# MARELEC MC Grading systems





- High precision
- High capacity
- Hygienic
- Customized
- Low maintenance





Various infeed models -

box tipper



MC3 high precision weighing unit with open structure



H-design for fast and intensive cleaning

MARELEC MC grading systems consist of an infeed belt, a dynamic weigher and a grading belt.

MARELEC sets the new standard for grading systems.

The **MARELEC** solution leads the way in the branch thanks to the various infeed, dosing and grading possibilities.

For use at sea the dynamic weigher is fitted with a movement compensation device acting in all directions.

#### **Smart Batching Software**

The MARELEC MC grading system minimizes excess weight by selecting the correct product for each batch and by continuously confirming or adjusting the total weight per batch.



#### **FUNCTIONS**

- Grading according to weight
- Grading according to number
- Grading according to various sizes
- Minimum overweight ('smart batching')
- Grading with product identification (V3 camera)

#### MC grader after PORTIO portion cutter











Catching arms for optimum product protection

Various output models

**Remote service** 



#### EXECUTION

- Stainless steel (choice between AISI 304 and 316)
- FDA approved food plastics
- IP 68 load cells / electronics

#### Modular belts

- Drum motors
- User friendly software

#### SPECIFICATIONS

- Dimensions: 50 mm 2 m long / 100 - 800 mm wide
- Range: 10 grams 20 kg
- Accuracy: as from 0.3 gram
- Speed: 30 180 pieces / minute
- 999 programs in memory
- On shore / off shore

Optional tables & take away conveyor for finished products

#### **Option:** label printer







# SEAFOOD & AQUACULTURE





## SALMON

Yield and speed are important for any processor in the salmon industry. Marelec covers a range of weighing and grading systems from the reception of the fish to the end of the line. This means that the weight of every single fish or total amount can be recorded at the reception. This is also possible after gutting, filleting, skinning,... The MARELEC equipment allows to divide the fish flow into different sizes, qualities or even species. At the end of the line, the packing can be done in tubs, boxes or bags, depending on the need. Intelligent batching is available on all machines to minimize giveaway or excess weight.

## TURBOT

Size grading plays an important role in turbot cultivation. To ensure optimal fish growth different sizes need to be separated on a regular basis. With this in mind MARELEC developed a gentle weighing and grading method. The systems have tilting conveyors and low angle gliding slopes which allow accurate weighing and grading without stressing the turbot. Special attention was given to the surface of the belts to ensure all fishes remain in a stable position. An efficient and fast weighing and grading method that meets the needs of the market.





## Several countries located around the Mediterranean sea cultivate fish such as sea bass and sea bream. Automation and cost-effective

**BASS & BREAM** 

fish such as sea bass and sea bream. Automation and cost-effective production are the key elements to ensure a continuous growth of both the fish industry and its companies. To ensure high-quality end results, the products need to be processed as quickly as possible after catch. Based on this perspective Marelec has successfully delivered grading and batching lines to Croatia, Tunisia, Turkey, Greece, Italy, Spain, ...

## **OYSTER**

Oysters have many different shapes, sizes and weights. MARELEC can offer different infeed systems from small to very high capacity. The size can be determined by weight, surface or volume. To analyze the shape / volume, MARELEC uses a high speed camera MARELEC V3. The V3 camera can work together with the weighing unit to separate different shapes in combination with weight. This gives an added value to the product.



## PROJECTS



## DESIGN

Reliable – extremely hygienic – service friendly – cost effective meeting the demands of the market: those are the keywords our designers bore in mind while sharpening their pencils to design the current generation of graders from scratch. Whether we talk about in-feed systems, weighing technology, grading and batching systems, or custom-built solutions: the targets are there. The result is complete satisfaction for many customers – how about you?

## MARINE

Adding value at the very start of the processing line can be done by grading on board. On-board graders have an active motion compensation that always gives accurate readings even at the toughest seas. As space on a fishing vessel is even more limited, MARELEC offers a tailor made design that suits the wishes of the customer. The direct contact between the MARELEC design team and the customer results in an open conversation and allows fast decision-taking. Even at sea, MARELEC can provide remote service in case technical assistance is needed.





## CUSTOM

Each processing plant requires a specific logistic process. From the very beginning of receiving the raw material and, separating it into different qualities, species or sizes, MARELEC offers a solution. Feeding the products to the grading line or transporting the full boxes, tubs or bags to the packaging area, all is possible. Logistic solutions range from receiving orders, production planning and stock management to printing shipping documents or invoices.

## STATIC

Static weighing systems can be used for different purposes: to weigh a single fish or a box, a batch of fishes or even to capture the weight for grading on a custom built grading line. A big advantage is infeed optimization also for larger fishes, quality and/or species grading.





### IN BALANCE WITH YOUR NEEDS

MARELEC Food Technologies started with marine electronics for the trawler industry. Soon after, robust yet reliable weighing and sorting systems for the fish industry were developed both for use on shore as well as at sea. The unique features such as the high speed precision and the custom design were then integrated into solutions for the meat and poultry industry. Nowadays, we are world leading in designing and producing highly advanced weighing and sorting systems as well as intelligent portioning machines. A team of talented and enthusiastic designers and technicians are responsible for the in-house production of our systems. We focus on durable, innovative and flexible solutions. Furthermore we have a network of international agents in over 30 countries – who are available whenever someone needs advice, a fast delivery and service after sale.

#### MARELEC

**Food Technologies** 

marelec

IN BALANCE WITH YOUR NEEDS

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