

EDIBLE OIL PLANTS

PROCESSING PLANTS



Oilseed preparation plants are facilities that process oilseeds, such as soybeans, canola, sunflower seeds, and flaxseed, to extract oil for use in various applications. Oilseed preparation plants typically receive raw oilseeds from farmers or other suppliers and process them into oil, meal, and other by-products.

Oilseed preparation process

It involves a series of mechanical and chemical processes that extract oil from oilseeds and refine it into a usable product.

- 1. Cleaning:** The raw oilseeds are cleaned to remove any foreign materials, such as stones, dirt, or plant debris.
- 2. Conditioning:** The cleaned oilseeds are then conditioned, which involves heating and moisturizing them to facilitate the extraction process.
- 3. Crushing:** The conditioned oilseeds are then crushed to break them into smaller pieces and release the oil.
- 4. Extraction:** The crushed oilseeds are then processed using either a solvent or mechanical extraction method to remove the oil. Solvent extraction involves using a chemical solvent to dissolve the oil, while mechanical extraction involves pressing the oil out using a screw press.
- 5. Refining:** The extracted oil is then refined to remove any impurities, such as free fatty acids, phospholipids, and pigments.
- 6. Packaging:** The refined oil is then packaged into containers, such as bottles, cans, or drums, and shipped to customers.



- The meal, or solid residue left after oil extraction, is typically used as animal feed or fertilizer.
- Other by-products may include hulls, which can be used as fuel, and lecithin, which is a valuable ingredient in many food products.

Food products processed using oilseed preparation plants



1. Cooking oils: Vegetable oils such as soybean, canola, sunflower, and corn oil are commonly used in cooking.
2. Margarine and spreads: Margarine and other spreads are made using vegetable oils.
3. Salad dressings: Many salad dressings contain vegetable oil as a main ingredient,
4. Snack & baked foods: Snack foods such as potato chips, popcorn, crackers, cakes, and cookies are often fried in vegetable oil.
6. Dairy alternatives: Some dairy alternatives, such as plant-based milk and yogurts, contain vegetable oil as a main ingredient
7. Processed meats: Vegetable oil is sometimes added to processed meats, such as sausages and hot dogs.

Market insights

The global demand for vegetable oils is expected to continue growing in the coming years due to the increasing population, rising disposable incomes, and changing dietary habits.

1. Technological advancements are driving efficiency and productivity:

Advancements in technology are allowing oilseed preparation plants to improve efficiency, productivity, and output. This includes the use of automation and robotics, precision agriculture, and data analytics.

2. Sustainability and traceability are becoming more important:

Many companies are implementing sustainable practices, such as reducing greenhouse gas emissions, conserving water, and promoting biodiversity, to meet consumer demands.

3. Trade agreements and policies affect the industry:

International trade agreements and policies can have a significant impact on the oilseed preparation industry, as they can affect market access, prices, and competitiveness.

4. Consolidation and mergers are occurring in the industry:

As they seek to improve efficiency, reduce costs, and increase market share. This trend is expected to continue in the coming years, with larger companies acquiring smaller ones to expand their reach and capabilities.

