

Salmon trimming

Manual trimming lines



Manual trimming lines for Salmon & 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 world wide. 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.



Standard models or Tailor made solutions?

Standard models

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.

- **ATS Active trimming line**

One conveyor belt system for trimming directly on the belt with 4 to 8 work stations. The waste is disposed in to a chute at each station and collected below on to a waste conveyor.

- **ATD Active trimming line**

Two conveyor belt system for trimming directly on the belt. The ATD comes with a shelf for knives and knifesharpeners. The waste is disposed in the middle of the line directly 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.

- **X606 Active trimming cross line**

Four conveyor belt system for trimming directly on the belt with 6 work stations. For trimming with less handling of the fillets and extra throughput. 2 operators trim the back of the fillets, the fillets are divided on to 4 different lanes and 4 operators trim the belly side of the fillets. Like on the X 404 line this line will provide better working conditions for the operators and reduce gaping.

- **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.

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 at the end of the brochure.



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.



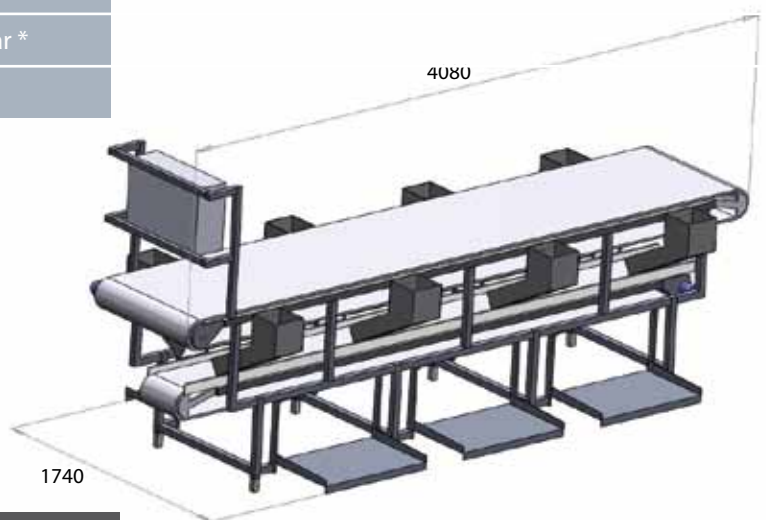
Compatible with Innova
– Intelligent production control system



ATS line

SPECIFICATIONS

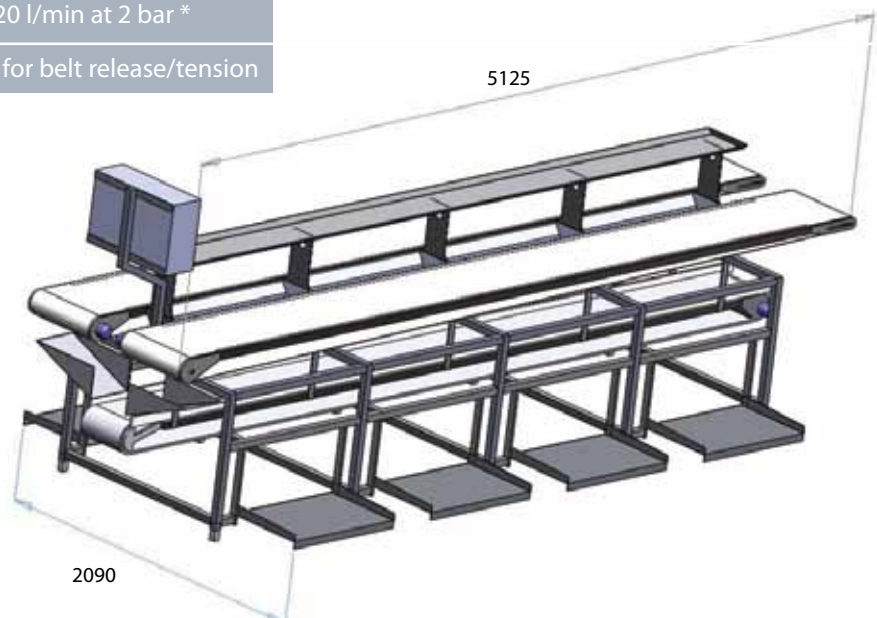
Operators:	Up to 8 persons
Belt type:	Modular belt
Electricity:	3x400V + N + PE
Power consumption:	0,75 kW
Water consumption:	Max 32 l/min at 2 bar *
Air supply:	Not required



