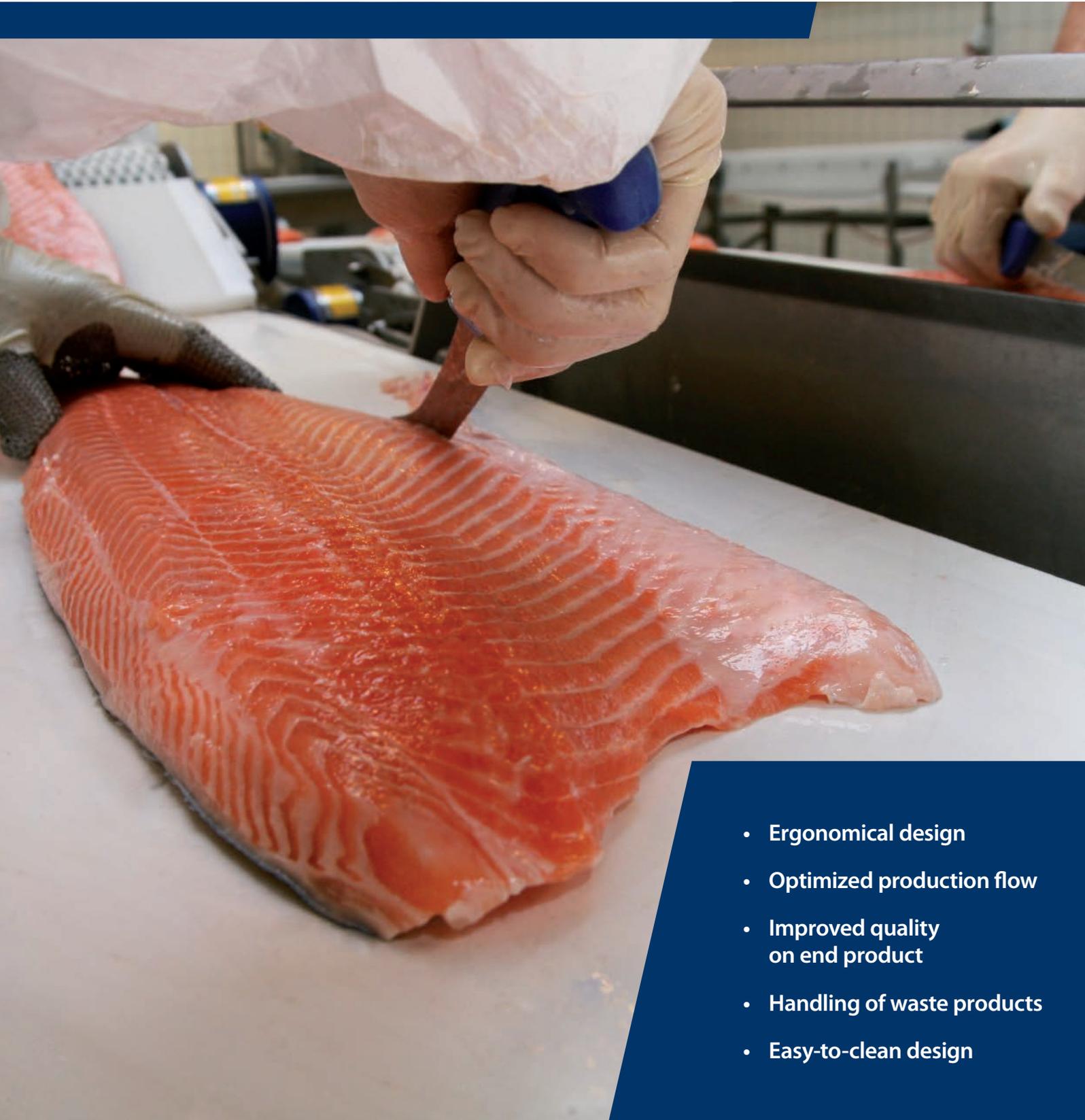


Salmon Trimming

Manual trimming lines



- Ergonomical design
- Optimized production flow
- Improved quality on end product
- Handling of waste products
- Easy-to-clean design

Manual trimming lines for salmon and trout

Marel trimming lines are specifically designed for salmon and trout, made for easy integration in to any production line. Marel is the leading supplier of manual trimming lines for salmon, with trimming lines installed and operating worldwide. Each line has been adapted to the individual needs of the customers.

Good ergonomics

We are aware of the importance of good ergonomics. Thus the design of our trimming lines is ergonomically correct and fully meets the demands in the industry. They can be delivered with height adjustable working platforms which are either manually adjusted or adjusted by water-hydraulics.

