Which type of extruder is most commonly used in snack food industry?

What is a screw extruder?

What is the basic composition of a screw extruder?

What is the working principle of the extruder?

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Casual food is an indispensable food in our daily life, which adds much fun to our life. When we are tired from work or with our friends, casual food can always give us the most help. When you walk into a store at will, you can always find that the number of snack foods is the largest.

Nowadays, the food processing industry has been mechanized, and casual food is even more so. In this industry, extrusion technology has become a key technology to improve the quality of food, and many kinds of snack food we consume are produced through this technology. The extruder is the best application of extrusion technology, so which type of extruder is most commonly used in the casual food industry?

Which type of extruder is most commonly used in snack food industry?

In the modern food processing industry, there are three extrusion technologies that are more common: piston extruders, roll extruders, and screw extruders. The most commonly used is the screw extruder.



What is a screw extruder?

A screw extruder is a machine that can concentrate a series of chemical basic unit processes, such as solid conveying, pressurizing, melting, exhausting, dehumidification, melt conveying, and pumping, on the screw in the extruder. Compared with single-screw extruders, twin-screw extruders enable the melt to be more fully mixed and are therefore more widely used.

The basic components of screw extruder:

- 1. Gearing unit
- 2. Feeding device
- 3. Barrel
- 4. Screw

Screw extruder plays a vital role in the processing of snack food. The extrusion process can make many unexpected delicacies from ordinary raw materials. What is the basic working principle when producing snack foods?

What is the working principle of the extruder?

First, add granular or powdered solid materials into the hopper of the extruder. There is a heater outside the barrel of the extruder. After the heater is heated, the heat will be transferred to the material in the barrel through heat conduction. The temperature rises and reaches the melting temperature.

After that, the extruder will start to run, the screw in the barrel begins to rotate, and the material is pushed forward while rotating. The material will generate friction during the movement, including the friction between the material and the barrel, the friction between the material and the screw, and the friction between the material and the screw. The friction between the materials will cause a lot of heat to be generated.

The frictional heat and heat conduction work together to melt the material, and the molten material is continuously and steadily transported to the head with a certain shape. After that, the material is conveyed into the cooling setting device, so that the material is solidified on one side and the other side maintains the established shape. Under the action of the traction device, the product is continuously advanced, and the final product size is obtained. Finally, the product is cut by cutting for storage and transportation.

It is worth mentioning that there are several models of extruders to choose from. Their structures, types, and specifications are different. The structure, shape, and size of the machine head can be customized according to the manufacturer's needs. The cooling and shaping method depends on the product variety and material properties. The rest of the auxiliary machines will also have many differences.

The extruder is very useful with superior performance, is an indispensable presence in the casual food processing industry, and a high-quality extruder will give manufacturers the greatest help. It allows manufacturers to produce snack foods of higher quality and is more recognized by consumers in the market.

We are a professional food machinery manufacturer, the production of <u>Food Extruder Machine</u> has gained very high praise and enjoys a high reputation in the industry. The machine is made of food-grade stainless steel, which is durable and easy to clean. The PLC control system and highly automated production method make the operation of the machine easier without human intervention, effectively reducing labor costs.



Most importantly, we can provide customized service, tell us your production needs, our engineers will customize the most suitable equipment for you, and can provide you with the most favorable price.

If you want to make your mark in the snack food industry, please contact us, and we will recommend the best Food Extruder Machine for you!