ATD line

SPECIFICATIONS

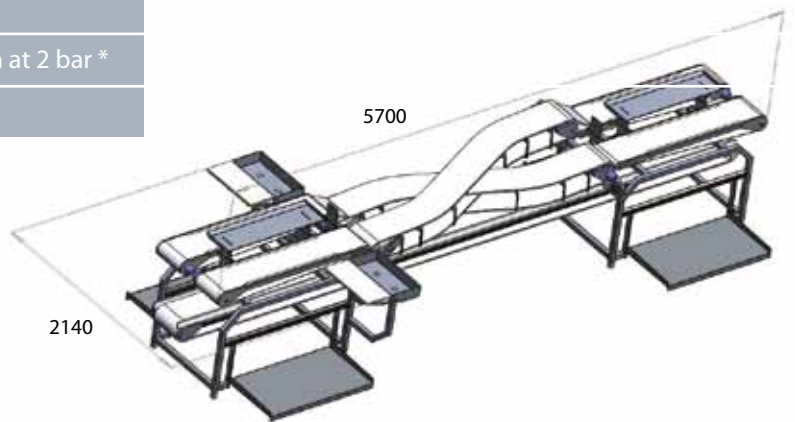
Operators:	Up to 10 persons
Belt type:	PVC and Intralox belts
Electricity:	3x400V + N + PE
Power consumption:	1,0 kW
Water consumption:	Max 20 l/min at 2 bar *
Air supply:	6 bar for belt release/tension



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

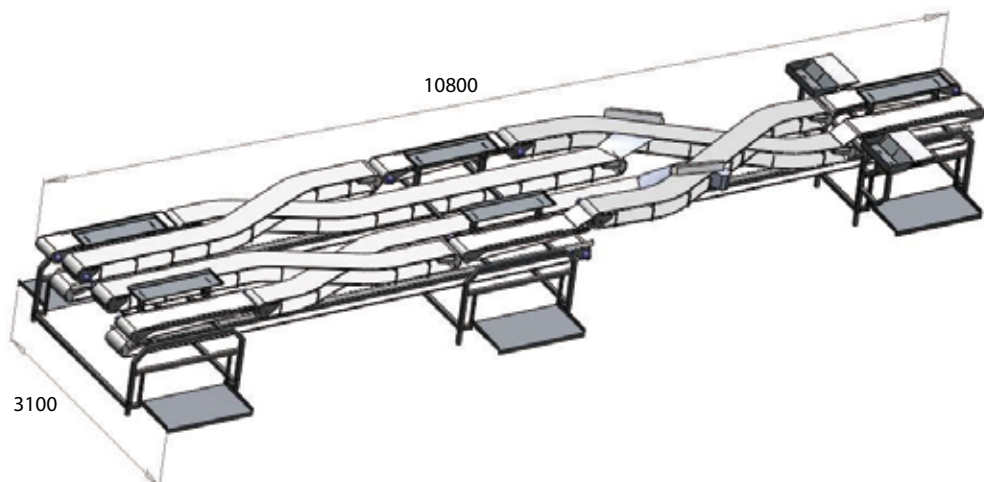
X 404 line

SPECIFICATIONS	
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 *
Air supply:	Not required



X 606 line

SPECIFICATIONS	
Operators:	6 persons
Belt type:	PVC and modular belts
Electricity:	3x400V + N + PE
Power consumption:	3,5 kW
Water consumption:	115 litres/min at 2 bar *
Air supply:	50 litres/minute 6-8 bar

