

Fully Automatic High - Quality Puffed Food - Making Equipment

Puffed Food Introduction

Puffed food is a popular and widely - consumed snack category. It is ingeniously crafted by subjecting grains like corn, wheat, and rice, along with various starches such as potato starch and tapioca starch, to specific processing techniques. The most common method is high - temperature, high - pressure extrusion. In an extruder, these raw materials are heated to elevated temperatures, often between 150 - 200 degrees Celsius, and placed under significant pressure. As the moisture within the materials reaches its boiling point under this pressure, it rapidly vaporizes. This sudden vaporization causes the materials to expand explosively as they exit the extruder, creating the characteristic light - textured, airy product we know as puffed food. Another method involves baking pre - processed dough - like mixtures in special ovens with controlled temperature and humidity, which also leads to the expansion of the food due to the release of trapped gases.

When it comes to common types, corn puffs are a classic example. These are usually made from ground cornmeal, formed into small, round or irregular shapes, and then puffed to a light, crispy texture. They can be plain or seasoned with a variety of flavors like salt, barbecue, or cheese. Rice puffs, on the other hand, are made from rice

grains. They are often used in cereal mixes or as a base for sweet treats when combined with honey or chocolate.

Cheese - flavored puffs are a favorite among many. These are typically made by adding cheese powders or processed cheese into the raw material mix before extrusion, resulting in a savory, cheesy snack with a soft - yet - crispy bite.

Extruded snack sticks are yet another popular type. They come in different lengths and diameters, and their flavors can range from spicy to tangy, appealing to consumers with diverse taste preferences. These puffed foods not only vary in flavor but also in shape, from the spherical corn puffs to the long, slender snack sticks, and in size, with some being bite - sized for easy consumption and others larger for a more substantial snack.

years. In 2020, the total consumption volume reached 5 million metric tons, and it is projected to grow to 7 million metric tons by 2025. This growth is propelled by several factors. Changing consumer lifestyles play a significant role. With the rise of busy, on - the - go lifestyles, consumers are increasingly seeking convenient, ready - to - eat snacks that can be consumed easily during commute, at work, or while engaging in outdoor activities. Puffed foods, being lightweight, easy to package, and long - lasting, fit this bill perfectly. Additionally, the expansion of distribution channels has made these snacks more accessible. Supermarkets, convenience stores, and online platforms now offer a wide variety of puffed food products, reaching consumers in both urban and rural areas. The increasing awareness of different cuisines and flavors has also led to a demand for more innovative and diverse puffed food options.

This booming market growth in the puffed food industry has, in turn, increased the demand for advanced and efficient production solutions. To meet the rising consumer demand while maintaining high - quality standards, manufacturers are turning to state of the art fully automatic high - quality puffed food making equipment. Such equipment forms the backbone of modern [puffed food production lines](#), enabling large - scale production with consistent quality, reduced labor costs, and enhanced production efficiency.

Technical parameters of puffed food production line

Model	Installed Power	Power Consumption	Output	Size(L*W*H)
LY 65	80kw	55kw	120-150 kg/h	21000*1200*2200mm
LY 70	115kw	95kw	200-250 kg/h	23000*1500*2200mm
LY 85	170kw	140kw	500-700 kg/h	28000*3500*2200mm
LY95	230kw	164kw	800-1000kg/h	29000*5000*3500mm



Parameters of each machine of puffed food production line(Take LY65 as an example)

EQUIPMENT	TECHNICAL PARAMETER
FLOUR MIXER	Technical Parameter: Model:LY-M

	<p>Input Voltage:380V/50HZ</p> <p>Installed Capacity:3KW</p> <p>Power Consumption:3KW</p> <p>Output:25kg/7minutes</p> <p>Dimension:1050*700*1150mm</p> <p>Functions:Mixer makes the raw material adding to water and other chemical additive fully mixed</p> <p>Machine Material: Contact Food Stainless Steel SS304</p> <p>Cover SS 201</p> <p>Support Rack: Carbon Steel</p>
SCREW CONVEYOR	<p>Technical Parameter:</p> <p>Model?LY-SH</p> <p>Input Voltage?380V/50HZ</p> <p>Installed Capacity?1.1KW</p> <p>Power Consumption?1.1KW</p> <p>Output:100-300Kg/h</p> <p>Dimension:3000*600*2000mm</p> <p>Function:Screw conveyor is advantage is</p>

