



PORTIO JET

Intelligent
Waterjet Cutter



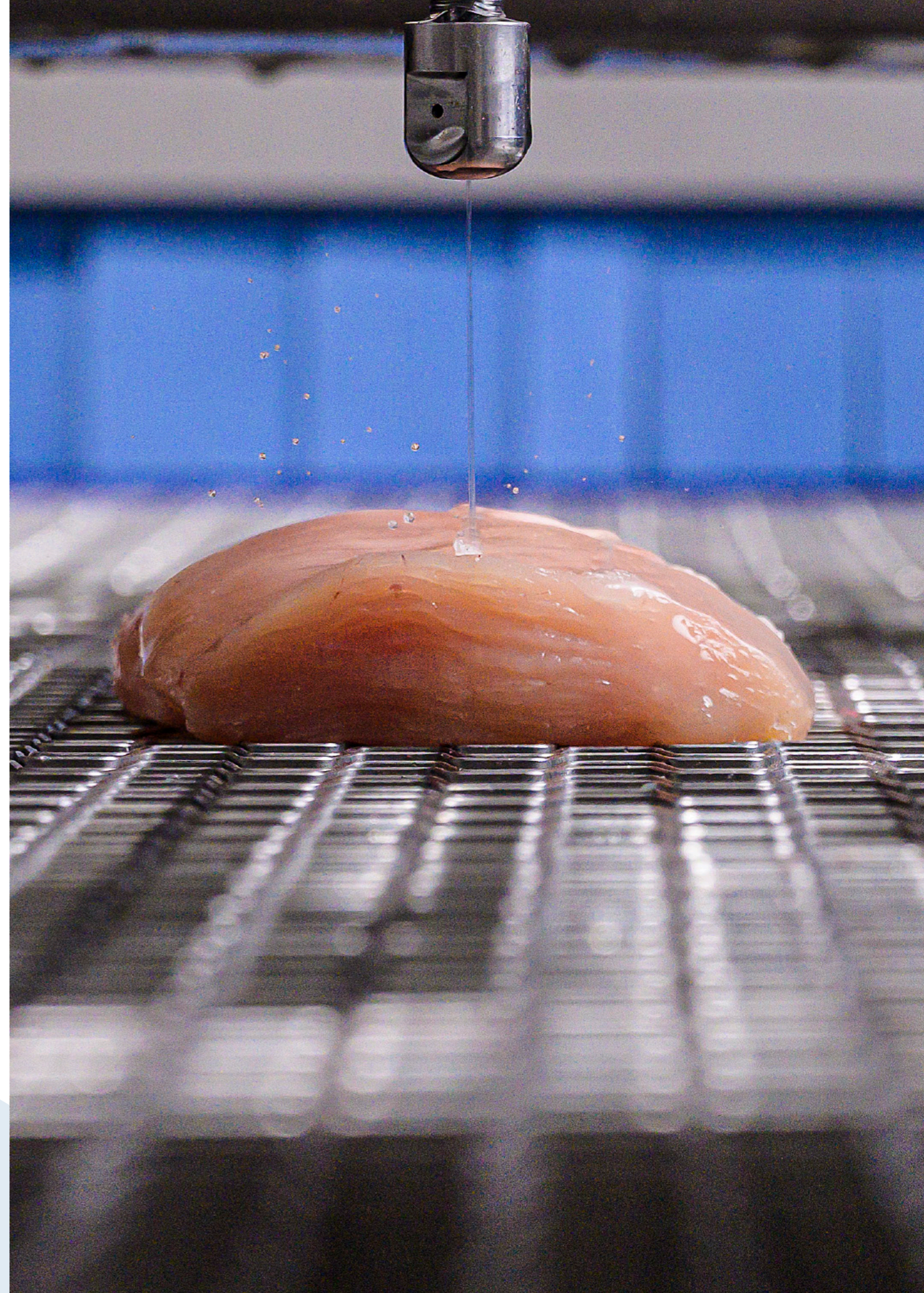
Introduction

When MARELEC launched its first PORTIO back in 2008, it answered a growing demand in the food processing market. The machine was first introduced for fish processing, but soon after, the 3-camera version was developed for the meat industry. This was the start of a successful product line that quickly developed into dedicated versions, to be used worldwide in all segments of the fish, meat and poultry processing industries.

