



Macaron Queen
Order Confirmation 879

May 1, 2023
Page 2

INCLUDED IN DELIVERY:

- 1.) Completely welded stainless steel construction, 10 Gauge with 14 Gauge for doors
- 2.) Safety doors with interlocks
- 3.) Sanitary full width product carry arms with product “seats” (patented)
- 4.) #1 VDE piston type depositor, with 9 pistons, rotating valves, highly accurate, easy to clean.
- 5.) #2 VDE piston type depositor, with 9 pistons, rotating valves, highly accurate, complete with special nozzle for ring depositing.
- 6.) Extra wide catch pan, to be used for both depositors.
- 7.) In-line mechanical Macaron capping system for gently and accurate placing tops onto bottoms.
- 8.) Automatic pan loading system finished product, complete with pan-shifting function.
- 9.) Integrated controls for complete system, AB Rockwell for servos and PLC
- 10.) Additional servo motor, gearbox and servo drive for additional depositor.
- 11.) Upgrade Rockwell PLC, for the control of a total of 6 axis (5 servo and 1 encoder)
- 12.) Lexan safety covers.
- 13.) Two sanitation carts, one for each depositor head.
- 14.) VDE Hopper Topper. All stainless-steel, with power lift for easy changing tubs.
- 15.) Powder sifter, pneumatically controlled, timing set by PLC, set by HMI.

DESCRIPTION OF PRODUCTION:

Maximum product width	: 64mm (2.50”) or to be discussed
Maximum product length	: 100mm (4.00”)
Possible biscuit shapes	: Heart shape, Star shape, square, rectangular, round,
Number of lanes produced	: 9 lanes
Number of lanes through machine	: 9 lanes
Number of lanes discharging machine	: 9 lanes
Maximum throughput sandwiches	: 13,500/hour, based on 25 sandwich rows/minute

Macaron Queen
Order Confirmation 879

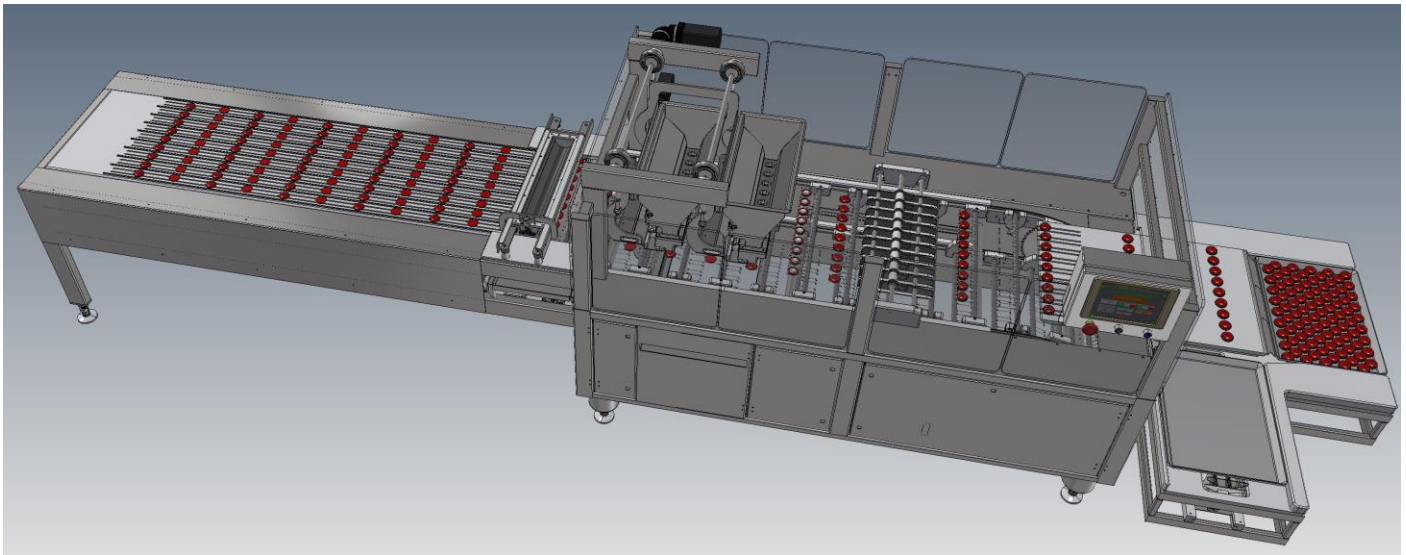
May 1, 2023
Page 3

Showing the machine with both depositors installed.