	<p>suit for powder item that is bad fluidity. In food processing industry, it is for conveying flour, powder additives, seasoning powder ect. Here is used to elevate the mixed raw materials to extruder.</p> <p>Machine Material: Contact Food Stainless Steel SS304</p>
LY65 DOUBLE SCREW EXTRUDER	<p>Technical Parameter:</p> <p>Capacity:120-150kg/h</p> <p>Total Power: 33.87KW</p> <p>Power Consumption:25.4KW</p> <p>Barrel Type: Round</p> <p>Screw Diameter:65mm</p> <p>Screw Length:1050mm</p> <p>Main motor:22kw (frequency)</p> <p>Heating power:10kw</p> <p>Feed motor:0.75kw(frequency)</p> <p>Cutting motor:0.75kw(frequency)</p> <p>Oil pump: 0.37kw</p> <p>Dimension:2500*930*1850mm</p>

	<p>Machine Material: Contact Food Stainless Steel SS304, Cover SS 201,Support Rack: Carbon Steel Screw of extruder: 38CrMoAi Cutter and dies: carbon steel Barrel: 45# steel</p> <p>Function:Raw Materials- rice powder, corn powder, millet powder, wheat powder, oats, buckwheat, bean, etc.</p> <p>108. Series of double-screw extruder mainly consist of feeding system, extruding system, cutting system, heating system, lubricating system and controlling system.</p> <p>108. Feeding system, extruding system and cutting system all adopt frequency conversion timing to gain powerful drive, stable perform, and electricity saving.</p> <p>108. Screw are made of alloy and processed by special technique to possess high intensity, abrasion resistant and longer using life.</p>
AIR CONVEYOR	<p>Technical Parameter:</p> <p>Model?FSJ-II</p>

	<p>Input Voltage?380V/50HZ</p> <p>Installed Capacity?0.75KW</p> <p>Power Consumption?0.75KW</p> <p>Output?100-300Kg/h</p> <p>Dimension:1200*500*500mm</p> <p>Machine Material: Contact Food Stainless Steel SS304, Cover SS 201,Support Rack: Carbon Steel</p> <p>Function: Used to carry products to the next machine.</p>
THREE-LAYERS DRYER (ELECTRICAL)	<p>Technical Parameter:</p> <p>Model?DLK3-II</p> <p>Input Voltage?380V/50HZ</p> <p>Capacity?100-150Kg/h</p> <p>Installed Power?36.75KW</p> <p>Power consumption?27.56KW</p> <p>Heating Power: 36KW</p> <p>DRIVING: 0.75KW (Inverter Control)</p> <p>DRY TIME: ABOUT 6-15 MINUTES</p>

	<p>About 110?</p> <p>Dimension: 5100*2000*1600mm</p> <p>Machine Material: Contact Food Stainless Steel SS304,</p> <p>Cover SS 201, Support Rack: Carbon Steel, chain materials of conveying belt is carbon steel, support rod is SS201</p> <p>Functions: This machine is used to dry the snacks food. <u>The heating temperature and the drying speed can be adjust.</u></p> <p>1. It is 5 layers oven. It can be used to bake and dry the food. The oven can bake all kinds of the inflating food, pet food, TVP/TSP food, peanut, nut, chew nut and so on.</p> <p>2. The temperature can be controlled willfully and designed according to the need.</p>
THREE-LAYER DRYER (GAS)	<p>Technical Parameter:</p> <p>Model? DLK5-II</p> <p>Input Voltage? 380V/50HZ</p> <p>Capacity? 100-150Kg/h</p>