Today we are proud to present a complete range of intelligent portion cutters including the waterjet. All models have been created with a customer centric focus and built based on our expertise in food processing since the early nineties.

We kindly invite you to browse through our brochure to find out more about the different PORTIO JET models, applications and our unique selling points. Our sales team is ready to answer any questions you may have.

As we are a worldwide leader with this technology and regardless of the PORTIO that you need, your choice of MARELEC will ensure that you are working with a service oriented company, one that listens to your specific needs and a flexible partner with a human approach. We look forward to our cooperation!



Unique Selling Points

1 // OPTIMIZED YIELD

Combining the proven MARELEC vision technology with the PORTIO JET optimization software and state of the art nozzles results in the highest possible yields.

2 // FLEXIBLE CUTTING ALGORITHMS

The PORTIO JET optimisation software calculates which cuts have priority over others to determine the cutting pattern that results in most value.

3 // UNPARALLELED ACCURACY

The waterjet cutter PORTIO JET uses the latest well known and proven vision technology. A 200Hz camera scans the chicken fillets or boneless leg meat and converts this into an exact copy in a 3D model.

4 // MODULAR DESIGN FOR INCREASED CAPACITY

The base unit of our waterjet cutter exists out of 1 scanning station and a module with 2 high pressure cutting stations. This is called the PORTIO JET 2. Depending on the needs, the PORTIO JET 2 can be extended with 3 more modules with each 2 high pressure waterjet stations, resulting in 8 cutting stations in total.

5 // USER FRIENDLY SOFTWARE INTERFACE

Intuitive programming of cutting patterns and fast and easy fine-tuning of the programs results in maximum yields. The cutting pattern is shown on the screen along with the indication of the thickness and the weight of every portion.

6 // EXTREMELY HYGIENIC, EASY TO CLEAN

The waterjet cutter complies to the most stringent hygiene standards. The open structure of the portioning machine for poultry allows to pressure wash and disinfect the entire in- and outside. All cabinets with electrics and electronics have a unique drying system to prevent condensation building up as well as the dual sealing concept on all doors.

7 // SERVICE

MARELEC has built a very strong reputation for its after sales service. A team of service engineers is available 24/7 to reply to your queries. The machine can be connected to the internet, which allows our service team to diagnose the status of the machine from our head office. This puts us in a position to react on the spot to assist you.