By the Ring-Filling depositing, the “ring” depositor will be number 1.

Both depositors will be servo controlled moving up-and-down for accurate placing, while the complete cradle will move with the cakes during depositing, also servo controlled.

Each depositor will be controlled with an individual servo motor and drive.

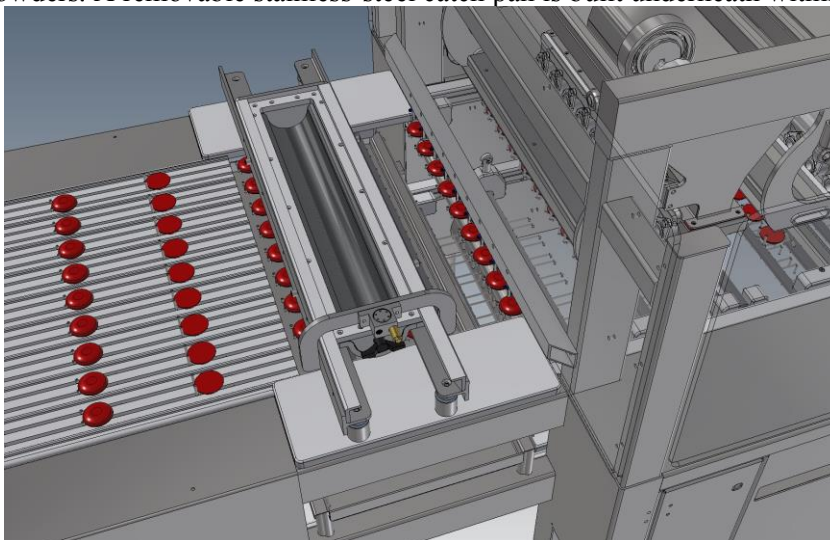


Pan filled with 90 products

The machine can run easy with either one or both depositors placed.

Installing and/or removing depositor can be done in few minutes, without any tools.

Powder sifter, pneumatically controlled, provided with two separate holding screens for different (salt, cocoa) powders. A removable stainless-steel catch pan is built underneath within the frame.



Macaron Queen
Order Confirmation 879

May 1, 2023
Page 4

DESCRIPTION EQUIPMENT:

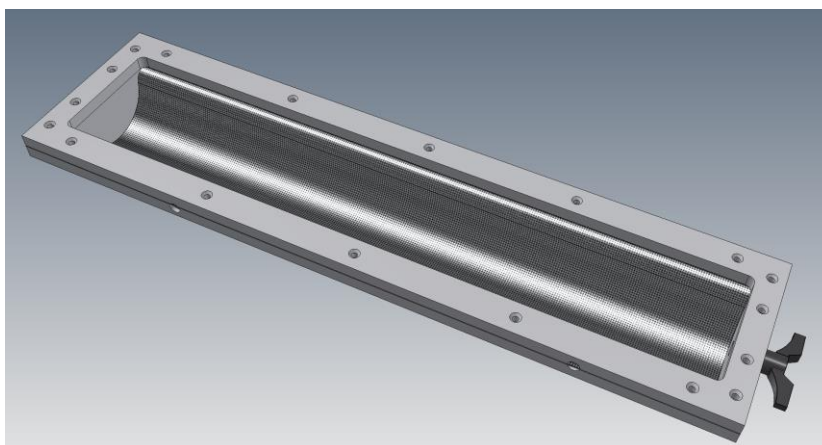
SANDWICH MACHINE:

In-Line sandwiching system, provided with unique sanitary pie or biscuit carry system. Each row, the tops and the bottoms, are carried by full width carriers, provided with individual stainless spring-steel "product carriers". Heavy duty 3/4" pitch stainless steel conveyor chains away from the cream stencil area are guided in UHMW chain guides for a neat, clean and long-lasting trouble- and maintenance free production. Heavy duty gear motor drive provides the continuous transport.

