

SNACK-BAR MANUFACTURING LINE

Snack-bar manufacturing line, the bars are made starting from a dough based on extruded cereals, dried fruits and legumes, spices etc. The whole line is composed by these elements:

- **Product loading system with “troller”**: Product loading at the exit of the oven in order to carry the product on the hopper of the bar line
 - Made of AISI 304
 - Loading level control
 - Fixed structure
- **Nr. 8 60 liters troller for product loading**: Entirely made of AISI 304
- **Snack-bar machine**: Multifunction machine that produces different sizes of snackbars, made of dried cereals or, by means of HMI panel recipe selections, you can easily start the production of bars extruded from different types of dough such as date, apricot, figs, etc

For both of the cases, the last operation is the trasversal cut. The actual dimension of the bar can be set from the HMI panel and the cutter is entirely made of AISI 304. 1

- **Cooling tunnel – 6 mt**: Made for food cooling, the hot product is conveyed inside the tunnel where there is a convective forced air flow at a low temperature. The operational parameters can be edited from the operator panel.
 - Made of AISI 304
 - Polyurethane conveyer belt
 - Forced air cooling flow
 - Pass-through product height 130/290 mm, belt width 180/250/320 mm
 - Cooling lenght 6 m
 - Volt 400 Hz 50 – 2,4 kW Threephase 5 poles
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- **Longitudinal cutter:** Made of a series of circular cutter and a set of distance blocks that can be set according to the needed product length
 - o **System for half longitudinal cut:** System to make half partial longitudinal cut at the moment of the bars production



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- **Electric cabinet:** All the electrical components are supplied such as sensors, valves etc. The management is done by central PLC and HMI operator panel. The machine is connected through Ethernet for the remote management as assistance or control of the process.



- **Trasversal ultrasound cutter:** It enables the machine to work on very sticky products and assure a very clean and precise cut.
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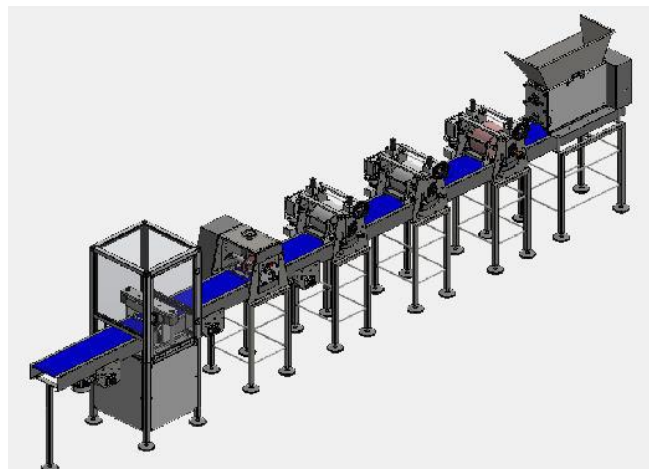
- **Bar-loading on tray:** It enables to pick the bars from the transport to the exit of the cut group, put them on a tray 600x400 mm



24/03/2023



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HORIZONTAL PACKAGING

- **Products:** Fruit & cereals snack bars, net weight 30 g.
- **Dimension:** 33 h x 11 x 105 mm length , thickness from 5 to 20 mm x 56 x 28 mm / from 5 to 20 mm x 28 x 28
 - Multipack cartonboard packaging 180 x 150 with max thickness 20 mm
 - Multipack cartonboard packaging 150 x 140 with max thickness 20 mm
- **Packaging Usable Film:** Polypropilene – gas coupled
- **Packaging speed:** Max speed 60/70 bpm, guaranteed speed with quality gas-coupled film max 20/30 bpm
- **Characteristics:** Machine structure in RAL 7024 or AISI 304 (optional), belt inlet conveyor 2 meters, film reel shaft with max width of 600 mm, max diameter of 350, internal diameter 76 mm, CE marking

24/03/2023



<u>PHOTO</u>	<u>HMI</u>	<u>COMPONENT</u>	<u>FUNCTION</u>
		<p>Full line</p>	<p>The entire line is about 17.5 m long and consists of: 1- dosing hopper 2- moulding rollers 3- cooling tunnel 4 - cutting unit 5 - final discharge conveyor on trays 6 - empty tray magazine + tray handling unit + full tray magazine At the software level it is divided into 2 partitions - points 1-2-3-4 above - points 5-6 above NOTE: the line layout is fully customisable</p>



Accessories

A) Cooker 50L
 B) 8 30L stainless steel tins for product loading
 C) Trolleys with 40 (40x60cm) perforated non-stick baking trays; trolley suitable for rotary ovens



