

## ROTARY MOULDER



SOFT BISCUITS



## POLIN SINCE 1929





FROM THE BEGINNING OF OUR LONG HISTORY,
HIGH QUALITY PRODUCTS AND CONTINUOUS
TECHNOLOGICAL INNOVATION HAVE ALWAYS DRIVEN
OUR GROWTH AND MOTIVATED OUR EXPANSION.

Since 1929 our philosophy has been innovation and creation of quality.

Today our peculiarity is the design and creation of medium to large scale industrial systems for pastry, biscuits and bread industry; our goal to provide our customers with both products and service.

We wish to take our talented technology all over the world.

# ANY KIND OF SOFT BISCUITS

Polin designs and manufactures tailored lines to produce biscuits of all kinds. A team of expert engineers will give all the necessary support to develop the line with the aim to maximize production efficiency.



AND MORE...



# THE EASY WAY FOR MOULDING BISCUITS







### INNOVATION IS OUR TRADITION

Polin has been designing and manufacturing Rotary Moulders for over 60 years.

Our long standing experience in the manufacture of tailored lines for big multinational companies led us to design and develop cutting-edge technological solutions.

The ultimate evolution of this progress is an innovative and functional smart design concept.



## A NEW SMART DESIGN CONCEPT

### UTMOST ATTENTION TO HYGIENE

Surfaces and connection crossbeams are manufactured to keep optimal hygiene conditions. Each machine part requiring routine cleaning is easily demountable.

### **USER FRIENDLY**

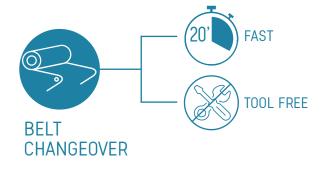
The control software is so intuitive that it makes the start-up phase quick and permits to have a complete control of the rotary moulder.

### UNIQUE CHANGEOVER

Roller quick replacement system and innovative, tool-free belt changeover system with no need to remove the roller and the gearmotor.



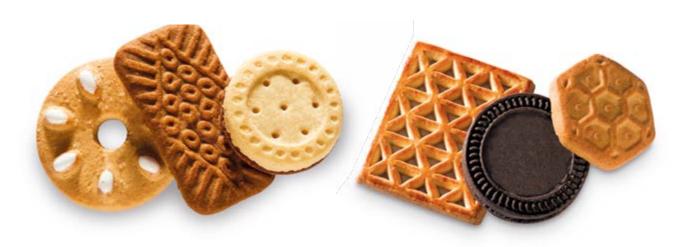






### FEATURES AND BENEFITS











### FULLY AUTOMATIC ADJUSTABLE MACHINE

- Independent drives for feeding and moulding rollers enable to vary relative speeds to suit product characteristic such as thickness and dough texture.
- The independent web drive ensures that web tension is reduced thus improving biscuit extraction and dough texture.
- Sharp and hardened knife, fitted on a rigid holder for long term lasting and optimum weight accuracy.
- A fast web change reduces maintenance costs and downtime No chain transmissions and external drives allow easy cleaning and maintenance.
- Built-in "Touch screen" Operator Panel, managed by PLC for rapid and easy control and response to troubles.
- Indipendent conveyor for scraps discharge

