

A close-up photograph of several fresh sugar beet roots with their green leafy tops. The roots are a deep reddish-purple color and have a rough, textured skin.

SUGAR BEET PREPERATION PLANTS



Sugar beet preparation plants are facilities that are used to process sugar beets into raw sugar. Sugar beets are a type of root vegetable that contains high levels of sucrose, which can be extracted and processed into sugar. Sugar beet preparation plants typically involve several stages of processing, including cleaning, slicing, diffusing, and evaporation.

- Sugar beet preparation plants require specialized equipment, including slicing machines, diffusers, evaporators, and clarifiers, as well as a range of pumps, piping, and storage tanks.
- The specific equipment and processes used in sugar beet preparation plants may vary depending on the size and capacity of the plant, as well as the specific requirements of the customer.

Some of the food products that may be produced using sugar from sugar beet preparation plants include:

1. Confectionery:
2. Beverages
3. Dairy products
4. Baked goods
5. Processed foods



Working Principle

- 1. Cleaning:** Sugar beets are first cleaned to remove any dirt, rocks, or other impurities that may be present on the surface of the beets.
- 2. Slicing:** The cleaned sugar beets are then sliced into thin pieces using specialized equipment. The slicing helps to increase the surface area of the beets and makes it easier to extract the sucrose.
- 3. Diffusing:** The sliced sugar beets are then mixed with hot water in a diffuser. The hot water helps to dissolve the sucrose and create a sugar-rich solution.
- 4. Clarification:** The sugar-rich solution is then separated from the beet pulp using a clarifier. The clarifier helps to remove any remaining impurities from the solution.
- 5. Evaporation:** The sugar-rich solution is then subjected to several stages of evaporation to remove water and concentrate the sugar. The resulting thick syrup is known as raw sugar.
- 6. Centrifugation:** The raw sugar is then further processed through a centrifuge to separate any remaining impurities and produce a higher-quality raw sugar.

The raw sugar can then be further refined and processed into a range of sugar products.





Market Scope

- The global market for sugar beet preparation plants is driven by the growing demand for sugar and other sweeteners in the food and beverage industry.
- The market for sugar beet preparation plants is also driven by increasing awareness of the health risks associated with excessive sugar consumption.
- Europe is currently the largest market for sugar beet preparation plants, with countries such as France, Germany, and Poland among the leading producers.
- The Asia-Pacific region is also expected to experience significant growth in the market, driven by the increasing demand for sugar and sweeteners in countries such as India, China, and Indonesia.
- The market for sugar beet preparation plants is highly competitive, with several large players operating in the industry.

Some of the key players in the market include BMA AG, Fives Cail Group, ANDRITZ AG, and ThyssenKrupp AG.