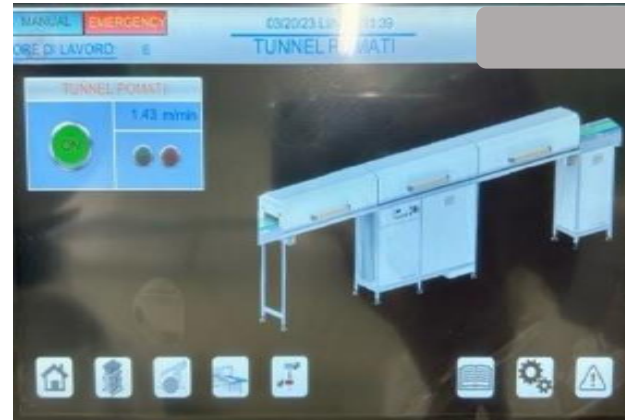
Heated horizontal reel feed hopper

3 interchangeable reels: the first one may crush the other 2 push the product onto the matthe hopper is equipped with coils for any product temperature maintenance



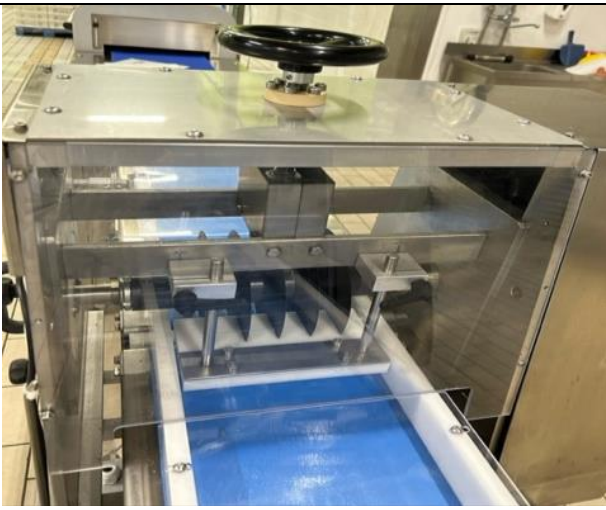

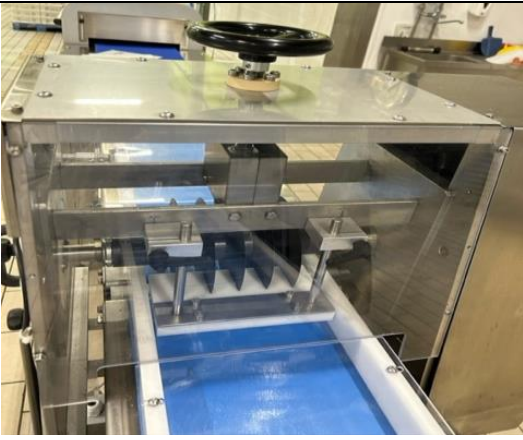

Teflon rollers
for rod levelling

the 1st roller
compacts the
productThe 2nd roller
compacts and adjusts
the bar thicknessThe
3rd roller defines the
bar thickness
NOTE: The height of
the rollers is
adjustable on each
one by means of a
manual crank



Cooling tunnel

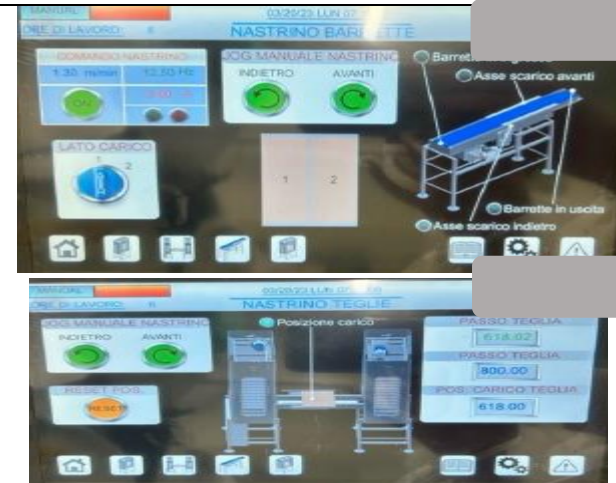
6-metre tunnel brings
the product to an
ideal cutting
temperature

		<p>longitudinal cutting blades</p>	<p>interchangeable blades according to bar size NOTE: Using the manual crank handle it is possible to adjust the depth of cut or exclude the cutter completely</p>
		<p>longitudinal cut backup</p>	<p>backup for possible quick change of bar size NOTE: Using the manual crank handle, it is possible to adjust the depth of cut or exclude the cutter completely</p>







Ultrasonic cross-cutting blade

The ultrasonic cutter cuts vertically and moves horizontally to distance a block of n bars



Retractable mat for unloading onto a pan and organ that brings the pan into position for unloading

when the product arrives at the photocell, the pan has already been brought into position by the organ, the belt retracts to discharge the product onto the pan

		<p>Empty tray warehouse</p>	<p>the trays are loaded manually on each level of the magazine; the magazine rotates to unload the tray onto the organ that brings the tray under the retractable mat into position for unloading</p>
		<p>Empty tray warehouse</p>	<p>full trays are moved from the organ into the full tray storage warehouse, waiting for them to be manually unloaded</p>





