Intelligent Portion Cutter

PORTIO

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sales@marelec.com
www.marelec.com

OPTIONS

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Portion 1</th>
<th>Portion 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product dimensions:</strong></td>
<td><strong>Product dimensions:</strong></td>
</tr>
<tr>
<td>800 x 240 x 150 mm</td>
<td>800 x 240 x 150 mm</td>
</tr>
<tr>
<td>254 mm</td>
<td>254 mm</td>
</tr>
<tr>
<td>adjustable till 40 cm/s</td>
<td>adjustable till 40 cm/s</td>
</tr>
<tr>
<td>up to 8 cuts/s</td>
<td>up to 8 cuts/s</td>
</tr>
<tr>
<td>stainless steel AISI 304 and FDA approved food plastics</td>
<td>stainless steel AISI 304 and FDA approved food plastics</td>
</tr>
<tr>
<td>modular type</td>
<td>modular type</td>
</tr>
<tr>
<td>940 kg net</td>
<td>1060 kg gross</td>
</tr>
<tr>
<td>1090 kg net</td>
<td>1250 kg gross</td>
</tr>
</tbody>
</table>

**Construction:**
- IP67 with integrated electronics
- MARELEC Z1 with UTP TCP/IP-connection
- 3 x 380 V + N / 50-60 Hz / 5 kW
- 6 bar (APH)
- designed for optimal cleaning
to meet extreme hygienic standards (CIP integrated)

**Power supply:**
- MARELEC P1
- standard optimisation software
- internet direct connection for remote flexible servicing

**Air supply:**
- MARELEC APH
- product holder
- MARELEC BH1
- back holder

**Software:**
- MARELEC MC1
- checkweigher for precision optimisation
- MARELEC M
- grader for fixed weight packages
- MARELEC OH1
- software for order handling

**Connectivity:**
- Selections keyboard
- Indicator
- Connectivity

**Selections:**
- PORTIO 3:
  - 3 camera system for highest accuracy with round objects
  - 360° view

- MARELEC MC1:
  - checkweigher for precision optimisation

- MARELEC M:
  - grader for fixed weight packages

- MARELEC OH1:
  - software for order handling

- MARELEC APH:
  - product holder

- MARELEC BH1:
  - back holder

**Portion 1: General dimensions**

- Belt width: 254 mm
- Belt speed: adjustable till 40 cm/s
- Cutting rate: up to 8 cuts/s
- Construction: stainless steel AISI 304 and FDA approved food plastics
- Conveyor belt: 800 x 240 x 150 mm
- Weight Portio 1: 940 kg net
- Weight Portio 3: 1090 kg net
The PORTIO combines state of the art technology for creating a high precision yet economic portion cutting machine. It is suited for fresh products such as fish fillets, whole fish, meat and poultry products. Following the product type, different product fixation systems are possible. Different knife types, suited on the product, can be used.

A product is fed on the infeed belt. A three dimensional laser scanner then calculates its volume. A preset weight and shape frame is selected from the program menu. The portion computer then calculates where to cut.

An optional checkweigher can optimise the precision with changing product characteristics.

The machine can be completely opened for easy cleaning. The belts can be taken out for separate cleaning.

For maintenance, easy obtainable spare parts have been selected. This guarantees lowest possible maintenance costs. All motors and encoders are situated away from the wet area, which ensures a long lasting lifetime.

### FEATURES

- **High speed cutting**: fixed weight, fixed thickness
- **High precision**, minimal give-away
- **Flexible software**
- **Fast and easy to clean**
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**Productivity**

Operated at its rated capacity, the PORTIO can perform the work of up to 5 people. Robust and highly reliable, the PORTIO requires significantly less maintenance than conventional machines. Easily adaptable to new products, it cuts to a level of accuracy and consistency no human could ever hope to achieve, meaning higher yields, less trim, improved product quality, increased throughput, and a short payback time.

**FEATURES**

- **Intelligent portion cutting**
  Pre-programmed calibration enables you to switch product set-ups in seconds. Specialised programs ensure you a highly flexible portioning solution that always makes the right decision prior to the actual cutting. The portion cutter can be adjusted from the colour screen control panel at any time during the portioning process, which improves performance.

- **Ultra-fast cutting**
  The knife makes up to 600 fixed weight cuts per minute.

- **Modular belt**
  The modular belt combines perfect synchronisation with unrivalled lifetime.

- **Unmatched accuracy**
  The latest in laser vision technology, featuring a 100 Hz camera, ensures unparalleled accuracy.

- **No use of water**
  The open knife guide does not require continuous use of water. This reduces the risk of cross-contamination.

- **Extremely hygienic**
  The Portio is designed and built to comply with the most stringent hygiene standards. A CIP (cleaning in place) system guarantees a fast cleaning procedure for both belts and knife guidance.

- **Product fixation (APH)**
  Four individual flexible arms hold down each product on top which keeps it stable and helps prevent it from moving on the conveyor belt during cutting. The APH is driven by drummotors, no transmission chains, and is easily adjustable.
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**FEATURES**
- High speed cutting: fixed weight, fixed thickness
- High precision, minimal give-away
- Flexible software
- Fast and easy to clean

**APPLICATION**

<table>
<thead>
<tr>
<th>product</th>
<th>weight</th>
<th>capacity *</th>
<th>precision *</th>
</tr>
</thead>
<tbody>
<tr>
<td>meat</td>
<td>55 - 150 g</td>
<td>up to 1200 kg/hour up to 2700 lb/hour up to 1600 kg/hour up to 3300 lb/hour</td>
<td>2 g</td>
</tr>
<tr>
<td></td>
<td>2 - 5 oz</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>150 g and larger 5 oz and larger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>poultry</td>
<td>55 - 150 g</td>
<td>up to 1000 kg/hour up to 2200 lb/hour up to 1400 kg/hour up to 3000 lb/hour</td>
<td>1.5 g</td>
</tr>
<tr>
<td></td>
<td>2 - 5 oz</td>
<td></td>
<td>1.5%</td>
</tr>
<tr>
<td></td>
<td>150 g and larger 5 oz and larger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fish</td>
<td>55 - 150 g</td>
<td>up to 1000 kg/hour up to 2200 lb/hour up to 1400 kg/hour up to 3000 lb/hour</td>
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* Standard deviation. Actual values can vary according to fat percentage, structure, size...
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