

BAND DRYERS



PRINCIPLE

Band dryer is composed of one perforated conveyor supporting a layer of product, passed through by process gas.

Dryer is constituted by several modular sections with independent heating and air circulation systems.

Process gas is blown whether downward or upward or in a combined arrangement in order to improve homogeneity of treatment.

Cooling section can be foreseen after drying zone.

Band dryer can be fitted with accessories (feeder, spreader, cleaning devices, etc.).

It is the most appropriate equipment for fragile, sticky, pasty products or products requiring long and accurate residence time.

ADVANTAGES OF THIS TECHNOLOGY

- Energy saving due to gas recycling
- Highly homogeneous treatment
- Adjustment of temperature, gas velocity and direction in each section
- Multiple processing in one single equipment
- Versatility of processes and applications
- Accurate adjustment of residence time
- Possibility to add accessories for mechanical action on product



◀ Mobile unit



MAIN APPLICATIONS

Extrudates, beads, granules, crumbs, paste, pet food, sliced vegetables, prills, flakes, etc.

MAIN PROCESSES

Drying, calcining, cooling, cooking, toasting, dehydration, etc.

PILOT TEST LABORATORY

For determination of band dryers parameters, using a batch lab scale pilot. Possibility of equipment rental.



comessa can propose various settings

HEATING MODES

STEAM EXCHANGERS



ELECTRICAL COILS



GAS BURNERS



CONVEYOR TYPES

According to handled product, following types of conveyors can be proposed :

- continuous perforated belt
- hinged perforated plates
- wire mesh
- wire and struts belt



Continuous perforated belt

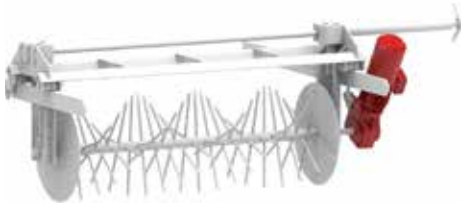


Hinged perforated plates

ACCESSORIES

A set of accessories can be foreseen :

- feeder : oscillating, vibrating, etc.
- spreader
- rotary picker
- conveyor cleaning device : rotating brush, scraper, washing tank, etc.

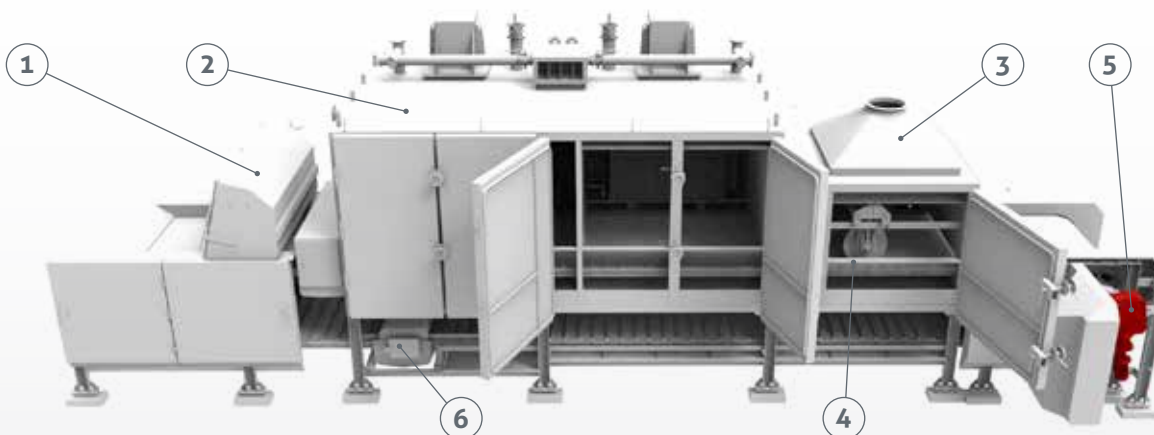


Rotary picker



Spreader

TYPICAL BAND DRYER ARRANGEMENT



- 1 - Spreader
- 2 - Drying section
- 3 - Cooling section
- 4 - Rotary picker
- 5 - Driving unit
- 6 - Washing tank

