

DOSING MACHINE FOR DOUGHS AND MIXTURES WITH SOLID PARTICLES - MAS

VOLUMETRIC DOSING MACHINE FOR FILLING AND DECORATING BAKED GOODS, DESSERTS AND PRE-COOKED PRODUCTS
WITH/WITHOUT SOLID PARTICLES INCORPORATED IN THE DOUGH



FORMEX

CREATING SOLUTIONS TO DOSE YOUR PRODUCT

GENERAL CHARACTERISTICS

- ✓ Machine **for dosing soft or semi-soft dough**, such as muffins, **which incorporate pieces of solids** with a diameter of **up to approximately 15 mm**.
- ✓ It excels in the areas of **speed, precision and ease of operation**.
- ✓ **Versatility** and incredible flexibility of use. **Homogeneous product** in all shapes and sizes.
- ✓ Quick and easy change of the different accessories for **multi-product work**.
- ✓ Made of AISI304 stainless steel and materials suitable for the processing of food product.
- ✓ For semi-automatic productions and/or those with a higher degree of automation, since it can be attached to a conveyor belt or production line.
- ✓ The hopper, pistons and nozzles and other elements of the machine are removable, which facilitates cleaning and disinfection.
- ✓ **HMI PANEL FOR INTELLIGENT PRODUCTION MANAGEMENT:** controls all machine functions: programming, production and cleaning.



“The volumetric dosing guarantees the same amount of product is dosed in all nozzles.”

“Volume and dosing speed are independent and adjustable.”

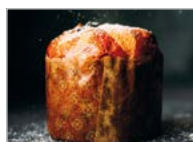
“The dosing system does not punish the dough and allows us to work with a wide range of products.”

WHAT PRODUCT COULD YOU MADE WITH THIS MACHINE?

BAKED-GOODS: MUFFINS · BROWNIES · PLUM CAKE · CUPCAKES · SPONGE CAKE · LARD SHORTBREAD · POUND CAKE



DESSERTS AND PRE-COOKED FOOD: YOGHURT · PIES · QUICHES · SAUCES · BOMBON · MOUSSE · CREAMS · PURÉE · BUNS



DOSING NOZZLES

A WIDE VARIETY OF OUTLETS ALLOWS FOR THE DOSING OF BATTERS WITH DIFFERENT PROPERTIES

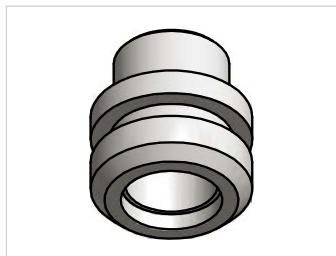
Adjustable nozzles | With a variable centre | Higher caliber pistons | Anti-drip nozzles | Double outlet |
Nozzles for solids up to 15mm diameter.



Small dose nozzle



S-shaped, Long nozzle smooth or
ridged nozzle



Standard nozzle



Off-centre nozzles, different
offcentre and nozzle outlet diameter
sizes.



TRAYS, MOULDS AND CONVEYOR BELT

In addition to the standard tray width configuration, other tray sizes can be manufactured. The conveyor belt can be adapted to flat trays, paper trays or different conveyor systems and different types of moulds. A tray loader can also be added.



Flat conveyor belt adapted for the
continuous dosing of sponge cake
sheets.



Flat tray conveyor belt.



Conveyor belt designed to place
three flat trays.



Conveyor belt with system to place
trays of different sizes.

HOPPER

The standard hopper can be exchanged for one with a larger capacity, it can be heated to work with products such as chocolate, and another hopper can even be added to work with dough with two colours.

- Option of using hoppers with different capacities.
- The heads can be interchanged with different configurations in terms of outlets and volumes.
- Removable, facilitates cleaning.



Tank split in 2 for two-colour doughs.



Tank with mixing agitator for very dense doughs that require the product to be continuously in motion.



Heated urn to keep the product in optimal working conditions.



