

# How does an extruder screw work?

What is a twin-screw extruder?

What are the advantages of extruders?

The application of extruders in the food processing industry?

The progress of science and technology is driving the development of society, and the food processing industry has quietly undergone huge changes. Automated production is the mainstream of the modern food processing industry. In the production of food, factories need to use many high-tech equipments, and the highest use rate is the screw extruder.

Screw extruder can be used in a variety of food products, can make the raw materials in an instant to produce a huge change, the taste will become very rich. So what kind of working principle does the screw extruder use to make it have such superior performance?

## How does an extruder screw work?

The screw extruder is one of the most important equipment in the food processing industry. Since the birth of the screw extruder, it has developed from an ordinary screw extruder to a new type of screw extruder after nearly a hundred years of development. Although there are many types of new screw extruders, the extrusion principle is basically the same as far as extrusion is concerned.



The specific working principle of screw extruder means adding water or appropriate liquid to the raw material powder and stirring it continuously. The stirred material is extruded with high extrusion pressure from a porous head or metal mesh. The material is usually extruded with a screw after being placed in a cylindrical container. With the use of frequency conversion technology, the pressure can be controlled to select the most suitable linear speed.

There are also various types of screw extruders, commonly single-screw extruders, and twin-screw extruders. Compared to single-screw extruders, twin-screw extruders have higher productivity and mixability and are widely used in the food industry.

### **What is a twin-screw extruder?**

A twin-screw extruder is a kind of equipment that integrates heating, mixing, crushing, shearing, pressing, forming, puffing, drying, and other functions. In the food industry, twin-screw extruder has become an indispensable equipment in compound raw material manufacturing engineering and product homogenization.

The working principle of the extruder is very powerful, and using this principle, many different types of food products can be produced. Many of the foods you eat every day are made using extruders.



### **Applications of extruders in the food processing industry:**

- 1.Casual food
- 2.Soy protein foods
- 3.Breakfast cereals
- 4.Macaroni
- 5.Baby rice flour
- 6.Pet food

These are a few of the more common food products produced by extruders. Are they not almost all over our lives? In addition to many others, extruders have become nearly the most

important presence in the food processing industry, and more and more manufacturers are using food extruders. So what are the advantages of extruders that make them the darling of the food processing industry?

### **What are the advantages of extruders?**

1. The intuitive understanding of the wear and tear of wearing parts

Since it is easy to open, manufacturers can find out the wear and tear of threaded components and barrel bushings at any time so that effective repair or replacement can be carried out. Avoid finding out the problem only when the extruded products appear, which causes unnecessary waste.

- 2.Reduce production cost

The highly automated production method allows the equipment to be produced with very high efficiency and less waste and reduces manual intervention, thus effectively reducing production costs.

- 3.wide range of applications

A wide range of applications can be applied to the processing of a variety of materials.

4. High output, high quality, and high efficiency

With all the advantages of the extruder, it can realize high output, high quality, and high efficiency.

- 5.No pollution to the environment

The production process will not produce "three wastes" and will not cause pollution to the environment.

Extruders have many advantages and excellent performance, so more and more manufacturers begin to use extruders. High-quality extruders can provide manufacturers with the greatest

help.

**Food Extruder Machine** is an internationally known food machinery with very high-cost performance, superior performance, stable quality, smooth operation, high production efficiency, low price, and can provide a long warranty. **Food Extruder Machine** is the ideal choice for manufacturers to reduce production costs and improve economic efficiency.

If you also want to get a broader market in the industry, welcome to contact us. We will provide you with the greatest help!