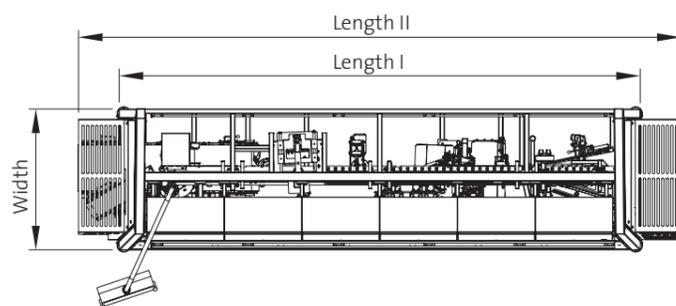




Technical data

Capacity	Max. 1,000 middles/hour
Products	Middles from porks with a slaughtered weight from 70 to 120 kg
Version	Right or left side machine with operator panel at the inlet end of the machine
Length	I: 5,700 mm II: 6,600 mm
Width	1,540 mm
Height	2,350 mm
Products	Pork middles - left or right
Product temperature	Min. 3°C - max. 7°C
Electric control	Stainless steel cabinet Complete PLC control Siemens S7-1500 Fail Safe with graphic display
Voltage	3x400V, 50 Hz
Power	IN 50 Amp
Prefuse	63A
Consumption	20,8 kW
Air consumption	6,5 m3/h by a capacity of 1000 middles/hour
Air supply	Min. 6 bar

Technical data may be subject to changes. The equipment is CE approved and designed in accordance with the EU regulations to meet the strictest demand on health and safety.



**DANISH MEAT
RESEARCH INSTITUTE**

Hygiene and maintenance

The equipment is designed to meet the high and strict demands in the meat industry. All conveyors are delivered with a belt lifting system for easy cleaning and maintenance purpose.

Data collecting

With a constant focus on optimization, up-time and flexibility, the need for correct data collection is high. With the Frontmateg solution we ensure that our customers get high return on their projects.

OEE

Collection of machine operation data, to calculate OEE (Overall Equipment Effectiveness) through our MES (GO.OEE).

Preventive maintenance

For maintenance purpose data is collected to make scheduled maintenance, through our Scada system.

Traceability

Traceability from batch and ID-numbers is possible through the machine, by MES solution.

Cutting line for pork middles Type AML-1100



Fully automatic cutting of pork middles

Fully automatic cutting line of pork middles

As market leader within fully automatic cutting and deboning of pork, Frontmateg offers a unique machine for fully automatic cutting and partly deboning of pork middles. The machine is based on optical, servo-electric and mechanical principles, which fully automatically divides the middle into belly and loin/back. And the loin can also be deboned.

Functionality

The machine is provided with servo/frequency-controlled motors for most of the moveable parts and knives. This method gives the machine a maximum capacity and optimal accuracy compared to any manual system. Furthermore, a minimal energy consumption is achieved.

Description

The machines receive the middles, left side middles in a left side machine and right side middles in a right side machine, from a primal cutting line or a conveyor system with the neck end first. In the inlet unit the rib top is pushed against the gripper chain, to ensure the spine is straight and fixed on all joints. Each individual middle is measured with various electro-mechanical measuring devices.

Recipes

Each customer can set up a specific recipe for cuts needed on their production line. The selected operation and control principle allow free connection and disconnection of all cutting tools (feather bones, cutting off meat, ribs, deboning of loins, loin ribs, rib top, string of pearls).

Cutting principles

- Loin and belly are separated with a circular knife
- The ribs are divided with the circular knife to split loin and belly
- Deboning of the loin is done by up to 5 fixed knives
- Loin ribs and feather bones are loosened and cut off the chine bone
- The subsequent rib top knife is used according to needs to cut off the rib top or to cut off the string of pearls
- All cuts, bones and meat are automatically transported out of the machine

Why the Frontmateg AML-1100!

- Fully automatic line
- High capacity and accuracy
- Clean cuts with reduced bone dust
- Optimized yield and labour savings
- Reduced product loss
- Low maintenance
- Hygienic design with easy cleaning access

Contact

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Machine modules of the AML-1100

1. Inlet belt
2. Infeed arrangement for fixation of chine bone on chains
3. Measuring units
 - 3.1 Registration of front position of the middle in the gripping chain conveyor
 - 3.2 Length measuring of the middle
4. Backfinning knife for featherbones
5. Cutting arrangement for featherbones
6. 2 x circular meat knife – loin / belly
7. Deboning arrangement for loins – 5 knives
 - Knife 1 – cutting under featherbone and backbone
 - Knife 2 – cutting under backbone against loin ribs
 - Knife 3 – cutting flat loin ribs - fixed for cutting off flat loin ribs or rotating for leaving the flat loin ribs on the loin
 - Knife 4 – cutting loin / loin ribs
 - Knife 4.1 - cutting loin / loin ribs
8. Circular rib knife – loin ribs of chine bone
9. Circular knife for chine bone / string of pearls
10. Outlet belt for:
 - Loin – partly deboned for final deboning, trimming and control
 - Belly – incl. belly ribs
 - Bone parts - chine bone, loin ribs, pearl string and feather bone



Inlet side of automatic cutting line for pork middles or loins



Outlet side of right and left side machines in-line

Specifications of the middles

The machine is foreseen to handle middles incl. rind, from porks with a slaughtered weight between 70 and 120 kg. Middles must be split in the center of the spine with a tolerance of max. +/- 3 mm at the ribs and +/- 5 mm at the flat bones. The middles must have at least 20 mm left on the feather bones at the ribs. The core temperature of the middles must be between 3°C and 7°C. Further specifications available on request of quotation.



Advantages with the fully automatic primal cutting line

- A high up-time on our equipment without compromising on the quality
- Optional recipes which can be customized, to improve your yield
- Short payback time on investment
- User friendly operator panels
- Low maintenance
- The Frontmatec software interfaces with all types of monitoring systems