ACCESSORIES

STREAMLINE YOUR PROCESSES WITH ADD-ONS SUCH AS THE TRAY LOADER OR TOPPING UNITS



TRAY LOADER

- Fixed or removable models to work with different moulds or trays.
- Adaptor to work with different tray sizes.



SPRAY UNITS

- Oil sprayed on the empty trays prior to dosing to make it easier to remove the moulds.
- Gelatin sprayed on croissants, after injection and prior to dosing the toppings.
- Alcohol sprayed on muffins prior to packaging for better conservation.
- Spraying of syrups or aromas.



TOPPING APPLICATION

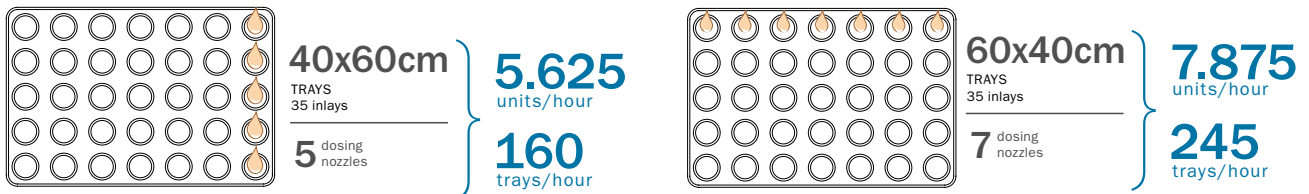
- Units for applying decorations such as chocolate chips, sugar, peanuts, hazelnuts, almonds and ground toppings, onto the product that has already been dosed. Fixed or removable models.
- **Belt topping doser**, homogeneous amount of topping throughout the product.
- **Ground topping**, simple and cost-effective solution for dosing chocolate shavings, pieces of nuts, almonds, etc.



PRODUCTION

The maximum speed of the machine is 3.2 seconds per cycle -value variable according to the quantity of doses and type of dough, (see technical data sheet).

This production is **calculated to make 35 gr. muffins with chocolate chips.**



DOSER MACHINE INTEGRATED INTO A PRODUCTION LINE = HIGHER DEGREE OF AUTOMATION

These lines consist of a series of modules ready to flexibly meet your production requirements.

WORKING LINE FOR THE PRODUCTION OF MUFFINS WITH TOPPING

Consisting of a tray loader, paper capsuling machine, muffin dispenser and chocolate chip topping dispenser.



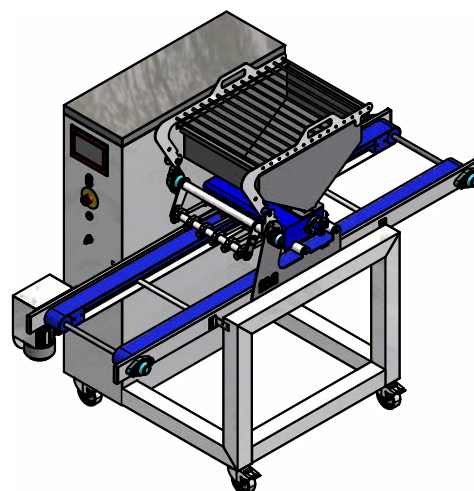
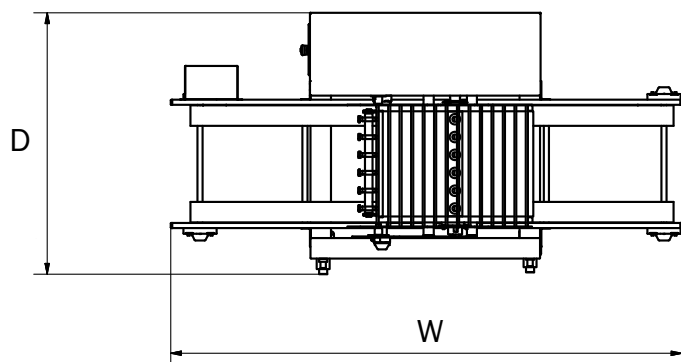
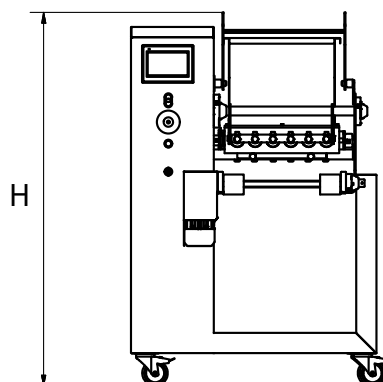
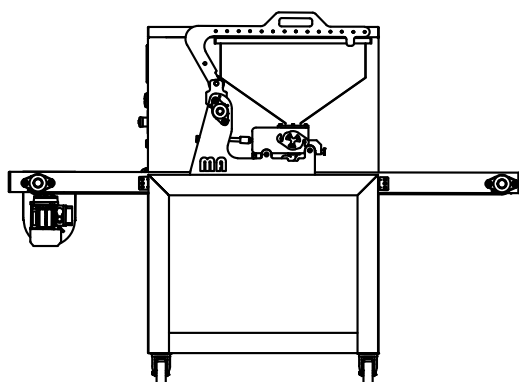
TECHNICAL DATA SHEET

