Discover The Secret To Perfect Corn flakes production line: Corn flakes production line Recipes

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The charm of corn flakes

In the bright starry sky of the global snack market, corn flakes are undoubtedly a dazzling star. From street shops in the Americas to supermarket shelves across Asia, Europe, and Africa, corn flakes have captured the hearts of countless consumers with their crispy taste, rich and diverse flavors, and convenient ways of eating. Whether as a nutritious choice with milk for breakfast or a delicious snack to satisfy your cravings during leisure time, corn flakes have been integrated into people's daily lives with their unique charm and have become a classic snack loved by people of all ages.

Introduction to the concept of <u>corn flakes</u> production line

Behind the popularity of corn flakes around the world, high-value and energy-saving equipment plays a vital role. This type of equipment is not a simple production tool, they are the crystallization of technology and innovation. The so-called high value is reflected in its excellent performance, stable quality, and the ability to optimize the entire production process, which can help companies efficiently produce highquality corn flakes; energy saving is a key attribute that conforms to the trend of green development in the era. Through advanced technology and ingenious design, while ensuring production efficiency, it minimizes energy consumption, not only saving operating costs for companies, but also contributing to environmental protection. It is these equipment that support the vigorous development of the corn flakes industry and transforms grains of corn into delicious food in people's hands.

Why our <u>corn flakes production line</u> is costeffective

In today's competitive food processing industry, manufacturers are increasingly looking for equipment that delivers more than just functionality. When it comes to corn flakes production equipment, being labeled as "top value" means offering an ideal combination of performance, reliability, energy efficiency, and long-term costeffectiveness.

Integration of automatic control systems

These systems allow for precise temperature regulation, continuous monitoring, and real-time adjustments, significantly improving operational stability and product consistency. Compared to traditional manual processes, modern corn flakes equipment minimizes human error and reduces production downtime.

2. Durability

Top-value corn flakes manufacturing line is typically built using highgrade stainless steel and food-safe components that meet international standards. This not only extends the machine's service life but also ensures it can handle high-volume, continuous production environments—making it especially suitable for both small-scale startups and industrial cereal manufacturers.

3. High performance

high-value equipment often incorporates modular design elements, allowing for flexible configuration and easy maintenance. Whether you're producing plain corn flakes or adding flavored coatings, these machines can be tailored to suit a variety of product lines without major retooling.



Equipment list of corn flakes production line

Mixer ---Screw Conveyor---Double Screw Extruder ---Vibrate Cooler---Air Conveyor---Flaking Machine---Air Conveyor---Pre-dryer ---Hoister --Vibrate Feeder---High Temperature Baking Machine---Sugar Sprayer---Multi-layer Oven---Cooling Conveyor---Packing Machine

Technical parameters of the breakfast cereals production line:

Model	Installed	Power	Output	Size (L*W*H)
	Power	Consumption		
LY65	140kw	90kw	120-150kg/h	39000*1200*
				2200mm
LY70	160kw	120kw	180-220kg/h	41000*1500*
				2200mm
LY75	190kw	140kw	300-500kg/h	43000*3500*
				4300mm
LY95	240kw	190kw	800-1000kg/	65000*5000*
			h	4300mm



Working Process of the corn flakes processing machine

1. Mixer: Mix corn flour, water, salt, sugar and other raw materials in precise proportions to form a uniform mixture, ensuring the taste and quality of the corn flakes produced later. In addition, various special ingredients such as nutritional enhancers and flavoring agents can be added during the mixing process.

2. Screw Conveyor: Use the rotation of the spiral blade to transport the

mixed materials from one location to another along the conveying pipeline. In the corn flakes production line, it is mainly used to transport the materials in the mixer to the next processing equipment to ensure the continuity and stability of material transportation.

3. Double Screw Extruder: Under the action of the twin screws, the materials are strongly extruded, sheared and stirred, and physical and chemical changes occur under high temperature and high pressure, plasticized and extruded. By replacing different molds, blanks of different shapes and specifications can be extruded to prepare for subsequent processing into corn flakes.

4. Vibrate Cooler: Cools the high-temperature material coming out of the extruder, disperses the material evenly through vibration, accelerates heat dissipation, prevents the material from sticking and deforming due to high temperature, and also creates suitable temperature conditions for subsequent processing steps.

5. Air Conveyor: Uses airflow to transport the cooled material to different processing stations. This method of transportation can achieve long-distance transportation and prevent the material from being contaminated during transportation. At the same time, the material can be screened and separated to a certain extent during transportation.

6. Flaking Machine: Presses the conveyed material into thin flakes. By adjusting the roller spacing and pressure of the tablet press, the thickness and density of the corn flakes can be controlled to meet different product requirements.

7. Pre-dryer: Removes part of the moisture in the corn flakes, reduces the moisture content of the material, and prepares for subsequent hightemperature baking. Appropriate pre-drying can reduce the hightemperature baking time, improve production efficiency, and help the corn flakes form a better taste and texture during the baking process.

8. Hoister: lift the pre-dried material to a certain height and transport it

to the subsequent processing equipment to achieve vertical transportation of materials between different heights and ensure the continuous operation of the production line.

