

What Is Extrusion In Food Processing?

The food processing industry occupies a very important position in our daily lives. Food processing refers to food made from food as raw materials. After processing, the food is more delicious and can effectively increase people's appetite. The ordinary foods we usually see are actually produced after a variety of processing methods. Extruded foods are now widely welcomed by the public and occupy a very important position in the food industry.

Extrusion technology is widely used in the food industry. For example, it is used in vegetable protein. The protein molecules become fibrous-like structures after extrusion, and the taste is richer. The use of extrusion technology in the brewing industry can effectively shorten the fermentation cycle. And the raw material output rate can be increased by 40% to 50%. Extrusion technology is also used in animal feed, so that the protein utilization rate of animal feed produced can be significantly improved. And the palatability of the feed will be better. At the same time, the extrusion method is currently the most respected microencapsulation method for flavors and fragrances.

For us, the most common way of food extrusion is all kinds of snack foods. Snack food occupies a very large proportion in our lives. Therefore, there are many manufacturers of snack foods, in order to obtain higher production quality as well as production efficiency, manufacturers have begun to use snack food extruders.

Recreational puffed food is the first product to succeed in applying extrusion technology to food processing. It uses rice, corn and other grains and potatoes as the main raw

materials. After extrusion, steaming, puffing, and baking, dehydration or frying , spraying a layer of delicious seasoning on the surface, it becomes the leisure puffed food we eat, corn fruit, puffed shrimp strips and other products belonging to the extrusion technology.

So what is the principle of extrusion technology in food processing?



The food extrusion process is usually carried out in a snack food extruder. The mixed raw materials containing a certain amount of moisture are affected by the thrust of the screw in the snack food extruder, the blocking effect of the inner wall of the barrel, the reverse screw, the kneading block, and the molding die, the heating effect of the outer wall of the barrel. And the the friction between screw and raw materials, raw materials and the barrels causes the raw material and the inside of the screw barrel to generate a large amount of heat energy.

The combined effect of these factors makes the raw material in the barrel at a high pressure of 3-10MPa and a high temperature above 170°C. The pressure at this time exceeds the saturated vapor pressure of water at the extrusion temperature, which makes the water in the raw material in the extruder barrel will not evaporate due to boiling. And the raw material will be in a molten state. Once the raw material is extruded from the mold, the pressure suddenly drops to normal pressure, the moisture in the raw material will instantly evaporate. And the temperature drops to about 80°C. So the raw material becomes an expanded product with a certain shape and porous structure.

Our company is a professional [food machinery manufacturer](#), mastering the core principle and technology of extruder. The extruder produced is very cost-effective. And it is the key to many manufacturers to increase their profits. At the same time, we can provide customized services. Our engineers will achieve personalized customization for you to meet all your needs. At the same time, our baby rice powder production line and instant noodle production line are well received.

At this time, I believe that you have a certain understanding of the [Snack Food Extruder Machine](#). As a necessary equipment in the snack food industry, the snack food extruder will definitely bring greater profit returns to your business!