The trimming lines are sturdy, reliable and stable in construction and very easy to operate. They are made in a strong stainless steel design with a smooth and easy-to-clean surface.

Cooperation with customers

Due to a close cooperation with our customers we have gained considerable knowledge and understanding of customer requirements. This enables us to continuously improve upon our equipment and provide our customers with the very best trimming solution.

Range

We supply trimming equipment ranging from basic trimming tables to advanced systems with full monitoring of yield control and traceability.

With many years of experience in the salmon processing industry, we have the technical know-how to offer complete tailor-made solutions, matching specific requirements.

Our sales team has a profound practical experience from the salmon processing industry and is highly qualified to help our customers optimizing their production.

Active trimming lines

Our range of active trimming lines are designed for trimming directly on the conveyor belt while it is running, where each operator is responsible for one specific trimming function like belly cut, back trimming or other parts and tail. By minimizing the handling and lifting of the fillets the flow is considerably improved, which will contribute to a higher throughput and better quality on the fillets.

Trimming on plates

As an alternative to the active trimming lines we have a solution for trimming on plates; 2 level line trimming, where each operator makes all the trimming of the fillet on a plate, and place it on the conveyor belt afterwards.



Extensive range covering every need

Whatever needs you have we will find the right solution for you. We have a range of standard solutions that can fit in to most production facilities today. The range spans from basic solutions to more advanced lines for large scale production.

Standard models

• ATS Active trimming line

One conveyor belt system for trimming directly on the belt with 4 to 12 work stations. The waste is disposed in to a chute at each station and collected below on to a waste conveyor.

• ATS Active trimming line two lane

Two conveyor belt system for trimming directly on the belt with 4 to 12 work stations. The two lane edition comes with a shelf for knives and knifesharpener. The waste is disposed in the middle of the line to a waste conveyor below.

• X404 Active trimming cross line

Two conveyor belt system for trimming directly on the belt with 4 work stations. For trimming with less handling of the fillets. 2 operators trim the back of the fillets, the fillets are conveyed across to the opposite side for trimming of the belly side by the 2 other operators. This set up ensures that the operators always cut away from the body. Fillets with gaping is minimized because the lifting of the fillets is significantly reduced.

• APT4 Active post trimming line

Two conveyor belt system for trimming directly on the belt with 2-6 work stations designed to fit after the MS2730 filleting machine with back- and belly trimming tools. The individual trimming operations are divided between the operators on each side. One operator can use an electric rotating knife (type wizard) and the others can use standard knives. At the first station on each side there is a buffer with a trimming board for miss cuts. The trim is collected in the middle of the line between the two belts, under which the waste conveyor is placed.

• 2 Level line trimming

A two level belt system for trimming on plates. The fillets are received by the operators from the top conveyor belt, trimmed on the plate, and placed on the lower belt. The line is available with an integrated pinbone machine and pinbone check.

• Brown meat trimming / Skin check

One conveyor belt system for removal of the brown meat and skin patches ; an active trimming line with 2-6 work stations. The line is prepared for installing wizard knives.

For the standard trimming lines there is a selection of optional features that can be added to the line in order to get the ideal set up that fits your needs. The features are listed on page 7.



Tailor made solutions

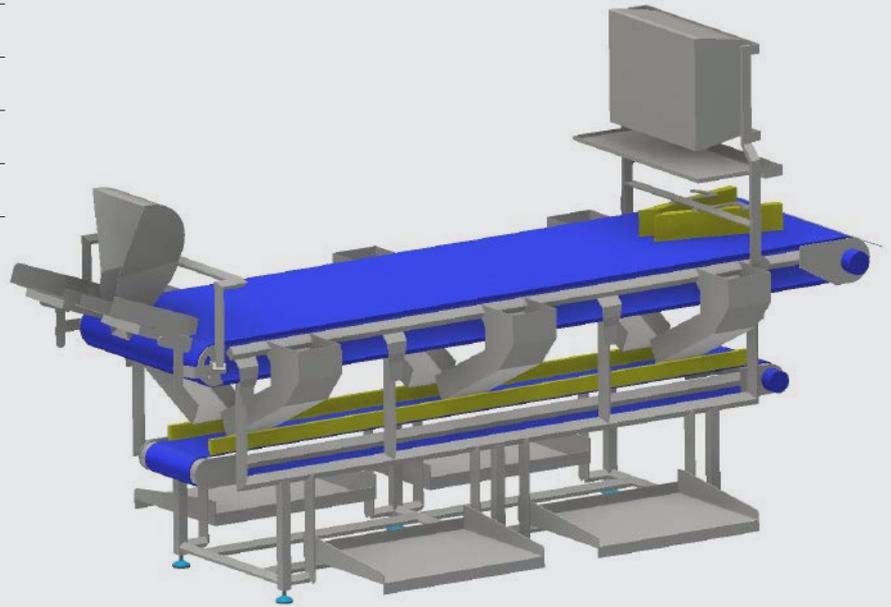
For customers looking for a tailor made solution our skilled project consultants are ready to advise them through every step of the process. Based on the basic customer needs in terms of capacity, throughput, yield control, waste handling etc. our experienced engineers will come up with solutions how to make the very best trimming line solution.



