# RheoPan

The range of machines that make up the RheoPan line give the possibility to produce a wide range of products with different types of dough. This line doesn't stress the dough and is very precise in weights, in particular thanks to its dough piece weighing system with weight control and continuous automatic readjustment of settings.

With the RheoPan line, depending on the modules installed, it is possible to produce:

- Rectangular breads (ciabatta, focaccia, or other)
- Round pieces (large or small, firm or very hydrated dough, fermented or not, etc)
- Moulded breads (such as baguettes, baguettes with pointed ends, rolls, large short breads or other).





# RHEOPAN PRECISION DIVIDER



Weighing belt

Its continuous double weighing system offers excellent regularity in weights, even when working with fermented dough. Each dough weight is controlled automatically on the second weighing belt. In case of a deviation from the target weight, the machine adjusts the settings automatically for cutting the next dough pieces.

The RheoPan Precision divider can work in 1 or 2 rows, depending on the dough pieces that we want to produce.

3 models are available depending on the requested range of weight, and production volume.



Model	Number of rows	Width of rows	Min weight*	Max weight*	Max production (kg/dough/h)*	Hopper capacity (liters)
RheoPan Précision 65	1	10 cm	100 g	1300 g	470	65
	2		50 g	650 g		
RheoPan Précision 85	1	13 cm	150 g	2050 g	740	85
	2		75 g	1025g		
RheoPan Précision 145	1	16 cm	200 g	2 400 g	- 865	145
	2		100 g	1 200 g		
RheoPan Précision 225	1	19 cm	450 g	3 450 g	1 440	225
	2		225 g	1725g		

\*Data are an indication only. Many parameters can influence this data, especially the % of yeast, the temperature of the dough, dough pieces tightening, the fermentation time, etc.















# RHEOPAN ROTABALL BYPASS ROUNDER



Automatic flour duster

If the production of round pieces is important, it is possible to complete the line by adding the rounding module RheoPan RotaBall Bypass.

The eccentric movement of this rounder and the settings available to adjust tightness or rounding speed allow you to round the dough pieces without any stress for the dough, which is crucial for soft doughs. The RheoPan RotaBall fits perfectly into the RheoPan line. The dough pieces, that should not be rounded (such as baguettes), can go directly from the RheoPan Precision divider to the moulder thanks to a bypass.

It is also possible to combine a slight rounding then a moulding for some products (large short breads) thanks to the roller-flattener FlatRoll. It is possible to choose the Double RotaBall Bypass rounder to increase production volume.

#### Weight of dough pieces: from 75 to $4\,000\,g^*$ Hourly rate up to $\approx 1\,500$ dough pieces/ $h^*$

\*Data are an indication only. Many parameters can influence this data, especially the % of yeast, the temperature of the dough, dough pieces tightening, the fermentation time, etc.





Double RotaBall Bypass



Control panel

Synthetic non-stick bands





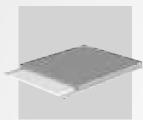








### ARMOR HV HORIZONTAL MOULDER



PoinTop (option)

For more than half a century, MERAND has been a specialist in dough moulding and, thanks to our experience, has developed a moulder which is highly efficient, especially when combined with the RheoPan Precision divider.

This horizontal moulder will elongate the dough on a fixed table, just as a baker would do it by hand on a worktable. It ensures optimal respect for the dough.

This horizontal moulder is equipped with the Alvéo+ lamination system to prevent gas escaping from the dough, and a 2-step adjustable lengthening system A.P.S (synchronized progressive moulding), which will avoid tearing the dough. Its reinforced gears allow it to ensure more production volumes than the classic Armor ABS moulder.

It is very well suited to shape beautiful baguettes and more.



- **Pointop** (shaping of breads and baguettes with pointed ends)
- RollsCoup (automatic cutting into rolls, half-baguettes,...)
- Short loaves guide (shaping of products to the desired lengths)

Depending on your needs, it is possible to replace the RheoPan Armor HV by another MFRAND moulder.