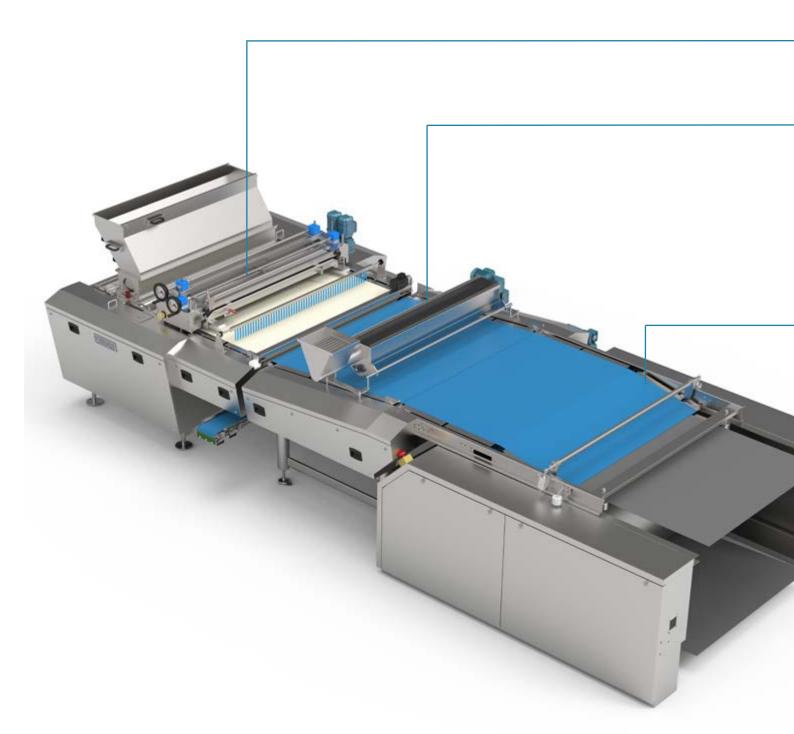
#### CONTROLS AUTOMATIC

- Grooved feeding roller speed
- · Moulding roller speed
- · Web speed
- Knife positionroller gap Extraction roll pressure side to side
- · Web tensioning
- Die locking
- Easy access to moulding roller (with quick changeover without tools)
- Automatic knife reversion during die extraction

#### BENEFITS WEIGHT

- · Better weigh control
- Better control
- Wider range of products
- Faster start-up
- Quicker product change over
- Less scraps / fewer tails
- Easy product management by recipe control on Operator Panel

### ANCILLARY EQUIPMENT





#### WASHING UNIT

The washing unit is used for the application of egg-wash, sugar/water or other liquids on the biscuits before baking, to obtain the characteristic golden colour of the baked product. Our washing unit has two indipendent motor to control the rotation of the distributor roll or brush(fast-no tools changeover).

The level of the liquid is automatically controlled by a specific pump and level sensor.

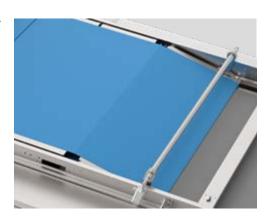


#### SUGAR SPRINKLER

It consists of a main stainless steel hopper with lower curved sheet provided with holes (diameter commensurate with the characteristics of the product), a rotating shaft shaving the sheet and a side hopper for manual feeding with screw conveyor. The hopper is removable for deep cleaning or for quick product changeover.

### Smart design plus:

 Suitable for different product sizes only by changing the bottom plate



#### SWIVEL PANNER

A swivel panner is installed to provide the final transfer of biscuits from the rotary moulder accurately onto the oven band. Activated by band follower rollers, the unit follows the tracking of the oven band, ensuring accurate centralized positioning of the product before baking.

### Smart design plus:

- · Easy access for cleaning
- Fast belt change: non need to dismount the driving drum

## SMART SOFTWARE, TOTAL CONTROL

Polin provides a range of Control Systems for complete Biscuit, Crackers and Layer cake lines, or individual units of machinery.

Whether it is semi or fully automatic recipe control, or higher level with SCADA (Supervisory Control and Data Acquisition) coupled to the ERP and MES of the Clients, Polin's control system has a clear, simple "Touch Screen" Operator Panel or PC screen as HMI (Human Machine Interface), to allow the operators to keep quality and and easily adjust the working parameters and visualize all the oven settings in a single location.

Recipe-driven set-up and clear alarm messages reduce changeover time, downtime and waste.



### TYPICAL SOFT BISCUITS LINE



### ROTARY TECHNICAL FEATURES

Working width: 800, 1000, 1200, 1250, 1500 mm

Grooved feed roller: 243 mm diameter
Moulding roller: 390 mm diameter
Anvil pressure roller: 250 mm diameter
Drive roller: 150 mm diameter
Roll gap adjustment: from 4 to 12 mm

Diameter of web nose bar: 4 mm

Web: resin-coated cotton



### ANCILLARRY EQUIPMENT THAT COULD BE COUPLED

- Product detachment roller
- Hopper extension with kibbler unit
- Washing unit
- Biscuit decorator (ink printer)
- Jam decorator
- Swivel panner





- 1 MIXER
- 2 DOUGH FEEDER
- METAL DETECTOR
- 4 ROTARY MOULDER
- **5** WASHING UNIT
- 5 SUGAR SPRINKLER
- SWIVEL PANNER
- 8 OVEN
- 9 OVEN STRIPPING CONVEYOR
- 10 COOLING CONVEYOR
- **STACKER**
- PACKAGING CONVEYOR

### Technology on demand for pastry, biscuit and bread industry

Since 1929 our philosophy has been innovation and creation of quality. Today our peculiarity is the design and creation of medium to large scale industrial systems for pastry, biscuits and bread industry; our goal is providing our customers with both products and service. We wish to take our talented technology all over the world.







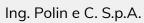












Viale dell'Industria, 9 | 37135 Verona | Italy Tel. +39 045 8289111 | Fax +39 045 8289122

polin@polin.it | www.polin.it