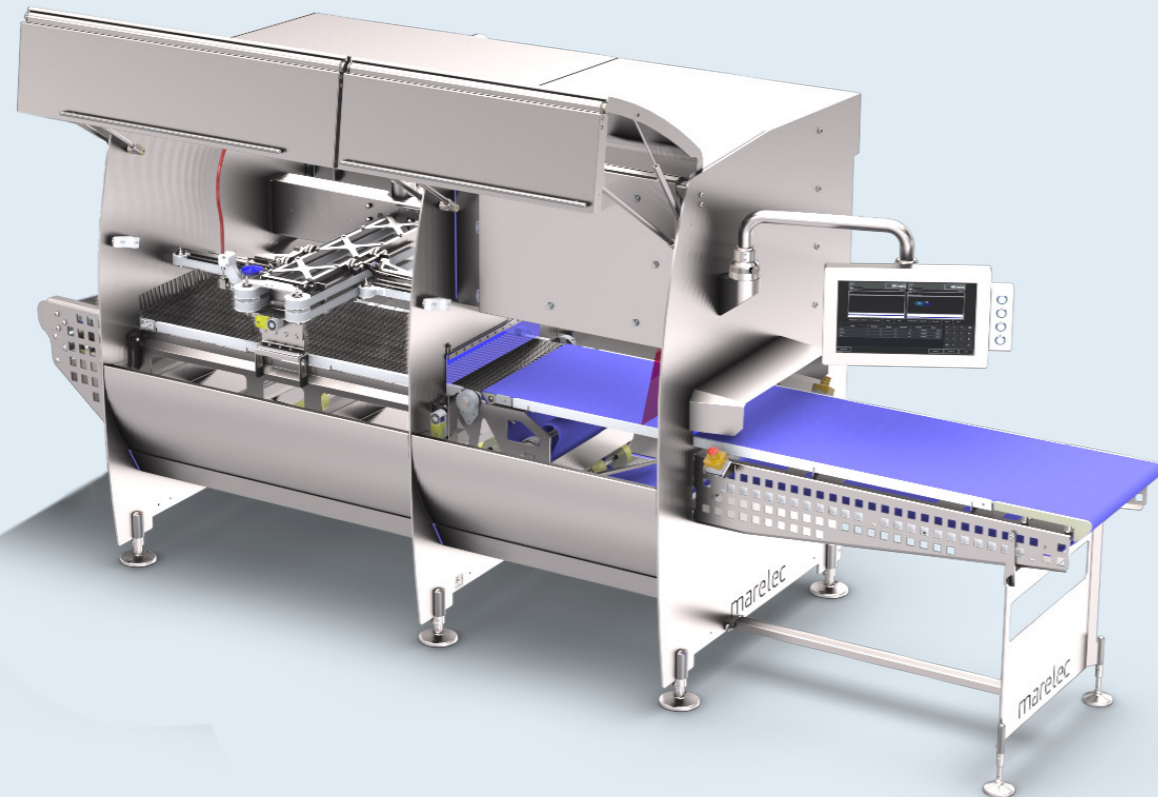
PORTIO JET

The PORTIO JET is developed to maximize yields when cutting predetermined shapes to fixed weights out of poultry fillets or deboned leg meat. The camera laser combination scans to the highest accuracy and the intelligent cutting algorithm calculates the optimal cutting pattern.

There's a list of pre-determined cutting patterns programmed where parameters such as weight and size from the portions can be adapted. There is a mode where the cutting pattern can be drawn on a scanned product to define specs.

Over 300 programs can be stored with a customized name making it possible to switch cutting patterns within seconds. Multiple streams of products can be loaded next to each other on the 600mm/24" wide belt and work with multiple applications simultaneously.

Typical applications are cutting chicken fillets into fixed weight portions, cubes or strips. Boneless leg meat can be trimmed down and portioned into fixed weight portions, better known as steaks or thigh patty. Very popular patterns are strips or cubes, such as karaage, kakugiri or BLK.



The PORTIO JET is built in a modular way. It starts with the base module where all electronics, scanning and HMI are integrated. As a standard this base unit is controlling a module with 2 cutting stations. This combination is called PORTIO JET 2.


The standard unit can be extended by series of modules with 2 high pressure waterjet nozzles up to 4 modules or 8 stations in total. Thanks to the modular design, these extra stations can be added whenever your volumes would require so.

The MATRIX J software collects all production data from the PORTIO JET and allows it to generate production reports per shift or program and to trace changes on machine level. MATRIX J software enables users to remotely make programs offline and monitor the machine status through an event log.

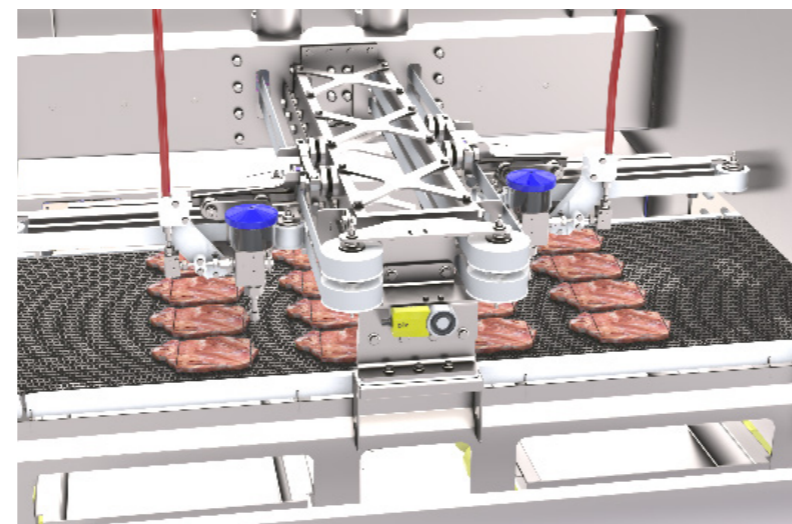
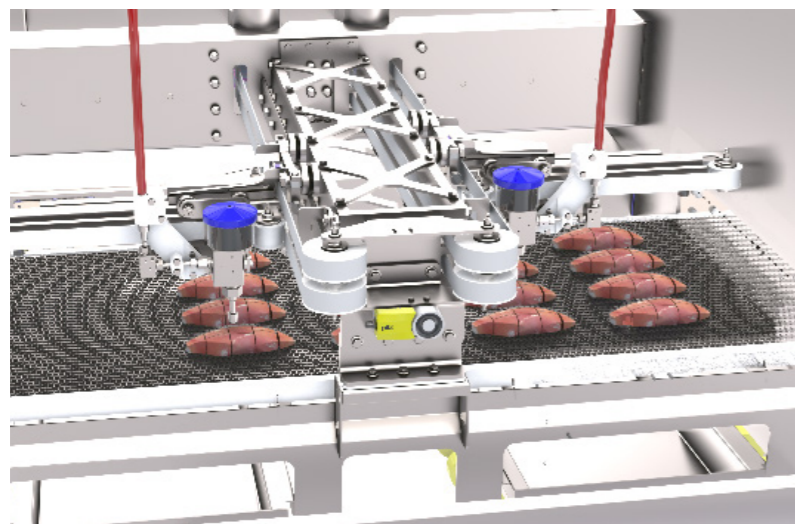


