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ESTABLISHMENT AND DEVELOPMENT OF GRAIN PRODUCTION PLANTS IN UZBEKISTAN

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Annotation

The flour industry is a branch of the food industry that processes grain. Buckwheat, rice, millet, oats, barley, corn, wheat, peas and white oats are used for the preparation of cereals. data are given.

The flour industry is a branch of the food industry that processes grain. The main products are flour and cereals. Flour weighing has long been known. Initially, the grain was ground into flour and thieves, hand mill was used to make cereal or flour, then water mills were built, and in the 17th century, windmills were built in low-water areas. The first steam mills appeared in Great Britain in 1786 and in Russia in 1818. With the advent of electricity, mills began to use mainly this energy, and the industry developed rapidly.

In 1918, large mills were nationalized, and in 1920, the Turkun Flour Industry Trust of the Republic of Turkestan was established, which included 21 flour mills and 6 rice mills. In those years, there were 4,510 privately owned water mills and water mills in Uzbekistan.

In the 1930s, the construction of new flour mills and factories began in major cities with regional centers and industrial enterprises. In 1932, the Republican Office "Uzdontayorlov" was established to produce, process and sell grain products (since 1992, the state joint-stock corporation "Uzdonmahsulot"). By 1941, flour i.ch. Increased 10 times (345.8 thousand tons). In the 60s and 70s, 8 flour mills with 3 types of flour with a capacity of 240 t / day were put into operation. In 1970, the production capacity of flour mills of the republic reached 3243 t / day. After 1991, in rural areas, many small and medium-sized businesses began to build small electric mills on their farms.

Uzdonmahsulot Corporation has 52 plants for the production of high-quality flour and semolina, more than 20 of which are equipped with modern technological equipment (mainly the Swiss company Bueller AG) (2004).

Another important branch of the food industry is the grain industry, which produces a variety of cereals from oats, buckwheat, wheat, barley, corn, rice and legumes (peas, beans, lentils). In Uzbekistan, mainly rice of various varieties is made. Its largest enterprises are located in Tashkent, Muzrabad, Khojayli, Shumanay, Khanka, Bagat and other cities. "Navoiydonmahsulot" produces corn flour for confectionery and bakery industry, as well as corn flour.

In 2003, the Uzbek Flour Industry. enterprises produced 971.1 thousand tons of flour, 36.9 thousand tons of cereals, including 35.6 thousand tons of rice (in 2000 - 1756.1; 88.5; 84.3 thousand tons, respectively).

In the developed countries of the world, wheat is the main source of flour for food production. Flour production is growing in these countries, despite declining per capita bread consumption. In the United States, Canada, Japan, the United Kingdom, France, Italy, Mexico, Brazil, and other countries, the manufacturing industry is well developed.

Modern mills and grain mills are highly mechanized.

computerized and automated, with a high rate of continuous operation

is the type of enterprise that performs. Technological processes in the mill start from one or more streams and during the grinding process are divided into tens and hundreds of streams (in terms of size and quality) and processed separately. Eventually one or more controllers flow through the finished product.

Production technology in modern mills and cereals

The process is carried out in 3 sections.

In cereals:

1. Clean the grain and treat the surface.
2. Separation of grain shells.
3. Coating and packaging of cereals.

In the first (preparation) section, the grain mass is free of foreign matter

cleared. The surface of the grain is treated with water.

In the second section (husk separation) by the size of the grain mass

divided into fractions, the husks of the grain are separated and sorted,

crushed, ground and ground, Cereals and waste Controlled.

In the third (coating) section the type and number of the finished product Cereals

covered separately.

The following points should be taken into account when cleaning the grain:

- washing grain to remove dust, fungi and microorganisms, as well as heavy and light mixtures;
- moistening with cold water or exposure to hot steam during rapid processing of grain to purposefully change the physico-technological and biochemical properties of the endosperm and shells;
- Dosing and mixing of grain with different physical and mechanical properties to obtain a more technologically advanced and food-grade mixture;
- Final crushing and short-term wetting to ensure that moisture in the grain is distributed differently between the endosperm and the shells before crushing.

Flour is a grain product that is ground. If the flour is made only from the inner part of the grain (endosperm), it is called varietal flour. Flour made from the grinding of grain together with the husk and husks is called jaydari (ordinary) flour. The main flour used is wheat, rye and triticale. Flour is also made from oats, buckwheat, corn and barley, depending on consumer demand. Different varieties of flour differ in chemical composition.

The kernels of whole grains are whitened by various processes and separated from the upper flower and seed pods. Only buckwheat husks are separated from buckwheat seeds and cereals are made. Buckwheat, rice, millet, oats, barley, corn, wheat, peas and white oats are used to make cereals.

Flour products made from wheat grains are the main source of consumption due to their richness in protein and other chemical elements. Cereals belong to the group of semi-finished products, from which a variety of dishes are prepared in less time.

The first task in processing grain into cereals is to completely separate the top layers of grain. For the production of cereals, the grain is cleaned of impurities, hydrothermally treated, separated into fractions, separated from the husk, the cleaned products are sorted, the cereals are ground and the remaining husks are decorated for cleaning. Only after separating the buckwheat from the rind can the porridge be obtained, in other cases the porridge requires additional processing.

Complex processes take place in the preparation of cereals from grain, in which the main chemical components of the grain are involved.

During hydrothermal treatment of grain, partial pasteurization of starch and inactivation of enzymes occur, grain stops breathing, degradation of the lipid complex increases the strength during storage of grain. As a result of separation and grinding of the shell, 90% of fiber, 80% of pentosans are removed, the amount of minerals, vitamins decreases, the amount of starch increases.

Porridge made from sorghum seeds is very useful for the human body and health. It is rich in protein and vitamins. In the cereal industry, oatmeal is used to make dairy products for breakfast. Rice bran - oil, soap, phosphorus is extracted from the husk. Qovuz (ëóçàà) is chemically treated at hydrolysis plants to produce technical alcohol and xylitol. Karshi-Dunyo-M produces special cereals for children from wheat bran. It differs from other cereals in its richness in various vitamins, fats and other macro and micro elements. The chemical composition of grain and its processed products varies, depending on their output and preparation technology. During grinding, grain starch is damaged, its properties change, its ability to absorb moisture and form sugar increases. Flour contains less lipids, minerals and vitamins than grain. The amount of protein is also unique. High-grade flour contains less minerals and fiber, more protein, vitamins, lipids, starch.

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