



**CONVEYOR BAND DRYERS
FOR THE FOOD INDUSTRY**



Mitchell Dryers Limited

CONVEYOR BAND DRYERS FOR THE FOOD INDUSTRY

With over 70 years experience in thermal drying technology for the food industry, we are able to recommend optimum and cost-effective drying systems for any application. Mitchell band dryers offer an efficient and convenient means of drying a wide variety of food products.

The range of conveyor band dryers has been designed specifically for food applications taking into account the industry's requirements for hygiene, accessibility and efficiency.

Drying is effected by circulation of hot air through a static bed of material as it is carried by a conveyor through the drying chamber.

Modular Construction

All our dryers are of modular design to

- optimise drying efficiency
- facilitate extensions at a later date
- reduce installation time
- give precise temperature control in each zone.

Dust entrainment is minimal and the need for expensive dust collection equipment associated with other continuous dryers is eliminated or greatly reduced.

Heating Systems

- Steam
- Gas
- Oil (indirect)
- Electric

Our drying systems, which have been developed and installed over many years, include Single Pass, Single Pass - multi stage and Multi Pass band dryers.

Single Pass

The single pass configuration is often used for pre-formed or granular feed materials, e.g. expanded cereal.



**Single Pass
Multi Stage**

For drying materials which require turning or are subject to shrinkage during the drying process, e.g. corn grits and wheat bran.



Multi Pass

Principally used where floor space is limited or where extended drying cycles are necessary e.g. coated cereals.



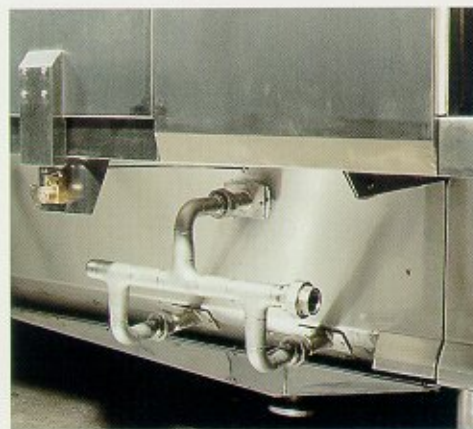
Hygiene and Access

Our dryers combine hygienic design with good access for cleaning and maintenance. Features include:

- ✓ Stainless steel or food grade rubber contact parts.
- ✓ Full length doors on both sides of each drying section to give easy access for cleaning. These are fitted with safety interlocks as necessary.



- ✓ Product transfer points fitted with discharge chutes for minimum spillage.
- ✓ Construction: stainless steel internals with stainless steel or painted mild steel externals.
- ✓ Clean line exterior appearance with self draining surfaces.



- ✓ Combined static and moving side guides on conveyors to ensure maximum product retention and to maximise air flow.
- ✓ Interior / exterior finish to client's specification.
- ✓ Minimum interior crevices and ledges.



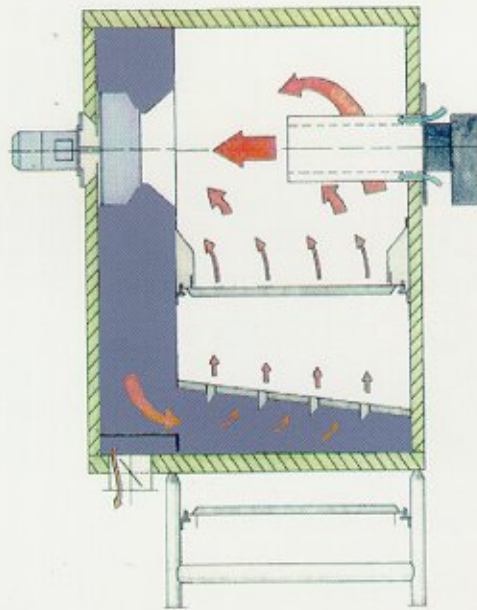
Other Food Dryers

- ✓ Continuous conveyor band coolers
- ✓ Air jet conveyor band dryers
- ✓ Gelatine dryers
- ✓ Continuous stoving / curing ovens
- ✓ Atmospheric & Vacuum Batch dryers
- ✓ Vacuum band dryers
- ✓ Coating Drums
- ✓ Chillers

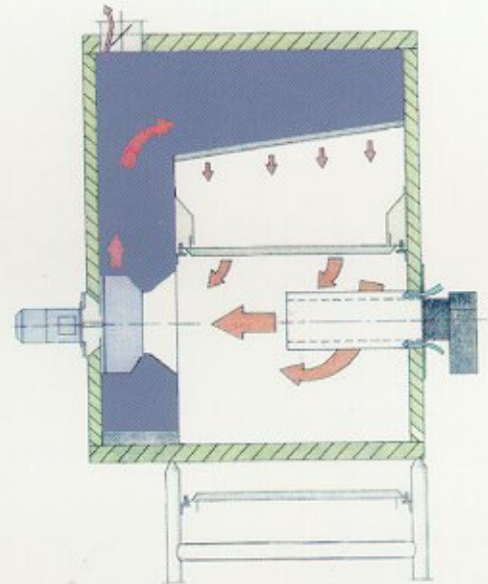
Efficiency

Our dryers are designed to function efficiently to ensure consistent high product quality with minimum running costs. Features include:

- ✓ Upwards or downwards airflow.
- ✓ Internal air system designed to give even air distribution.
- ✓ Effective sealing of the dryer enclosure with silicon rubber extrusions.
- ✓ Variable speed conveyor drives.
- ✓ Air recycle for optimum efficiency.



Upwards airflow through section of the dryer



Downwards airflow through section of the dryer

- ✓ Tailor-made to suit process requirements with minimum energy usage.
- ✓ Solid construction from double skin thermal panels insulated with mineral wool to minimise heat loss.
- ✓ Optional energy-efficient, low noise motors.

Options

Special Features

These features can be incorporated to suit the type of product.

- ✓ Integral or separate cooling sections to reduce product temperature.
- ✓ Cleaning brushes, band scrapers and washers or full C.I.P.
- ✓ Modular control panels pre-wired for installation.
- ✓ Continuous collection and removal of fines.
- ✓ Band waxing to minimise adhesions.
- ✓ Explosion venting.
- ✓ Heat recovery.
- ✓ Exhaust air clean-up.
- ✓ Soundproof enclosures.

Feed Systems

- ✓ Oscillating belt feeder.
- ✓ Vibratory feeder.
- ✓ Apron feeder.
- ✓ Oscillating rake spreader.

