

Massage plant

2000, 3000, 4000, 6000, 10000 and 12000 litres

Process description

Massaging is one of the most important processes in the preparation of processed meat products in relation to colouring and absorption of additives. The key words are: Time consumption, yield and appearance of the meat product. The massage plants have been designed to ensure efficiency, reliability, economy, flexibility, and foodstuffs guarantee.

The massage drum is intended for continuous operation with 95% vacuum.

The massage plant consists of a pivoting frame with a hydraulically operated massage drum. Through two swivel points the frame has a fixed pivoting connection to the floor frame of the plant where the hydraulics and vacuum pump are placed. The construction enables the rear end of the massage drum to be raised or lowered. This function applies when the massage plant is filled, emptied or when used for tumbling.

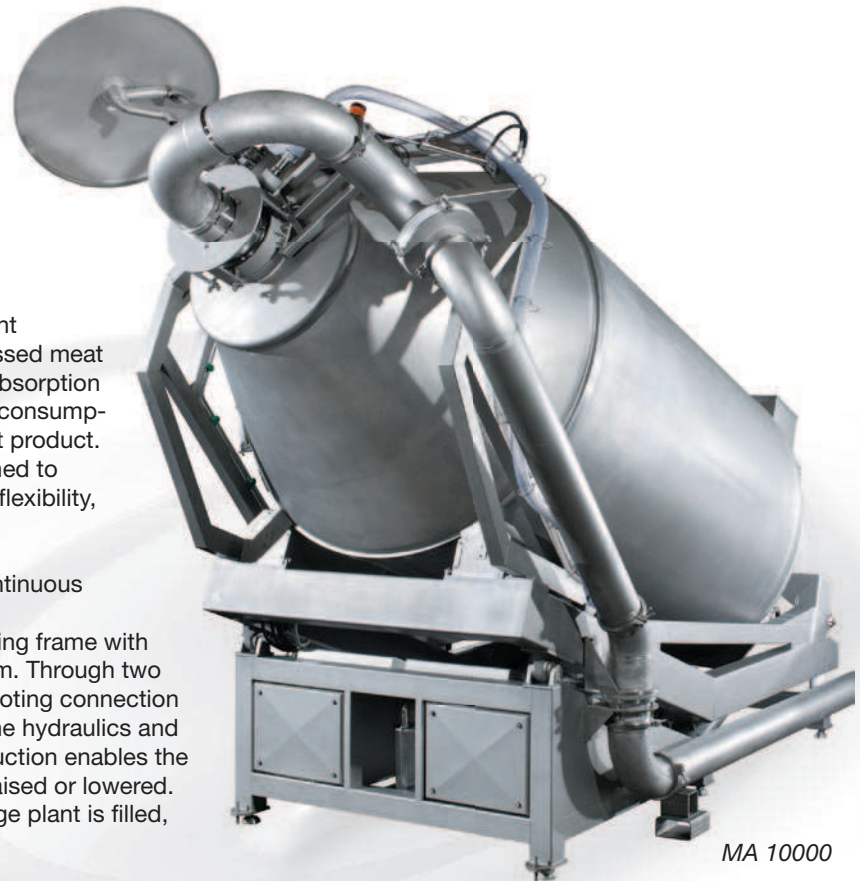
Working process

1. The massage plant is filled with meat products from either a loader, swing loader or by a vacuum filling system, from hoppers, via hose connection or a fixed stainless pipe connection.
2. The lid of the massage plant is closed manually or by a hydraulically operated closing system.
3. Select the program for the required process on the panel of the computer. Dependent on the chosen system, it is possible to program time, temperature, rotation direction of the drum, rotation speed, % vacuum and tumbling.
4. If the plant is equipped with cooling/heating system the temperature of the meat can be measured during the process and the data is transmitted to the PLC control panel.
5. The massage process takes place under vacuum. If a re-feeding system is required, it will be possible to add trimmings, brine or other additives during the massage process.
6. The massage drum is equipped with carriers for hard and gentle massaging. The carriers are designed in a way that there is a minimum of meat and fat residue after each completed cycle.

7. Emptying of the massage plant is done through drum tilting, with the possibility of slow rotation. Contrary to the „spiral systems“ our system prevents air from being whipped into the meat during the emptying process.

Optimization

- It is possible to place the massage plant on weighing cells to meet the recipe requirements and calculate yield.
- As additional equipment we offer cooling of the drum. The cooling is a closed recirculation system in the carriers.
- SFK has a patented working process allowing for the massage system to be used for defrosting of meat products. This is made possible during massaging as the juice is re-massaged into the meat. With no loss of meat juice, the yield is typically increased by 3-10%.



MA 10000

When using our technology it is possible to obtain the following advantages:

- The brine works as a protective membrane on the inside of the drum.
- Due to the salt concentration of the brine the quantity of bacteria in the meat will be very low.
- Meat juice is massaged into the meat.
- Even though the brine temperature is high (low boiling point under vacuum) the temperature adjustment of the plant will, combined with added heat and cold in the carriers, ensure that the proteins do not coagulate.



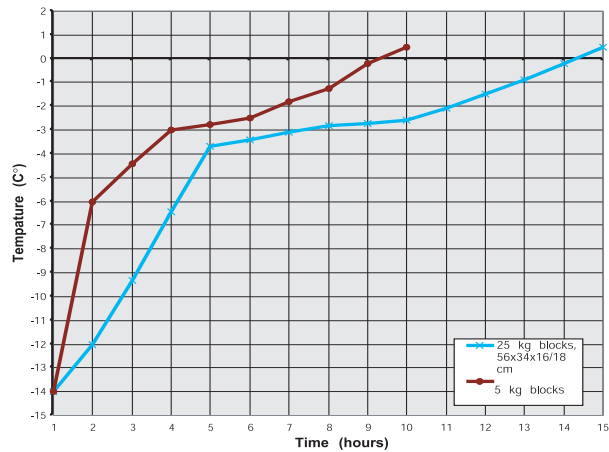
Machine advantages

- The message plant is controlled by a PLC (Allen Bradley) with colour screen (IP65) offering you the possibility of programming the following:
 - Required vacuum percentage.
 - Rotation speed.
 - Hard and gentle massage.
 - Time for massaging , pauses and total time.
 - Temperature settings.
- Possibility of collecting data.
- High filling degree - up to 60%.
- Graphic display of temperature curve and vacuum curve.
- Increased profitability with the specially designed carriers that offer the possibility of combining quick, hard, slow and gentle massage of the product in different stages.
- Drum movements, rotation, filling, emptying and mixing are all hydraulic – this offers very slow (and gentle) movement with rotation speed as low as 1 rotation/minute.

Hygiene

- The machine conforms to the strictest hygiene demands by providing easy access for effective cleaning.
- Purchase of CIP cleaning is an option.

Defrosting of hams



Safety

The message plant conforms to the strictest rules regarding health and safety Standards.

Preconditions

No preconditions.

Legal preconditions

The message plant is CE marked and complies with the HACCP regulations.



MA 3000

Technical data subject to alteration



SFK Systems A/S · Indkildevej 2-4 · DK-9210 Aalborg SØ
 Tel. +45 7634 2700 · Fax +45 9814 9290 · mail@sfk.com · www.sfk.com