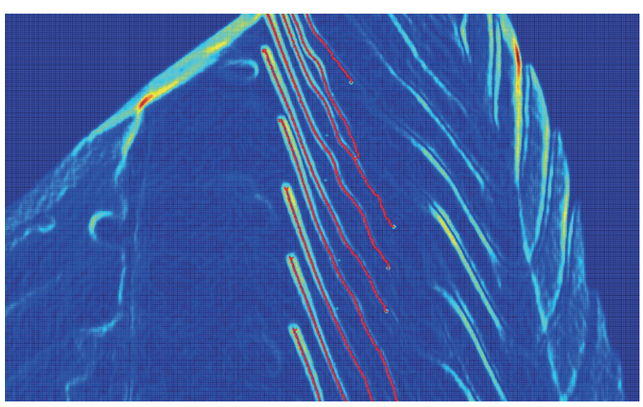
Precision portioning with a small footprint

FleXicut Whitefish

- Automatic pinbones removal
- Improves yield with precision portioning
- Easy-to-clean, compact design
- Simple interface control for maximum product flexibility

FleXicut Whitefish

Maximize portioning options with minimal footprint
Ideal for processors of various whitefish such as cod, saithe, pollock and haddock, the FleXicut offers maximum portioning flexibility in a compact solution.
The combination of two water-jet cutting robots and twin cutting blades provides cutting versatility, while intelligent software prioritizes high-value portions and minimizes giveaway.



Throughput varies depending on fillet size, with a capacity of 50 fillets per minute when processing 750g cod fillets of 450mm length.

Precision with x-ray vision
On entering the system, a high-definition X-ray detects bones as small as 0.2mm from two angles, creating 3D images of individual fillets.
The 3D vision system scans fillets for size, shape, density and weight, optimizing portions to customer specifications.

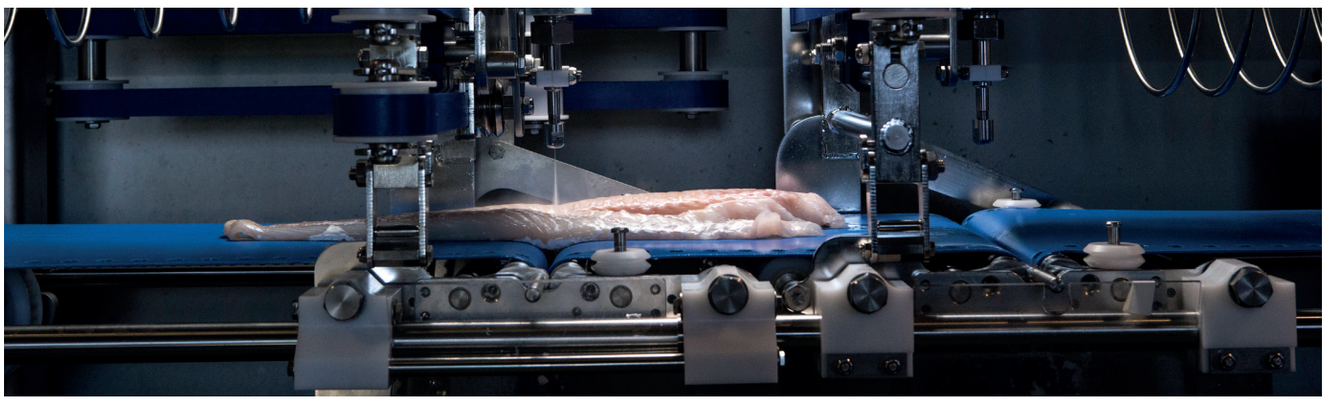
Cutting with class
Two water-jet robot cutters and twin blades work in tandem to deliver precision portioning. Intelligent software analyzes the 3D scan and automatically adjusts cut angles to the shape and thickness of each fillet to ensure precision bone removal and portioning that minimizes raw material cut-off.
The two water-jet cutting robots accurately removes pinbones with curved and angled cuts, while the twin blades make straight cuts according to predefined cutting patterns, specific weight, length and shape.

Cutting patterns example

1.

2.

3.



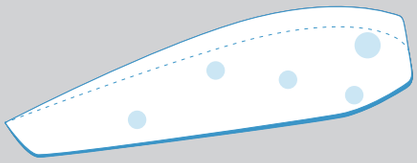
The FleXicut Whitefish maximizes

The ultimate all-rounder with exceptional portioning flexibility and a small footprint.