Technical data

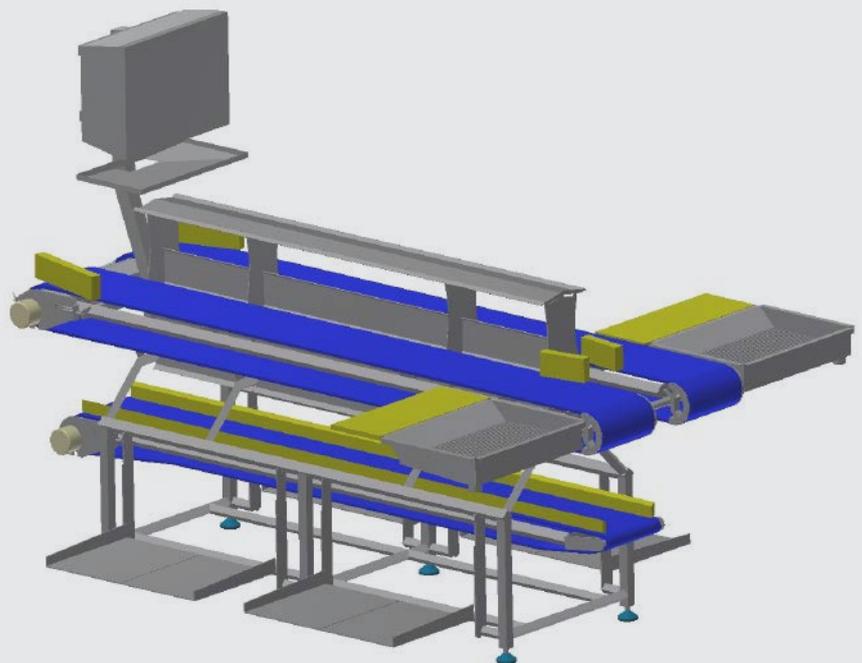
ATS line

Operators:	Up to 8 persons
Belt type:	Modular belt
Electricity:	3x400V + N + PE
Power consumption:	0,75 kW
Water consumption:	Max 32 l/min at 2 bar *



ATS line two lane

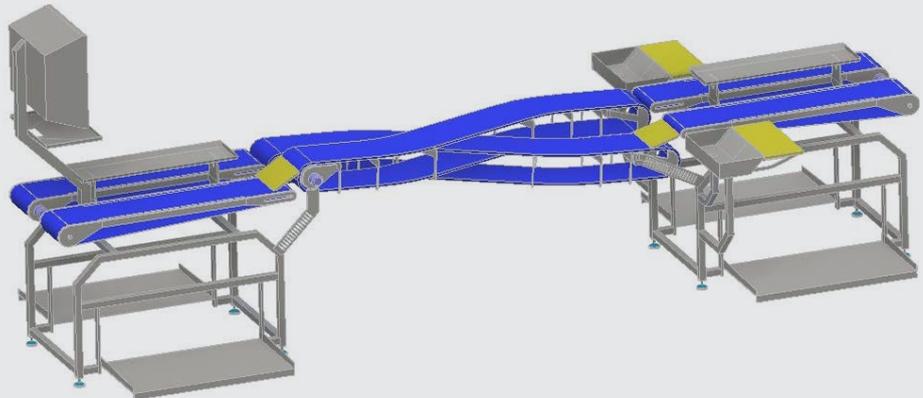
Operators:	Up to 12 persons
Belt type:	Modular belt
Electricity:	3x400V + N + PE
Power consumption:	0,75 kW
Water consumption:	Max 75 l/min at 2 bar *



* Water consumption is indicated for the belt wash. Additional 10 l/min at 2 bar is required per work station for water spray pistol.