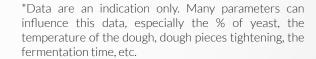
Weight of dough pieces: from 50 to 2 000 g\* Hourly rate up to  $\approx 1800$  dough pieces/h\*





Short bread guide (option)









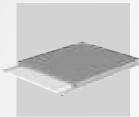








# ARMOR I HORIZONTAL MOULDER



PoinTop (option)

This moulder is very respectful for your dough. Thanks to the progressive and adjustable lamination system (1 prelamination roll Alvéo+ and 4 laminating rolls), and thanks to the elongation on a fixed table. the Armor I allows to preserve the alveolar structure of the dough without degassing, tearing or overheating it.

Its first calibrated elongation makes it possible to obtain excellent length regularity of the finished products.

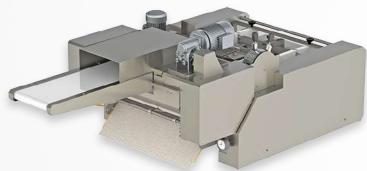
It allows you to make beautiful baguettes with nice honevcomb structure, but also baguettes and breads with pointed ends thanks to the accessory **PoinTop** (option).

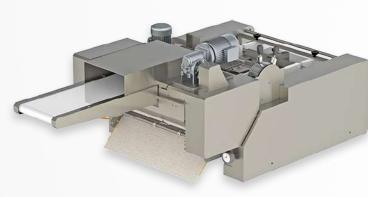
With the cutting system RollsCoup (option), it is possible to mould your baguettes and cut them in 2, 3, 4,... in the moulder, only if coupled with a MERAND proofer (for white breads).

The option C2A (Assisted Lengthening Control) can give you more versatility thanks to its motorized lower belt allowing to stop, limit or increase the 2<sup>nd</sup> elongation.

Specially designed for high volumes production, the horizontal moulder Armor I can be used to shape dough pieces from 200 to 2 000 g\* and can go up to ≈ 2 000 dough pieces/h\* (depending on weight and type of dough).

\*Data are an indication only. Many parameters can influence this data, especially the % of yeast, the temperature of the dough, dough pieces tightening, the fermentation time, etc.









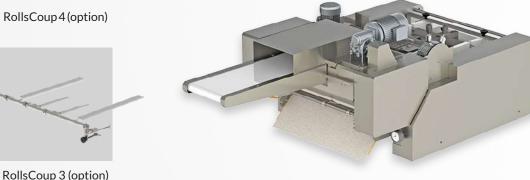












# **WORKBELT CONVEYOR BELT**

Several models of WorkBelt conveyor belts are available depending on line configuration.

Reclining, they will be able to transport dough pieces to other modules, or allow working the dough pieces manually thanks to the 2-side work shelves. Some models may have an adjustable loading height, to be more versatile in case of a configuration change.



















### **AUTOMATIC INTERMEDIATE PROOFERS**



Pockets in Nyltex

MF2S

Ventilator/humidity

extractor

Although most customers use the RheoPan line without a proofer, some wish to add the resting stage, especially for the production of the white breads (baguettes, in particular), or to increase the regularity and quality of final products.

MERAND has several types of proofers, including **EasyRest** for a short rest (2 to 5 minutes), the **BMF Mecaform**, or even **Mecaform Industry** ensuring higher rates.

MERAND associates these static proofers with pre-shaping dough pieces before loading them into the pockets. This is the M.F.2.S system (pre-shaping without stress). The dough pieces are pre-elongated, just like with manual moulding.

This operation enables to put the glutinous network of the dough in the right way for its better elongation in the moulder, and thus brings greater regularity, while avoiding tearing the dough.

The pockets of our proofers are in **Nyltex**, a material specially designed to avoid the sticking of the dough pieces and to limit the flour dusting. For maximum hygiene and limitation of the risks of sticking, our proofers are equipped with germicidal lamps, and an optional ventilators/humidity extractors system to dry the pockets and a central flour duster.

These proofers are particularly recommended for long baguettes or traditional baguettes and to make afterwards automatic cutting into rolls.







Mecaform Industry













### LIFTER AND INTERMEDIATE HOPPER

The plastic box lifter allows a continuous feeding of the RheoPan Precision divider hopper through rectangular plastic boxes (not supplied).