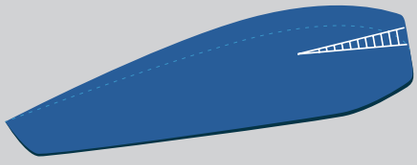
FleXisort outtake conveyor
Portions exiting the FleXicut are sorted into the relevant product stream

Precision cutting
Water-jet robot cutters cut angles and curves while twin blades make straight cuts for maximum portioning options

Pre-trim
Remove fillet defects



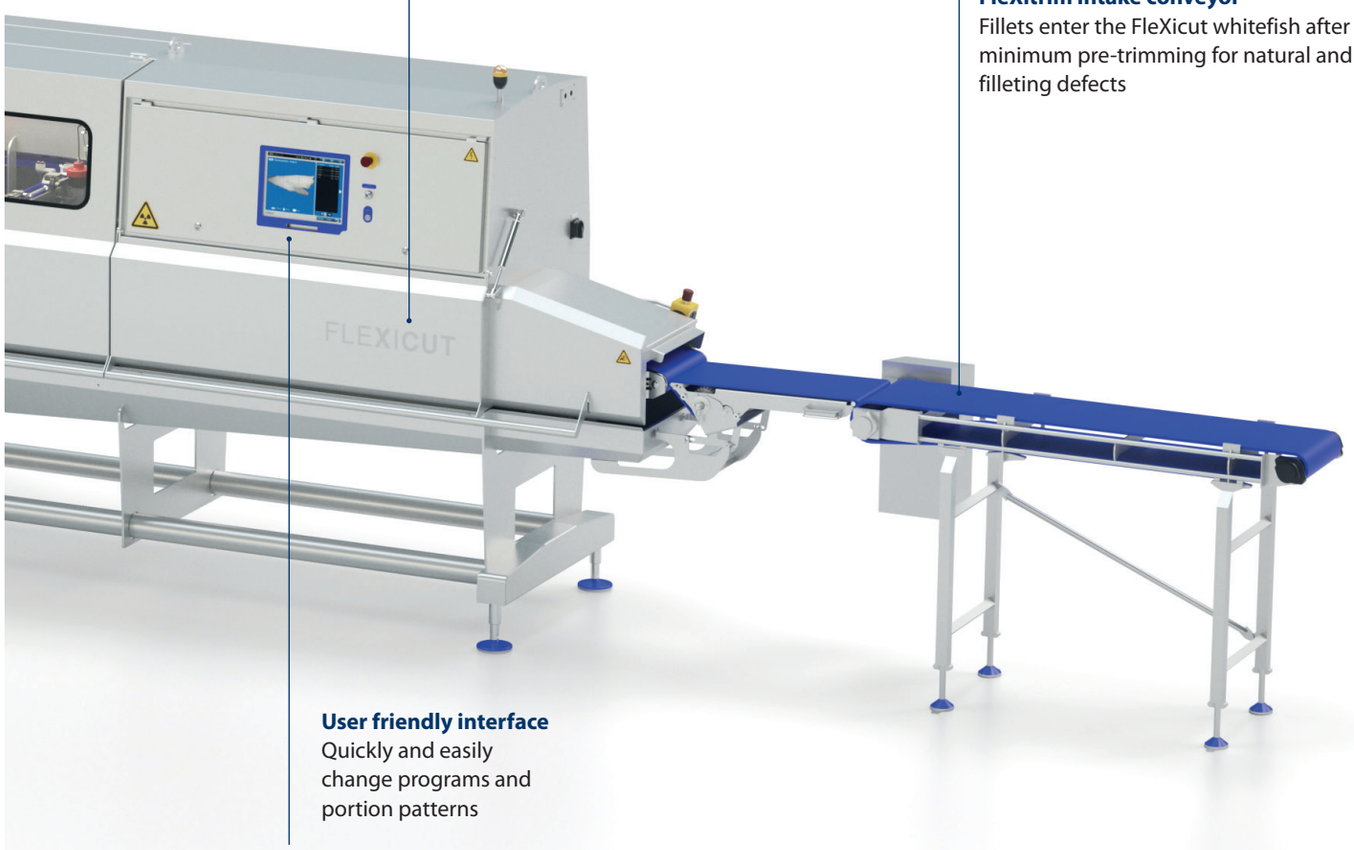
X-ray
Fillets scanned for accurate bone detection



; yield with precision cutting

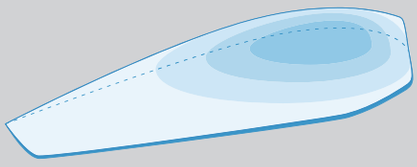
X-ray vision
A high-speed, high-definition x-ray locates bones as small as 0.2mm. 3D scanning records the weight and shape of individual fillets

FleXitrim intake conveyor
Fillets enter the FleXicut whitefish after minimum pre-trimming for natural and filleting defects

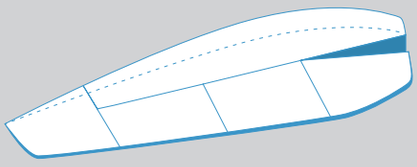


User friendly interface
Quickly and easily change programs and portion patterns

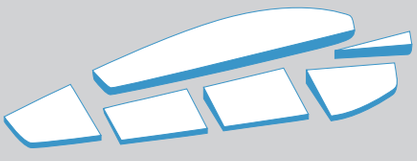
3D scan
Each fillet is scanned for shape and density



Cut calibration
Intelligent software analyses x-ray and 3D scans to calculate cuts for optimal portioning



Water jet and portioning
Accurate and automatic pinboning and portioning



Intelligent product distribution

Intelligent production distribution
Integrated with the FleXicut, the FleXisort and FleXitrim enable full line traceability and improved throughput and yield with quality inspection reporting available in real-time.