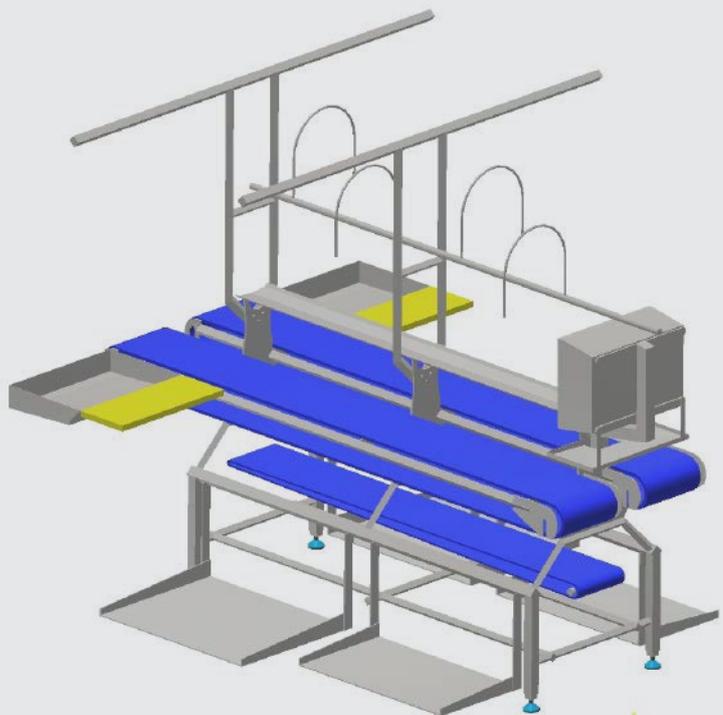
X 404 line

Operators:	4 persons
Belt type:	PVC and modular belts
Electricity:	3x400V + N + PE
Power consumption:	1,5 kW
Water consumption:	Max 50 litres/min at 2 bar *



APT4 line

Operators:	Up to 6 persons
Belt type:	Modular belts
Electricity:	3x400V + N + PE
Power consumption:	0,75 kW
Water consumption:	32 litres/min at 2 bar *



