

FAT MELTING AND CRYSTALLIZATION PLANTS



Fat melting and crystallization plants are industrial facilities designed to process and refine various types of fats, such as vegetable oils, animal fats, and other lipid-based materials. These plants are typically used in the food processing industry to produce a range of products, such as margarine, shortening, and other food ingredients.

- **FAT MELTING:** Used to melt and refine solid fats into a liquid state.
- The solid fats are typically heated to a specific temperature until they melt into a liquid, and then they are refined and purified using various processes, such as filtration, clarification, and centrifugation.
- **CRYSTALLIZATION PLANTS:** Used to cool and solidify liquid fats into a solid state.
- The liquid fats are typically cooled to a specific temperature and then crystallized using various processes, such as agitation and seeding.



Equipments used

1. Melting & crystallization tanks

Used to melt solid fats into a liquid state and to cool and solidify liquid fats into a solid state. The tanks may be heated using steam, hot water, or may be cooled using refrigeration systems or other cooling methods.

2. Heat exchangers

Used to transfer heat between two fluids, such as heating or cooling the fats.

3. Pumps

Used to move the fats from one part of the plant to another, such as from the melting tanks to the crystallization tanks.

4. Filters

Used to remove impurities and particles from the fats, improving the quality of the final product.

5. Centrifuges

Used to separate different components of the fats, such as separating solids from liquids or separating different types of fats.

6. Mixers

Used to blend different fats or to add other ingredients to the fats to achieve specific properties, such as texture or flavor.

