

# DryBand

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**Continuous drying  
under vacuum  
of pasty products**

- Continuous and gentle drying
- No oxidation and minimal flavour losses
- Suitable for sticky, highly viscous and/or hygroscopic products
- Drying avoiding carriers for clean label production
- Low energy consumption
- Customised and high-performance equipment
- Fully automated operation & cleaning
- Closed system with hygienic design



### Design and Functionality

The DryBand is especially suitable for products which are sticky, high viscous and/or hygroscopic as well as for the products that are sensitive to thermal stress.

Liquid products are uniformly distributed on the belts with swivel feeders and are conveyed through the dryer on parallel operating belts for specified residence time.

Contact heating plates underneath the belts provide desired heat through individually controlled heating zones. Optional radiant heating plates (patented) bring additional energy into the product from the top, to accelerate drying as well as for controlled maillard reaction. In the last zone, the product cools down below the glass transition temperature and becomes brittle. At the end of the belt, the dried

product cake is cut by guillotine and crushed into small pieces using a crusher or cribbler®.

The product is collected in an intermediate hopper from where it is discharged out of the vacuum into the atmospheric environment using automatic airlocks. The vacuum is maintained using a single stage or multistage vacuum system. The removed vapours are condensed in a condenser.

### Application

- Malt cocoa beverages
- Malt extracts
- Reaction aroma and HVP's
- Plant extracts
- Fruit and vegetable concentrates
- Vitamins and enzymes
- Pharmaceutica and nutraceutical concentrates
- Infant nutrition

### Technical data

Feeding rate	from 2 to 4'000 kg/h
Heating & cooling surface	from 0.2 to 325 m <sup>2</sup>
Heating range	from 20 to 180 °C
Vacuum range	from 1 to 100 mbar abs.

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#### Products and Services

Process technology for fruit and vegetable processing to juices, concentrates and puree production, for brewing solutions, for filtration, for milk powder production, for the vacuum drying of liquid and solid products, for freeze drying of coffee, tea, fruits, vegetable, etc. Technology for municipal and industrial sludge dewatering and drinking water filtration

#### Products

Fruit reception lines, mills, mash heaters, hydraulic presses, membrane filtration equipment, cold block equipment, adsorber, ion exchanger, evaporators and aroma plants, pasteurizers, CIP systems, vacuum and freeze drying cabinets and belt dryer, zeolite adsorber, complete processing lines

#### Services

Process development and project engineering; assembly and commissioning; technical support; original spare parts; inspection; service contracts; retrofits; training; service and maintenance; NetService