

Research on Pneumatic Popcorn Machine

Popcorn is a popular traditional food.

[Hot air popcorn maker](#)

With the continuous improvement of people's living standards, the demand for popcorn is also increasing rapidly. Over the years, popcorn has been mainly exploded by a heated sparkler.

[Microwave drying machinery and equipment](#)

The spark chamber of the heating sparkler is usually sealed with lead. The popcorn made of the heating sparkler is easy to carry lead, which is not conducive to health, and the output needs to be improved.

Therefore, it is necessary to develop a safe, hygienic and efficient popcorn machine.

Pneumatic popcorn machine is mainly composed of air pump, reversing valve, air filter, pneumatic relief valve, popcorn chamber and so on. Under the drive of the motor, the air pump continuously pressurizes the spark chamber. Air relief valve plays the role of safety valve and plays the role of safety protection in the system.

When the system pressure exceeds the prescribed value, the safety valve opens and part of the gas in the system is discharged into the atmosphere, so that the system pressure does not exceed the allowable value, thus ensuring the safety of the system.

When the air pressure in the popping chamber reaches about 6 atmospheric pressures (equivalent to 0.6 MPa), the quick exhaust valve is opened, which makes the compressed air in the system discharge quickly, and the air pressure in the popping chamber decreases rapidly, which makes the pressure difference between the inside and outside of the corn kernels bigger, and instantaneous popping of the rice kernels becomes popcorn.

Multiple air filters are used to prevent dust and germs from entering the spark chamber. The spark chamber is equipped with a discharge port for loading and unloading raw materials and finished popcorn.

Using pneumatic popcorn machine to process corn popcorn, the energy of each 40 g popcorn product is equal to 2 eggs. Compared with beef of the same weight, the protein content of popcorn is steak. 70. Iron and calcium content is 10% higher than steak. Cracking Jade Processed Rice color, white flavor, porous, dense honeycomb, uniform structure, soft texture. Nutrition loss in popcorn production without heating

In the popping process, adding sugar, oil, spices and other condiments, you can get all kinds of flavors of cornflower, which has good color, fragrance, taste and shape, rich nutrition, easy digestion, suitable for all ages.

Compared with the ordinary popcorn production process, the pneumatic popcorn machine has larger particle size and lower energy consumption. It is suitable for large-scale production to improve production. Pneumatic popcorn machine uses high-pressure air to pressurize corn kernels, then makes the volume of corn kernels expand sharply, and pops corn kernels into corn flowers.

This method does not need heat, low energy consumption, less pollution, nutritional hygiene and high production efficiency. It is a new technology worthy of promotion.