Total power: 4.3KW

Transmission power:0.75KW

Dehumidifier fan? 0.55KW

Circulation fan power: 3 KW

Burner brand: Italian Baltur

Fuel Consumption:

BTG 11: 4.8-10m³/h,

BTL 10: 5.1-10kg/h

Dimension:6100x1500x2600mm

Machine Material:

Contact Food Stainless Steel SS304,

Cover SS 201,Support Rack: Carbon Steel, chain materials of conveying belt is carbon steel, support rod is SS201

Functions:

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FOOD GRADE PVC HOISTER	<p>Technical Parameter:</p> <p>Hoister Power:0.37kw</p> <p>Dimension:1800*560*1500mm</p> <p>Function:</p> <p>Deliver the snack to flavoring drum.</p> <p>Working together with the flavoring drum.</p> <p>Machine Material: Conveying Belt is Food grade PVC</p>

Equipment list of puffed food manufacturing line

Mixer ?Screw Conveyor ?Twin Screw Extruder? Air Conveyor ?Multi-layer Oven? Hoister ?Flavoring Line



Working Process of the puffed food production line

1. **Mixer:** Mix all kinds of raw materials into a uniform state, some can add water to adjust the humidity to ensure product quality.
2. **Screw conveyor:** Convey the mixed raw materials to the

extruder, with large conveying capacity, stability, good sealing, and precise quantity control.

3. Twin screw extruder: Core equipment, extrude and heat the materials to expand them into semi-finished products, and can adjust parameters to produce a variety of products.

4. Air conveyor: Use wind power to transport raw materials or semi-finished products through pipelines for long distances and high efficiency. It is suitable for granular and powdered materials. It can flexibly connect different equipment to reduce space occupation, ensure the cleanliness of the conveying process, and avoid cross-contamination of materials.

5. Multi-layer oven: Bake semi-finished products, remove moisture to increase crispness and color, and some have ventilation to optimize flavor.

6. Hoister: Lift the baked food to a specified height and send it to the subsequent process. The conveying is stable and the layout is flexible.

7. Flavoring line: Add seasoning to enrich the taste of food. Some have drying and cooling functions.

Our Services

1. Recipe: The company's after-sales service department can provide free basic recipes or introduce more

marketable recipe experts.

2. Training: after the installation and commissioning of the equipment can be on-site training of relevant operators, equipment easy to operate.

3. Return visit: regular after-sales telephone call back to customers, to help you solve the relevant problems encountered in the use of equipment.

4. Maintenance: our company provides quality and inexpensive spare parts to the demand side all year round, and provides equipment upgrades and new product development support, really let you have no worries.

5. Out of warranty maintenance: the company provides free maintenance for equipment damage caused by non-human factors during the warranty period. If the equipment is damaged due to human factors and force majeure, the company will provide maintenance services but charge the relevant fees.

About Us

We are able to provide customers with solutions to meet a variety of needs, customizing equipment to produce a variety of food categories. Whether it is a product based on rice, wheat flour or starch, our equipment can meet diverse production needs. This versatility allows our customers to flexibly respond to changing market demands and gain a

competitive advantage.

We are proud to serve global customers, who are not only in China, but also in Canada, the United States, South Korea, Nigeria, Zimbabwe, Afghanistan, Algeria, Ghana, India, France, the Philippines, Malaysia and Sri Lanka. Our customers include many large food companies that are leading the global food industry. The long-term partnerships we have established with our customers enable us to provide highly customized food machinery solutions.

We are professional manufactory of food machinery, snacks food machinery.

22 experienced engineers is working for us whose job is to research new machines, design for clients, commission equipments for clients.

24 Hours' service and 15 after sales service personnels help our clients to solve all the errors of our machines as soon as possible.

We mainly deal with the manufacture, research and development of the snacks food machinery. According to clients' different requirements, we could offer the whole complete processing line for all kinds of expanded snacks, 2D and 3D pellet, potato chips, corn flakes, nutrition powder, pet food and so on. And our technical assistance will help clients produce high quality products all the time.