Technical data

2-level line

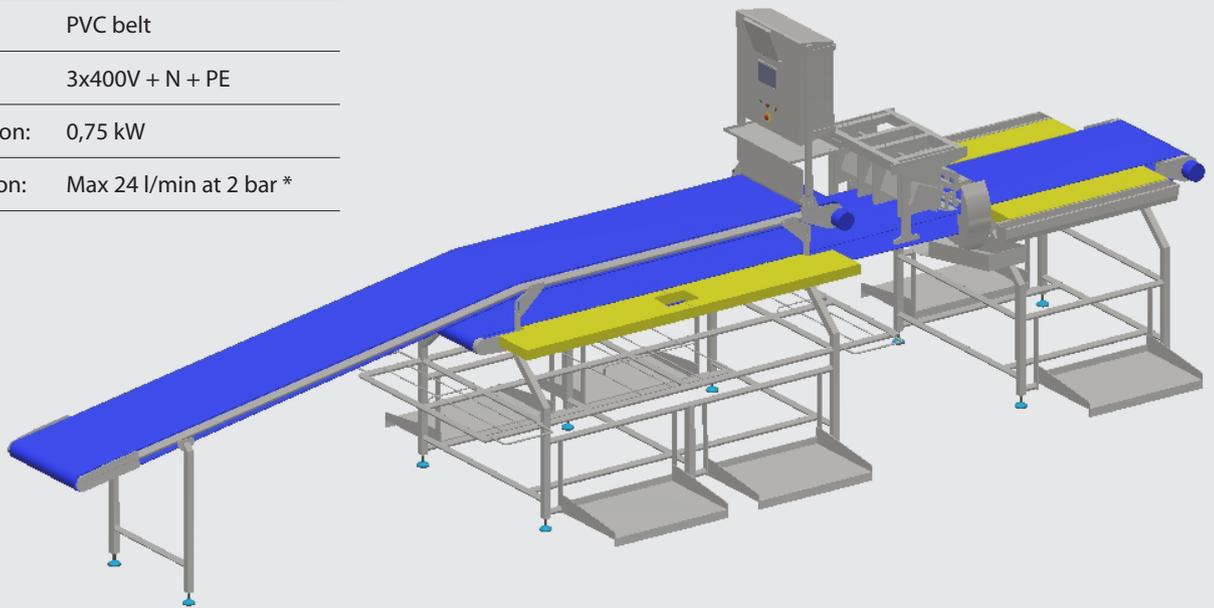
Operators: Up to 12 persons

Belt type: PVC belt

Electricity: 3x400V + N + PE

Power consumption: 0,75 kW

Water consumption: Max 24 l/min at 2 bar *



Brown meat trim / Skin check

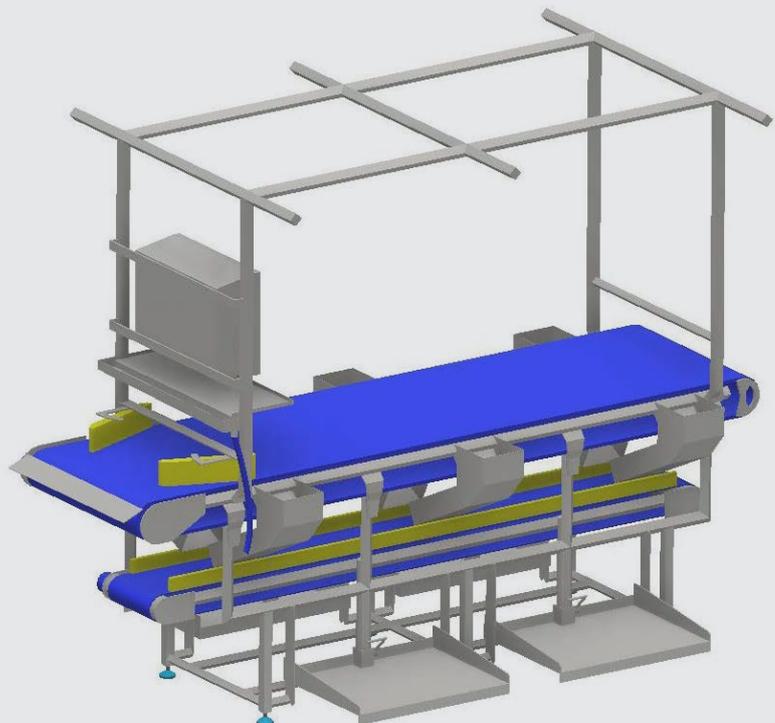
Operators: 4-6 persons

Belt type: Modular belt

Electricity: 3x400V + N + PE

Power consumption: 0,75 kW

Water consumption: Max 32 l/min at 2 bar *



* Water consumption is indicated for the belt wash. Additional 10 l/min at 2 bar is required per work station for water spray pistol, and 20 l/min at 2 bar for integrated pinbone remover.

Standard equipment/features

Model	ATS	ATS 2 lane	X 404	APT4	2 level line	Brown meat
Electric control cabinet	*	*	*	*	*	*
Height adjustable working platforms	*	*	*	*	*	*
Water spray guns	*	*	*	*	*	
Offal conveyor	*	*	*	*	*	*
Belt wash	*	*	*	*	*	
Solenoid valve for interval wash and disconnection of water	*	*	*	*	*	*
Quick release system for easy removal of belt			* 1)			
Shelf for knives etc.		*	*	*		
Buffers with trimming plates at inlet			*			

1) Only belts at workstations

Valued optional features

- Scales & software for yield control
- Grinder for knives
- Offal conveyor under trimming plates
- Centre shelf for knives etc.
- Water hydraulic height adjustable platforms
- Training station, incl. deeper platform
- Integration of pinbone remover
- Chutes (outlet)



Service & support

Any purchase of a Marel trimming line includes the offer of installation, to make sure you can quickly and smoothly get your production line up and running. Our skilled service engineers will also provide your operators with thorough training in operating, cleaning and maintaining the equipment.

Our service department is always available to provide any troubleshooting and assistance you may need. This includes sending a service engineers to deal with any technical issues related to your Marel trimming line set-up.

A Marel service agreement also gives you easy access to regular service support. Our service engineer will visit you to check the equipment thoroughly and make sure it is properly set up and fine-tuned for efficient, reliable production, changing any parts if necessary. Whenever you need any wearing parts, spares or replacement parts, we dispatch these straight to you by courier service, to help ensure maximum uptime.



Salmon processing solutions

Marel's expertise and experience in designing and manufacturing advanced processing solutions is unmatched in the industry. Virtually a one stop shop for salmon processors, we offer everything from single stand-alone units to custom-designed turnkey solutions, including a wide range of key products for wet processing and value-adding slicing.

Our consultants work side-by-side with our customers to identify the best possible solution to meet their needs, providing advice and support throughout the entire process. First and foremost, our goal is to increase the productivity of our customers.



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

With offices and subsidiaries in over 30 countries on six continents and a vast global network of agents and distributors, Marel's expertise in local markets and requirements helps it deliver the best processing innovation for its customers.

Our dedicated R&D teams ensure that we provide the latest technology for all stages of the processing value chain; ranging from single scales to integrated production lines and turnkey systems.