

DryBand Lyophilisation



Freeze drying for continuous drying of food

- Continuous and gentle freeze drying
- No oxidation and minimal flavour losses
- Suitable for free flowing granular products
- Drying avoiding carriers for clean label promotion
- Customised and high-performance equipment
- Fully automated operation & cleaning
- Closed system with hygienic design





Design and Functionality

The DryBand for freeze drying is suitable for products being sensitive to heat. Freeflowing powders, granules and products of larger sizes are conveyed into a hopper on top of vacuum belt dryer. The product is fed in doses into an intermediate chamber, from where the product will be distributed onto the top belt by a unique dosing system. Solid products are transported back and forth through the dryer from the top to the bottom belt, to extend the residence time. (Belts are used in series)

Heating plates underneath the belts are installed in independent heated zones to permit constant or variable drying rates. Additional radiant plates (patented) gives a surplus on drying capacity. This system allows gentle continuous drying for maximum product quality. In addition, the last zone can be designed as a cooling zone, if required. The pieces are collected in an intermediate hopper from where they are discharged out of the vacuum into the atmospheric environment using automatic airlocks.

The vacuum is maintained using a single stage or multistage desublimation/vacuum system.

Application

- Coffee/Tea
- Fruits and vegetables in pieces
- Meat or sea food in pieces
- Pharmceuticals
- Probiotics and enzymes
- Infant nutrition

Technical data

Feeding rate	from 2 to 1'000 kg/h
Heating & cooling surface	from 0.2 to 325 m ²
Heating range	from 20 to 180 °C
Vacuum range	from 0.5 to 50 mbar abs.

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Helpdesk

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Products and Services

Process technology for fruit and vegetable processing to juices, concentrates and puree production, for brewing solutionss, 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;