There is also an option that allows triggering the box lifting when there is not a lot of dough in the hopper.



To transfer the dough directly from the mixer to the RheoPan divider, 2 modules are necessary:

- An intermediate hopper above the RheoPan Precision divider to fill little by little the hopper of the divider and thus maintain a good regularity of divided weights.
- A bowl elevator capable of raising high enough to fill the intermediate hopper.



These modules limit the operator manipulations, and therefore save time on your production, avoid MSDs (Musculoskeletal Disorders), and give you a higher production volume.















# TOPSEEDS AUTOMATIC SEEDS DISPENSER



Water module

Automatic seeds deposit on dough pieces coming out of the RheoPan Precision divider (seed square bread, seed ciabattas,...).

The water spray module is connected to the water network. The water flow is adjustable in frequency and pulse duration. It allows a good grip of seeds on the dough pieces.

The TopSeeds dispenser puts seeds on the dough pieces in a homogeneous way.

The seed rate is adjustable, so you can put more or less seeds on the dough pieces.

Dough pieces are detected with sensors; water and seeds are dropped only on the product to avoid loss.

The TopSeeds is also equipped with water and seeds collecting drawers, limiting waste and facilitating cleanliness around the machine.



Seeds module



Water and seeds collecting drawers









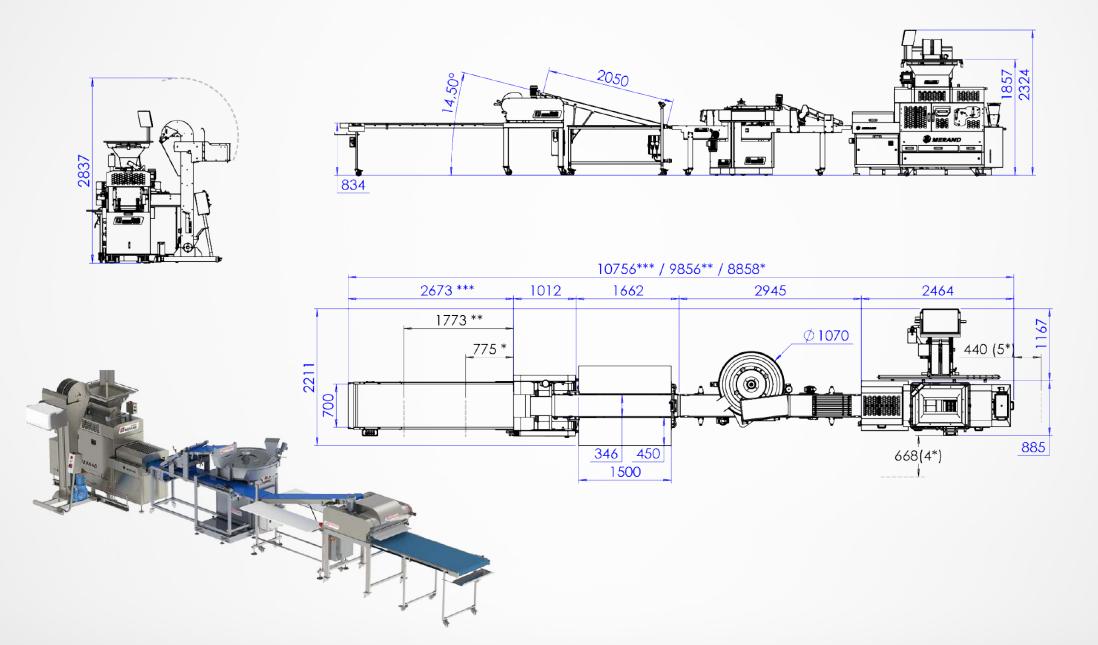








This standard configuration gives good versatility to the line thanks to the rounder with bypass. It allows the production of a large range of products with an artisanal quality.



This line configuration allows you to have a higher production volume, and to improve the regularity and the quality of the final products. This line can also handle the cutting of rolls and the production of high quality white baguettes for even more diversity in the production.

# MERAND RANGE OF AUTOMATIC BREAD LINES