9. Vibrate Feeder: transport the material to the next process at a stable and uniform speed, such as to the high-temperature baking machine. By adjusting the vibration frequency and amplitude, the feeding amount of the material can be accurately controlled to ensure the stability of the production process and the consistency of product quality.

10. High Temperature Baking Machine: use high temperature to bake corn flakes to further dehydrate and expand them, forming a crispy taste and unique flavor. High temperature baking can also play a sterilizing role and extend the shelf life of corn flakes.

11.Sugar Sprayer: Evenly spray syrup, sauce, etc. on the surface of baked corn flakes to increase the sweetness and flavor of corn flakes and meet the taste needs of different consumers. At the same time, the syrup can form a thin layer of sugar coating on the surface of corn flakes after cooling, which improves the appearance and taste of the product.

12. Multi-layer Oven: Re-bake the corn flakes after spraying sugar so that the syrup can fully penetrate into the corn flakes and further dry the corn flakes to ensure that the moisture content of the product meets the standard, while making the flavor of the corn flakes richer and the taste crisper.

13.Cooling Conveyor: Cool the baked high-temperature corn flakes to room temperature for subsequent packaging. The cooling process can prevent the corn flakes from generating water vapor after packaging due to excessive temperature, which affects the product quality and shelf life.

14.Packing Machine: The cooled corn flakes are quantitatively packaged into packaging bags, boxes and other packaging materials

according to different specifications and requirements, and the sealing and labeling operations are completed so that the products can be put into the market for sale.



Reasons why corn flakes production line is popular in the market

1.Global breakfast cereal demand growth trend

One reason for its widespread adoption is the shift toward healthy

eating habits. As consumers look for quick yet nutritious breakfast options, the demand for corn flakes and other cereal products has soared. This trend has driven the breakfast cereal processing industry to invest in machines that can produce high-quality products in large volumes—reliably and consistently. High-efficiency equipment ensures that production keeps pace with market growth without compromising food safety or product standards.

2. Positive user feedback and strong sales performance

Moreover, the automation and consistency delivered by modern food machinery reduces labor dependency and increases output precision. With automatic mixing, cooking, forming, and drying processes, manufacturers are able to reduce waste and streamline production workflows. The result is faster time-to-market and reduced operating costs—two major advantages in today's competitive cereal manufacturing industry.

Versatility for small, medium and large production lines

Customer testimonials and global market trends also reinforce the popularity of this equipment. Many food production companies report not only improved productivity but also a higher return on investment due to reduced energy consumption and maintenance requirements. These factors position corn flakes processing machine as a smart, longterm investment for both emerging and established manufacturers.

FAQ

1. What is the production capacity of this corn flakes production line per hour/day?

Our standard - configuration corn flakes production line can achieve an hourly output of 100 kilograms, and approximately 1 tons per day with continuous operation. However, the actual capacity can be adjusted according to your specific requirements. We can customize the production line to increase or decrease the output by modifying components such as the extruder's screw speed, oven size, etc.

2. Can this production line handle different types of corn raw materials and produce various flavors of corn flakes?

Absolutely. Our production line is highly adaptable. It can process different varieties of corn, including yellow corn, white corn, etc. Regarding flavors, you can add different seasonings and ingredients during the mixing and spraying processes. We'll provide you with detailed recipes and technical guidance on how to produce popular flavors like cheese, barbecue, and honey - sweet, as well as help you develop unique flavor combinations.

3. Who will install the production line? How long will it take to install?

Our professional installation team will travel to your site for installation. The installation process usually takes about 2 weeks, depending on the complexity of your factory layout and any unforeseen circumstances. Before installation, we'll communicate with you in detail to prepare the necessary infrastructure, ensuring a smooth and efficient installation process.

4. Will you provide training for our operators?

Yes, we offer comprehensive training for your operators. The training includes both theoretical knowledge. Your operators will learn how to start and stop the production line, adjust parameters, troubleshoot common problems, and perform basic maintenance tasks. We'll also provide training materials in your language to support continuous learning.

5. What kind of after - sales service do you offer? How quickly can you respond to equipment failures?

We provide one year warranty for all equipment. During this period, if

there are any quality - related problems, we'll offer free parts replacement and repair services. For urgent equipment failures, our technical support team is available 24h.

About Us

We are a professional manufacturer of food machinery and we have been manufacturing nutrition cereal bar processing line for nearly 20 years. In addition to the Nutrition Cereal Bar snack processing line, we also manufacture lines for deep-fried food, pet feed, modified starch and many more. Each of our lines has basically a variety of moulds, which can be adapted to produce a wide range of food products. We are not satisfied with the status quo but are constantly upgrading and innovating our products, adapting our production plans and designs to the changing needs of the times and keeping up with the pace of progress. Never satisfied with the pursuit of excellence!



Reference

The following are five authoritative foreign literature websites in the field of Industrial food machinery:

1. Food Engineering Magazine

Website: https://www.foodengineeringmag.com/

2.Food Processing Magazine

Website: https://www.foodprocessing.com/

3. Journal of Food Engineering

Website: https://www.journals.elsevier.com/journal-of-food-engineering

4. Food Manufacturing Magazine

Website:https://www.foodmanufacturing.com/

5. International Journal of Food Science & Technology

Website:<u>https://onlinelibrary.wiley.com/</u>