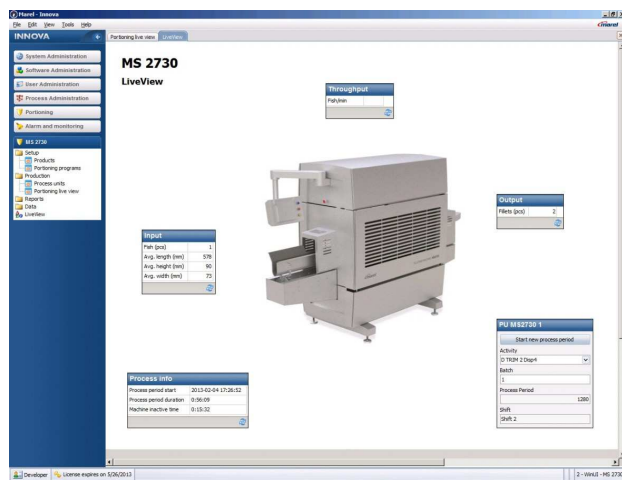


Powered by  
**INNOVA**  
Food Processing Software

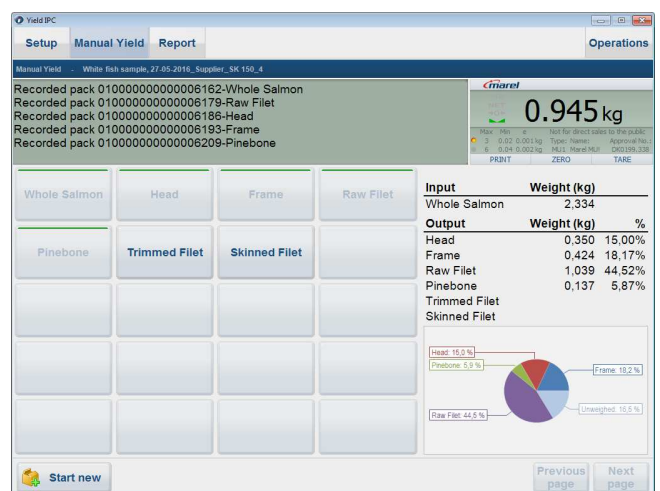
Manual yield sampling unit  
Dashboard for monitoring performance  
User-friendly touch screen monitor

## Key features

- Reliable, real-time yield management
- Flexible data registration and monitoring
- Generates accurate yield reports
- Increases traceability by logging data on batches received from various suppliers
- Easy for operators to use and understand



Dashboard for monitoring performance



User-friendly touch screen monitor



# Preventive maintenance

## Your best insurance against downtime

A Marel certified specialist will service and maintain your equipment during a scheduled visit to your site at a time that fits your production schedule.

Our specialist will carry out a physical inspection that includes routine checks, tests on electrical, electronic and mechanical components and functions, replacement of wearing parts and adjustments to each machine as required and in accordance with our own quality standards for optimal performance.

On completion of each visit, you will receive a report on the current status of your equipment, with recommendations for continued maximum availability and peak performance.

## Fast access to approved spare parts

All our parts are manufactured from high quality materials for optimal performance. Many of our solutions use custom components, making Marel your first choice in providing the right part for the right application.

By being prepared and using approved spare parts, you can help minimize production stops and maximize productivity. Whenever you need any parts or spares, we dispatch these straight to you by courier service.

## Benefits

- Maximize equipment uptime and availability
- Extend the lifetime of your hardware
- Maintain optimal performance of equipment
- Control operational costs
- Reduce downtime

*Marel is the leading global provider of advanced equipment and systems for the fish, meat and poultry industries.*