DOSING SYSTEM		MAS - (with servo motor)			MA - (pneumatic)	
Dose change regulation		Electronic by display (very accurate)			Mechanical with wheel (manual adjustment)	
Control of the dosing parameters by touch screen		Yes			No	
Loading speed control		Electronic by display (very accurate)			Pneumatic (not changeable)	
Unloading speed control		Electronic by display (very accurate)			Pneumatic (not changeable)	
Re-dosing in the same mould		Yes			Yes	
Drop aspiration		Yes, by display			No	
MODELS		40	45	60	65	80
MA (pneumatic) - MAS (with servo)	Tray width (cm)	40	45 (18'')	60	65 (26'')	80
	Maximum speed (seconds/cycle)	3,2 (variable value according to the amount of product to be dosed and type of dough)				
	No. of dosing nozzles	to be choosen				
	Dosing regulation: Piston Ø15 mm Piston Ø30 mm Piston Ø40 mm Piston Ø52 mm Piston Ø60 mm	from 2 to 17 cc from 7 to 69 cc from 13 to 123 cc from 21 to 208 cc from 28 to 276 cc				
	Hopper capacity (L)	52	58	72	78	96
	Weight (Kg)	180	202	240	250	280
	Motorization (Kw)	0,18				
	Single phase voltage (V)	220				
	MA	Measurements WxDxH (cm)	201x88x147	201x93x147	201x108x147	201x113x147
Power consumption (Kw)		1				
Air consumption (L/min)		190	190	230	230	230
Pressure (compressor required)		6 bar				
MAS	Measurements WxDxH (cm)	201x94x147	201x99x147	201x114x147	201x119x147	251x134x147
	Power consumption (Kw) - 220 V	1,5				
	Motorization (Kw)	1 of 0,18 + Servo				
	Air consumption	50 (L/min) - 6 bar (compressor required)				

Due to constant technological development, the characteristics of our products may be altered without prior notice.

SEE PRODUCT
ON WEBSITE





HMI PANEL FOR INTELLIGENT PRODUCTION MANAGEMENT

- **Recipe programming** (create, rename, delete, duplicate).
- Management with multi-users and passwords with different access levels according to rank.
- **Number of rows per tray and distance between products.**
- Forward **movement of trays**, being **positioned** for **filling** and **exiting** upon completion.
- Option to create **dosing patterns** to adjust them to the different trays.
- Electronic control of **tray presence**, when the tray reaches the end of the conveyor belt the machine stops until the tray is removed.
- **Single-dosing function** for weight adjustment.
- **Multi-dosing function**: dosing is repeated in the same position on the tray.
- Independent **conveyor function**.
- **Anti-drip control**.
- **Self-cleaning** function.
- List of alarms that occurred on the machine.
- Control of activated automated inputs and outputs.





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FABRICAMOS SOLUCIONES PARA DOSIFICAR TU PRODUCTO

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