Overview

Applications & capacities

Product	Raw material	Application	PORTIO JET 2	PORTIO JET 4	PORTIO JET 6	PORTIO JET 8
			Capacity			
	Fillets ≈ 250 gram	Cubes 15 g	> 500 kg/hour	> 1000 kg/hour	> 1500 kg/hour	> 2000 kg/hour
		Cubes 30 g	> 1000 kg/hour	> 2000 kg/hour	> 3000 kg/hour	> 4000 kg/hour
		Strips 45 g	> 1500 kg/hour	> 3000 kg/hour	> 4500 kg/hour	> 6000 kg/hour
	≈ 120 gram deboned thigh meat*	Thigh patty / steak 85 g	> 1000 kg/hour	> 2000 kg/hour	> 3000 kg/hour	> 4000 kg/hour
	≈ 220 gram deboned whole leg meat*	Cubes / BLK 20 g	> 700 kg/hour	> 1400 kg/hour	> 2100 kg/hour	> 2800 kg/hour

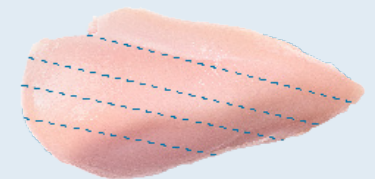
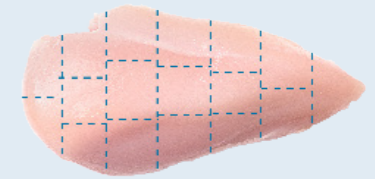
* With optional 6000 bar pump
 Specifications depend on product characteristics. Contact our sales team to find out the yield and capacity for your application.



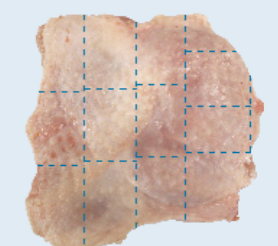
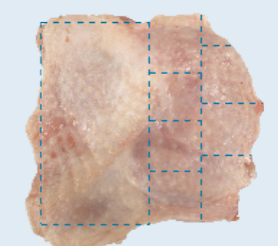
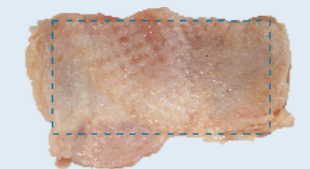
Scan to see the machine in action

