



Freeze drying, also known as lyophilization, is a dehydration process used to remove moisture to preserve products. In this process, the product is loaded into a freeze-dry chamber, containing the product and the freeze dry coil. The product is frozen at very low temperatures and the chamber is drawn in to a vacuum. Moisture sublimates off the product and collects as ice on the coil, effectively drying the product. Freeze drying in food processing is used to preserve and extend the shelf life of perishable products like fruits, vegetables, meats, and prepared meals while retaining their flavor, nutrients, and structure.

Colmac freeze-dry coils are **custom configured** to best fit each freeze dry application. We offer individualized connection locations, support structure, tube spacing, and defrost solutions.

## **STANDARD FEATURES**

- 304 Stainless steel coil and frame with either 5/8" or 7/8" x 0.035" tubing
- Tube spacing to best use available space and provide maximum surface area
- Connections located to match existing piping
- Circuited for any working fluid and system type

## SPECIAL FEATURES AND OPTIONS

- Heavier wall 5/8" or 7/8" x 0.049" tubing
- Aluminum housing
- 316 Stainless steel construction
- Drain pan to collect frost and ice melt
- Variable tube lengths

## FOOD INDUSTRY APPLICATIONS

- Preservation of fruits, vegetables, meats, and meals
- Pet food and treats

