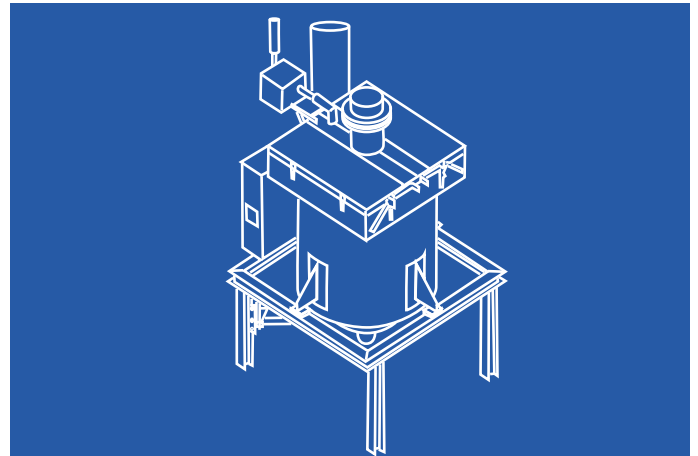


CRYO CRYSTALLIZER-M

- Produces small, free flowing spheres from high melting point liquids
- 98% of the spheres are all the same size (monodispersed)
- Easy to use & clean hygienic construction



The Concept

The **CRYO CRYSTALLIZER-M** transforms liquid fats and other high melting point liquids (HMPL) into free flowing powders. This powder is resistant to clumping under adverse conditions, is stable and does not need additional cooling steps.

The **CRYO CRYSTALLIZER-M** is especially suitable for high value products (such as mixtures of essential oils, API) with low production capacities. The produced powders are monodispersed spheres (same size) ranging from 0.6 - 1.2 mm, which may also contain active ingredients mixed into the high melting point liquid before being dropletized.

The product sphere size can be precisely adjusted to 0.6 - 1.2 mm in diameter, enabling them to be used in applications where exceptional dosing is required.

The nominal capacity of a **CRYO CRYSTALLIZER-M** is 200 kg/h.

Industries

The **CRYO CRYSTALLIZER-M** is ideal for processing high melting point liquids, such as fats, emulsifiers and waxes. The free flowing powders can be used in many applications and processes among the following sectors:

- Animal Feed
- Nutritional Supplements
- Pharmaceutical Ingredients
- Specialty Fat Products

Features

The product has to be liquefied and brought to the right temperature by the customer.

A special droplet dosing unit is installed at the top of the equipment with hundreds of injectors, each of which generates a fixed and uniform droplet size at a rate of hundreds of droplets per second for each injector. This droplet generator is able to prevent the production of satellite droplets. On average, more than 98% of the produced droplets are all the same size.

The droplets are cooled in an upwards stream of cold nitrogen gas, which maximizes falling time and heat transfer, whilst minimizing the potential for the droplets to touch each other before they are sufficiently stable.

The **CRYO CRYSTALLIZER-M** is constructed with stainless steel, and features curved surfaces which eliminate corners and crevices where the product can lodge.

The product outlet is through a rotary valve that can be easily removed for cleaning and is the only moving part of the equipment.

The process is user friendly and easy to use with its PLC control panel and delivers excellent performance with respect to quality, efficiency and productivity.

Benefits

- Efficient production of small monodispersed spheres from high melting point liquids
- Compact design which requires minimal floor space
- Stainless steel, hygienic construction providing fast, effective, low loss cleaning
- Low capital investment and installation cost
- Safe and easy to install and operate
- Minimal maintenance required

Model Range

The **CRYO CRYSTALLIZER-M** is available in one standard size, with a nominal capacity of 200 kg per hour (based on 1mm. or 1/25" diameter spheres). Multiple units may be required for higher production capacities.

The **CRYO CRYSTALLIZER-M** meets the required standards & regulations for the following locations:

- Europe
- North America
- Central America
- South America
- Asia
- Pacific

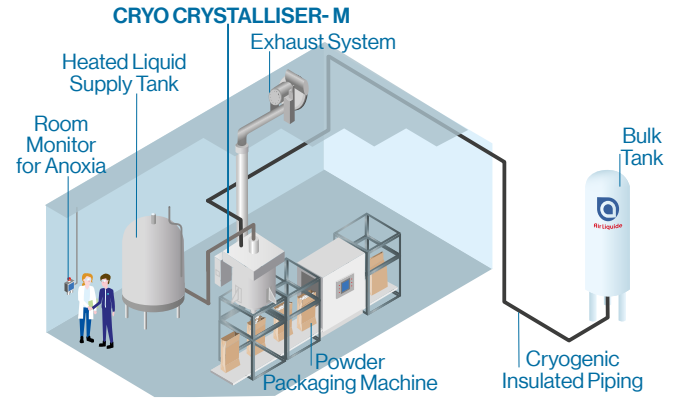
Technical Data

CRYO CRYSTALLIZER-M		
Overall Length	79 inches	200 cm
Overall Width	79 inches	200 cm
Overall Height	138 inches	350 cm
Power Supply	480V, 3 phase, 60 Hz	
Shipping Weight	2200 lbs	1000 kg

Options

- **ALIGAL™ 1** (Liquid nitrogen)
- Different electrical voltages & frequencies
- Spare parts kit

Installation Layout



Related Offer

The **CRYO CRYSTALLIZER-M** is part of the **Nexelia for Ingredients Processing** offer which has been specifically designed for those processors that need to achieve a competitive processing cost for their powder products. The **Nexelia** solution includes the best of Air Liquide's **ALIGAL™** food grade gases, state-of-the-art application equipment and technical support services along with a customized Performance Monitoring Service program for cryogen consumption optimization.

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