The FleXitrim equalizes the flow of untrimmed whitefish fillets to operators. Delivered to bottom-lit inspection tables operators can easily remove natural and filleting defects before the fillet is portioned.

Utilizing FleXicut data, the FleXisort automatically allocates whitefish portions to multiple product streams using modular drop-down mechanisms. Increasing throughput speed and efficiency while reducing labor requirements.

TECHNICAL FEATURES	
Capacity*	50 fillets/min
Fillet height	45mm
Fillet width	255mm
Fillet lenght	900mm
Water consumption (average)	12 liters/min
Dimension LxWxH	4815x1620x2215mm
Weight	1600kg
Electricity standard	3x400V +N + PE 50Hz
Compressed air	100 liters/min at 6 bar

* At maximum belt speed of 0,42m/s, based on a fillet length of 450mm, with 50mm between fillets

Software

Benefits of Innova for the FleXicut

- Lets you change settings quickly and remotely in response to demand
- Collects and analyzes real-time and historical data, providing vital insights
- Powerful editor for creating and maintaining cutting programs
- User-friendly, centralized management of material flow to other destinations

Monitor and control fish processing

The Innova module for the FleXicut and FleXicut Whitefish lets you monitor and control your pinboning, trimming and portioning in real time. Dashboards provide live feedback for a clear overview of processing, meaning you can quickly and easily make adjustments to ensure production is running optimally. Easy-to-use program management allows you to control FleXicut settings remotely and for multiple devices.

Get operational insight

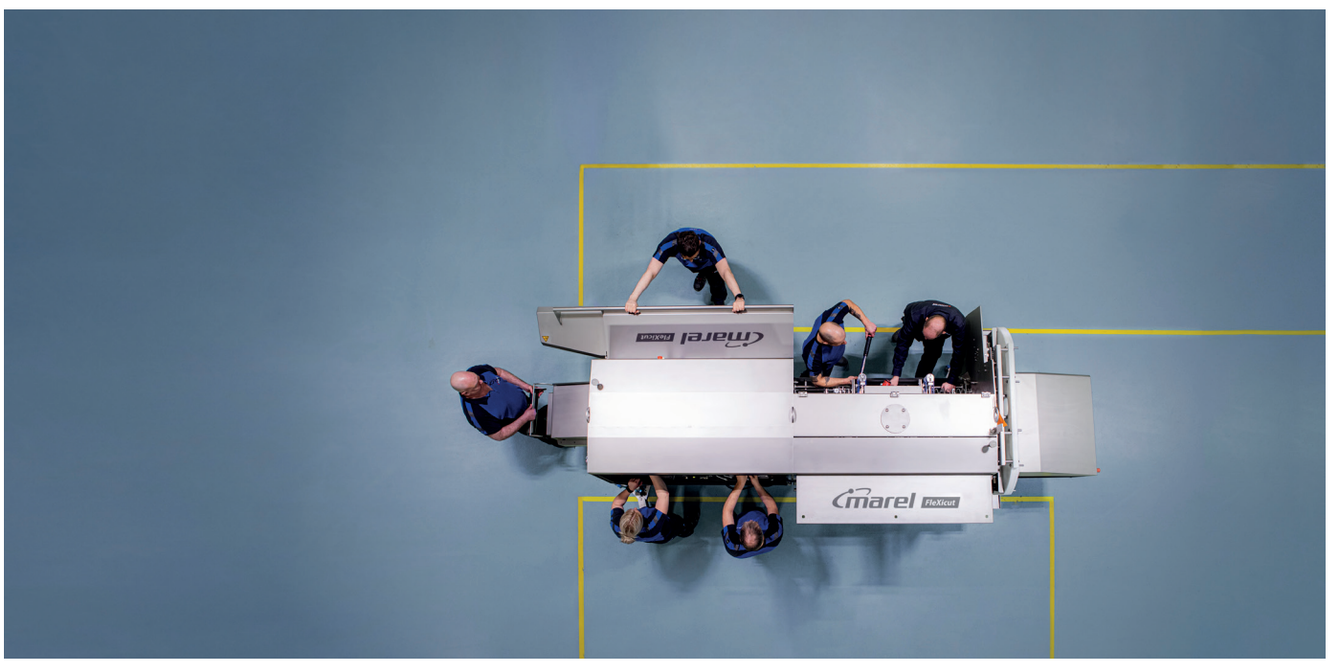
Vital performance data is collected and stored in the Innova database, enabling you to analyze and optimize your process. This statistical analysis takes away the guesswork and allows you to make effective, data-driven decisions.

Connect your business

Innova software can be implemented stand-alone with your FleXicut, or it can be integrated with other Marel processing equipment across a full-line solution. Valuable KPIs provided by Innova help you make intelligent decisions to maximize your results.

Service

Marel offers a range of service solutions to prevent failures, maximize performance, or in case of unexpected breakdowns, remote or onsite assistance.
Marel has offices in 30 countries across all regions and a global network of highly skilled professionals that provide remote as well as onsite service support. We provide quality spare parts and customized service agreements for our customers to ensure optimal performance of Marel equipment.



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