The "top" cakes are transported with stainless-spring steel carriers. These spring steel (stainless) carriers will be easier to clean, while by accidental depositing when no product is underneath, no filling will be left on the carriers. Using a simple integrated cam in the chain guides, the top cakes will be gently lifted onto a "waiting station."

The additional powder sifter can be used for powder sugar, salt, cocoa. We will supply two holding sifters; these will simply slide in- and out- the unit. Each sifter will be tested with the products as per sample shipped by Macaron Queen. It is important that the product to be sifted does not clog. We have had poor experience with certain sugars, which "caked" in the sifter.

When using the sifter for the bottom cakes (salt prior to depositing the filling, using the HMI and calling for this particular product will set the unit to sift over the "bottom cakes" only. When using the sifter for cocoa, for on top of the "top cakes", this recipe will be chosen.



The "bottom cakes", provided with cream are carried with stainless steel concaved seats provided with tall lugs. Once the bottom cakes are underneath the waiting top biscuits, the tall lugs will push also the top cakes and both will be merged accurately together, simply effortless, no adjustment required.



Macaron Queen
Order Confirmation 879

May 1, 2023
Page 5

DEPOSITORS:

VDE 9-piston type depositors, highly accurate, easy to adjust for weight and simple to clean: Complete with stainless-steel hopper, which can be simply detached for cleaning. Depositing volume as well as target and following can be simply adjusted and stored in “Recipe” HMI.

AUTOMATIC PAN LOADING:

An empty pan will be laid-up at the discharge station. Once needed, this pan will be brought into the system automatically, after which rows of finished product will be loaded.
The pans will be pneumatically shifted right and left (choice at the HMI), which will give extra product loading, in combination with a short row-to-row distance.
The number of rows in the pan is adjustable at the HMI. The system is Rockwell servo driven.

CONTROLS:

Integrated stainless steel, all welded control panel.
PLC and servo motors and servo drives are from AB Rockwell. The gearmotor for the main drive is SEW Eurodrive. This motor is provided with a Rockwell absolute encoder, for control of all functions in the machine.
Because of the number of servo drives in this machine, we will install an updated Rockwell PLC, able to run up to 8 servos simultaneously. (5 + 1 encoder +2 for future automation)
The HMI is a 10” color touch screen, while standard a modem is installed, to make it possible for VDE to have access using WIFI to the controls when the customer asks for this.

FUTURE AUTOMATION:

When, in the future, a band oven will be used for the baking production, based on a band layout of 18 products across, VDE will be able to create 2 x 9 rows from this production, and automatically feed this sandwich machine, for a production of $25 \times 9 \times 60 = 13,500$ finished products/hour.



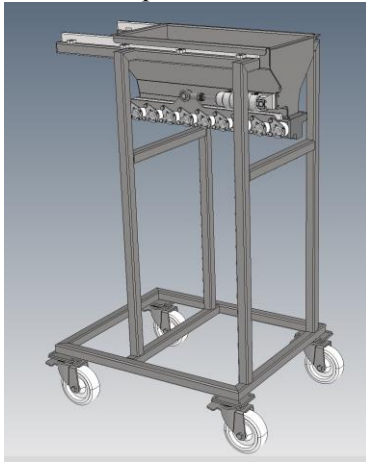
Macaron Queen
Order Confirmation 879

May 1, 2023
Page 6

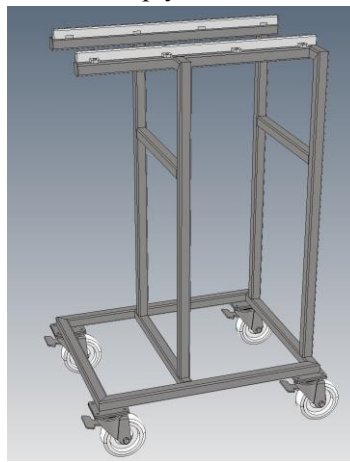
ADDITIONS:

Two stainless-steel sanitation carts, one for each depositor head, are included.
The carts are provided with casters and Delrin top glides, for easy placing and removal of the depositor heads.

Cart with depositor:



Empty cart;



VDE Hopper Topper:

All stainless-steel, pneumatically driven.
Provided with power lift for simple and easy bringing suction tube in and out the tubs.
Unit controlled by integrated level sensor over depositor.

Using quick sanitation clamps, parts can be quickly disassembled for thorough cleaning.