Cutting patterns

Half-breast Portions

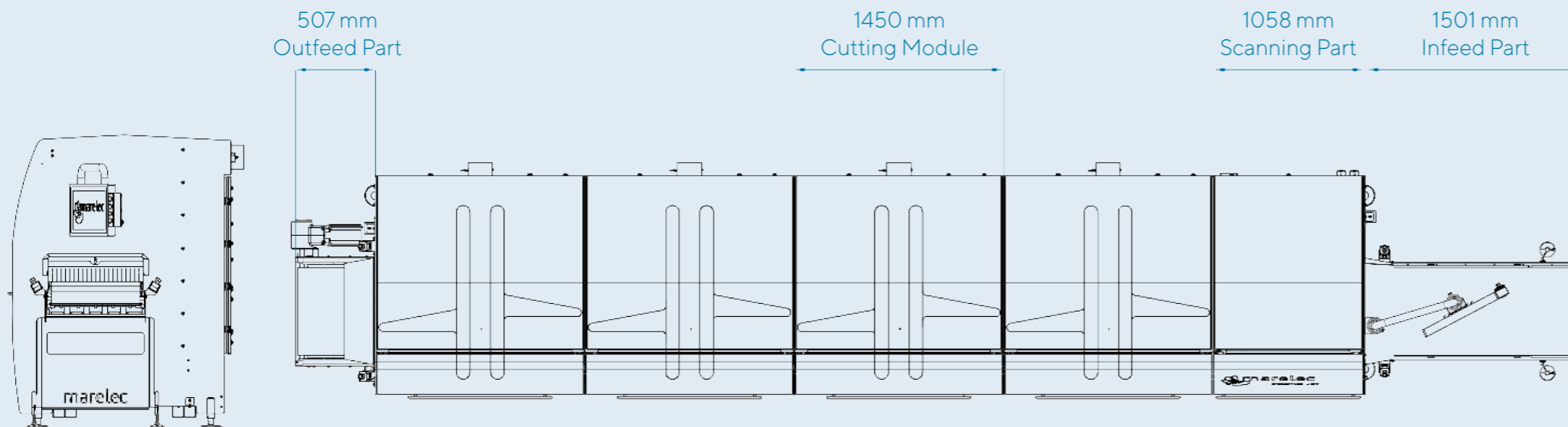
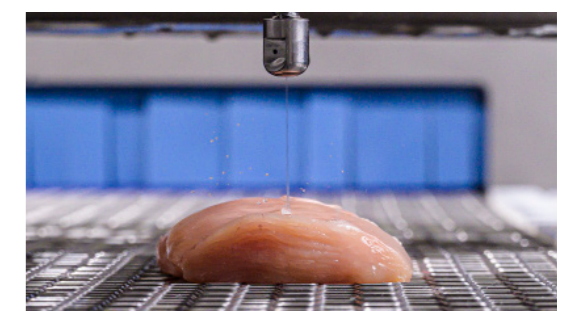
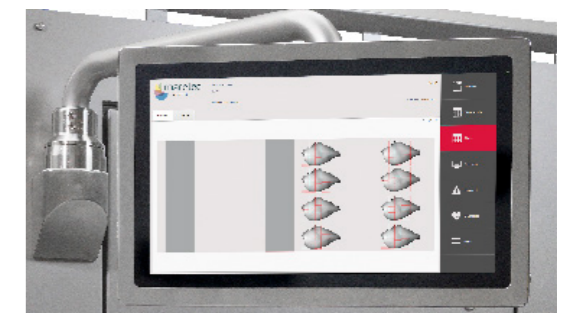
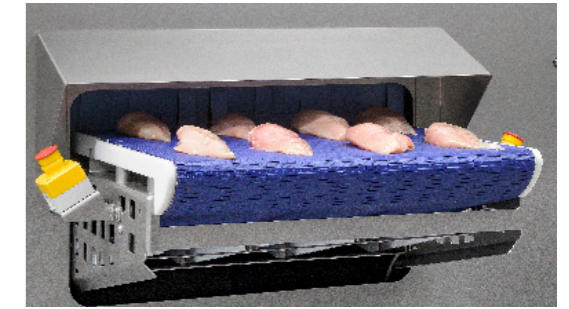


Leg Meat



Specifications

	PORTIO JET 2	PORTIO JET 4	PORTIO JET 6	PORTIO JET 8
L x W x H	4550 x 1657 x 2031 mm / 179 x 65 x 80 inch	6000 x 1657 x 2031 mm / 236 x 65 x 80 inch	7450 x 1657 x 2031 mm / 293 x 65 x 80 inch	8900 x 1657 x 2031 mm / 350 x 65 x 80 inch
Net weight	1500 kg	2000 kg	2500 kg	3000 kg
Belt width	600 mm / 24 inch			
Cutting stations	2	4	6	8
Belt speed	50 - 450 mm/s			
Power plug	3 x 400 VAC + N + PE 63A	3 x 400 VAC + N + PE 63A	3 x 400 VAC + N + PE 125A	3 x 400 VAC + N + PE 125A
Power	40 kW	40 kW	80 kW	80 kW
Water consumption	200 liter/hour	400 liter/hour	600 liter/hour	800 liter/hour
Maximum pressure	standard: 3800 bar optional: 6000 bar			
Userdefinable programs	299			





MARELEC Food Technologies

Redanweg 15 - 8620 Nieuwpoort - Belgium - T +32 58 222 111 - sales@marelec.com