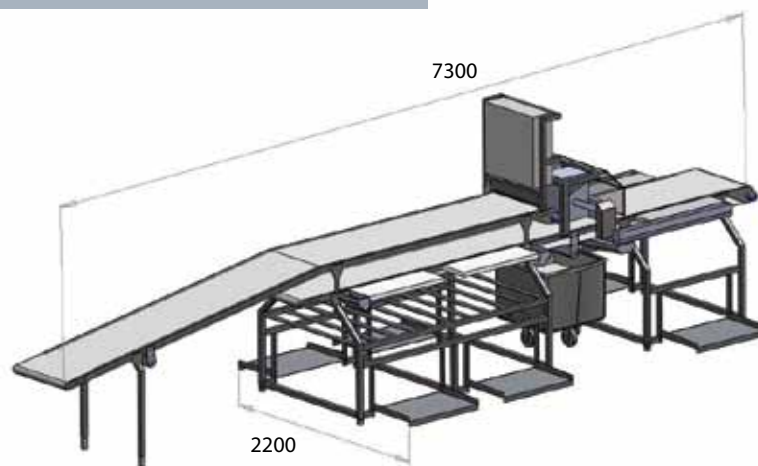


* Water consumption is indicated for the belt wash. Additional 10 l/min at 2 bar is required per work station for water spray pistol.

2-level line

SPECIFICATIONS

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 *
Air supply:	Not required



* 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.

- Ergonomical design
- Proven standard solutions or tailor made solutions available
- Yield control, INNOVA compatible
- Optimized production flow
- Improved quality on end product
- Handling of waste products
- Easy to clean design
- Numerous optional features



FACTS

Standard equipment/features

Model	ATD	ATS	X 404	X 606	2 level line
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)	* 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)

After sales service

When you buy our equipment, we offer you installation to make sure that you will have a quick and smooth start of production. Our skilled service engineers will also give the operators a thorough training in operating, cleaning and maintaining the equipment.

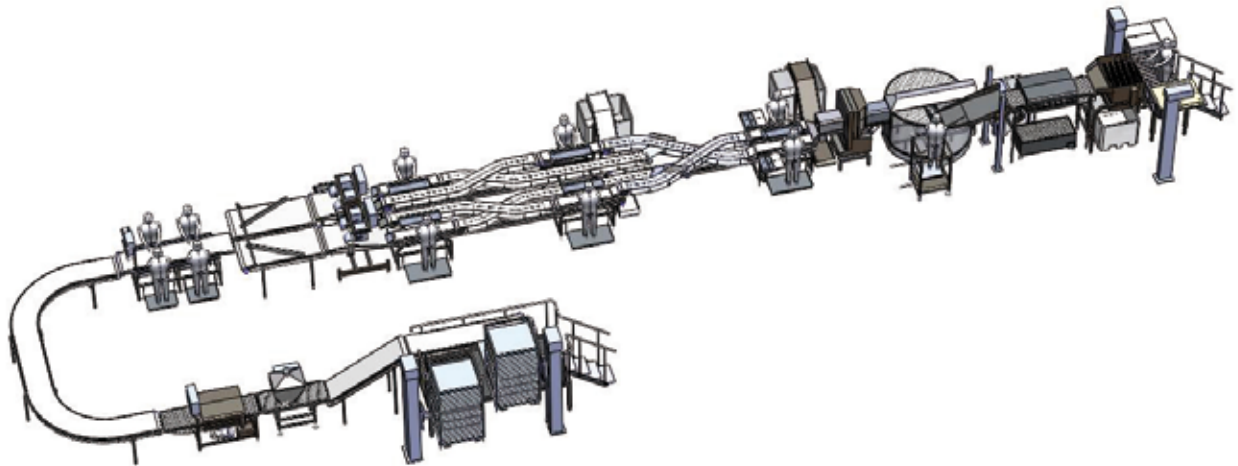
Our service department is always available for troubleshooting and assistance. If necessary we can send one of our service engineers to solve any technical problems related to our equipment.

By entering a service agreement with us, we can offer you regular service. Then our service engineer will visit you to check the equipment thoroughly and make sure it is fit for production, changing any parts if necessary. Whenever you need any wear- or spare parts, our spare part department will send them to you by courier service.



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

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

Marel, Stork Poultry Processing and Townsend Further Processing – Our brands are among the most respected in the fish, meat and poultry processing industries. Together, we offer the convenience of a single source to meet our customers' every need.

For further information please visit

www.marel.com