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Freeze Drying Systems Pvt. Ltd.



MASTERING TRANSFORMING

THE FUTURE OF FOOD
& PHARMA PRODUCTS

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Freeze Drying Systems Pvt. Ltd.

Freeze Drying Systems Pvt. Ltd. has been at the forefront of freeze-drying technology for the past 29 years, with over 150 plants and machinery sold globally. We provide cutting-edge solutions for the pharmaceutical and food industries, among others.

Mission



We aim to set new standards in freeze drying, offering sustainable, innovative solutions that ensure quality and efficiency for our clients worldwide.

Global Presence



Our services and technology are available across multiple countries, including India, Spain, Dubai, Nigeria, Ghana, and Côte d'Ivoire.



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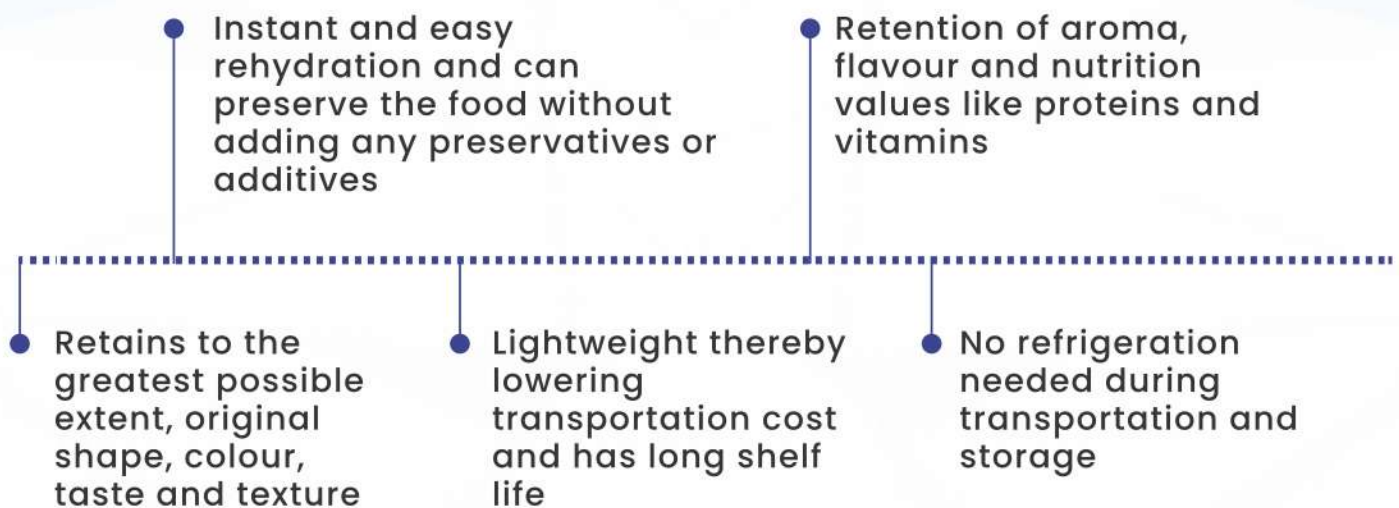
What is Freeze Drying?

Process Overview:

Freeze-drying, or lyophilization, is a process in which water in a material is frozen and removed by sublimation under low pressure, allowing for the preservation of the product's original shape, color, and texture.

Advantages:

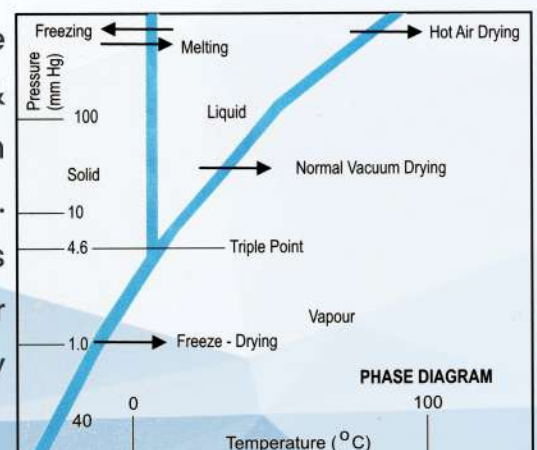
- ◆ Retains the product's original qualities (taste, color, shape, aroma).
- ◆ Lightweight, making transportation easier with longer shelf life.
- ◆ No need for refrigeration during transportation and storage.
- ◆ Instant and easy rehydration without preservatives or additives.



Explanation:

Freeze drying is a sophisticated process that operates below the triple point of water, a critical temperature and pressure where water exists simultaneously as a solid, liquid, and gas. By carefully lowering the temperature and pressure, the water in the product undergoes sublimation, transitioning directly from ice to vapor without passing through the liquid phase.

This gentle process preserves the product's structure, nutrients, & flavour by preventing the degradation typically caused by heat or oxidation. As a result, the product retains its original quality, making it ideal for long-term storage & easy rehydration.





60 Kg
(FOOD FREEZE DRYER)



150 Kg
(FOOD FREEZE DRYER)



30 Kg
(FOOD FREEZE DRYER)



Features	REVA R&D FFD	REVA 15 FFD	REVA 30 FFD	REVA 60 FFD	REVA 150 FFD	REVA 1 TON
Effective Tray Area	0.15 m ²	0.85 m ²	1.7 m ²	3.41 m ²	8.54 m ²	51.24 m ²
* Wet Input / 8 Hr.	1 Kg.	5 Kg.	10 Kg.	20 Kg.	50 Kg.	330 Kg.
* Dry Output / 8 Hr.	0.2 Kg.	1 Kg.	2 Kg.	4 Kg.	10 Kg.	66 Kg.
Temp. Range Drying	30° C - 100° C	30° C - 100° C	30° C - 100° C	30° C - 100° C	30° C - 100° C	30° C - 100° C
Water Removal Capacity	0.8 Kg.	4 Kg.	8 Kg.	16 Kg.	40 Kg.	260 Kg.
Ultimate Condenser Temp.	-35° C	-40° C	-45° C	-45° C	-50° C	-50° C
Defrosting Method	Natural	Natural	Natural	Steam	Steam	Steam
Total Connected Load	1 Ph 15 Amp Connection	8.5 KW	16 KW	19 KW	38 KW/ 19 KW	106 KW
Average Connected Load	1 Ph 15 Amp Connection	6 KW	11 KW	13 KW	26 KW/ 13 KW	74 KW
Base Area of Plant	1.1 Mt x 0.7 Mt	1.8 Mt x 1 Mt	2.5 Mt x 2 Mt	3 Mt x 2 Mt	4 Mt x 2 Mt	12 Mt x 8 Mt
Height of Plant	1.5 Mt	1.8 Mt	1.8 Mt	2.5 Mt	2.5 Mt	4.5 Mt

* Considering product with approx. 20% solid content.



Freeze Dried Strawberry and Mango Pieces



Freeze Dried Ice Cream



Tomato Concentrate



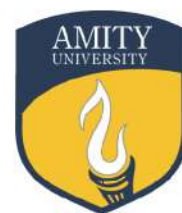
Freeze Dried Green Peas



Freeze Dried Camel Milk Powder



List Of Clients Using Our Freeze-dryers





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