

What is a soft biscuit production line

I have previously written about the biscuit production line as a whole. In this article, we will explain the [soft biscuit production line](#) separately.

What are soft biscuits?

Shortbread biscuits are a type of biscuits that are high in fat and sugar. Their core features are loose texture, crispy taste or melt-in-the-mouth. These biscuits usually do not undergo long-term fermentation or multiple rolling, but rely on the lubrication of fat and the hygroscopicity of sugar to maintain their shortbread structure.



The history of shortbread: from court pastries to global snacks

The development of shortbread biscuits runs through the evolution of human baking history. Its core feature - the crispy texture brought by high fat content - can be traced back to the diet of ancient aristocrats. Later, it became a popular snack with the industrial revolution and globalization. The following are the key development

stages:

1. Ancient origin (before the 16th century): the early combination of fat and flour

(1) Middle East and Europe:

"Qurabiya" in the Arab region is a shortbread made of almond powder, honey and fat, which may be the earliest prototype of shortbread (about 10th century).

(2) Medieval European monasteries used butter and flour to make simple shortbread for long-distance travel or fasting.

(3) China: "Shortbread" recorded in "Yinshi Zhengyao" in the Ming Dynasty was made of lard and flour and was the predecessor of peach shortbread.

2. Modern Development (16th-18th Century): Butter Revolution and Royal Desserts

(1) Scottish Shortbread: In the 16th century, during the reign of Queen Mary of Scots, butter replaced expensive sugar as the main ingredient of biscuits, giving rise to the

classic "butter shortbread" (melts in your mouth, with a fat content of over 30%).

(2) French court influence: French "Sablé" biscuits became a standard afternoon tea for European aristocrats due to the addition of large amounts of butter and egg yolks.

3. Industrialization Era (19th-20th Century): From Handmade to Mass Production

(1) Danish Cookies in the 19th Century: Danish bakers combined shortbread dough with caramelization technology to develop the "Danish Blue Jar Cookie" (founded by the Kelsen Group in 1891).

(2) The Rise of American Cookies: In the early 20th century, the American company Nabisco launched "Oreo" (1912) and "Chips Ahoy!" (1963), promoting shortbread cookies as a popular snack through industrialized production.

(3) Asian localization: Japan's "White Lover" (1976) combines French shortbread craftsmanship and becomes a representative of sandwich shortbread cookies.

4. Modern innovation (21st century): health and diversification

(1) Health improvement: low-sugar version (using sugar substitutes), whole grain shortbread (such as oatmeal cookies).

(2) Flavor breakthrough: regional flavors such as salted egg yolk and spicy (such as China's "pork floss shortbread").

(3) Process upgrade: frozen dough technology, non-fried puffing technology (retaining the crispness and reducing fat).

Cultural significance of shortbread cookies

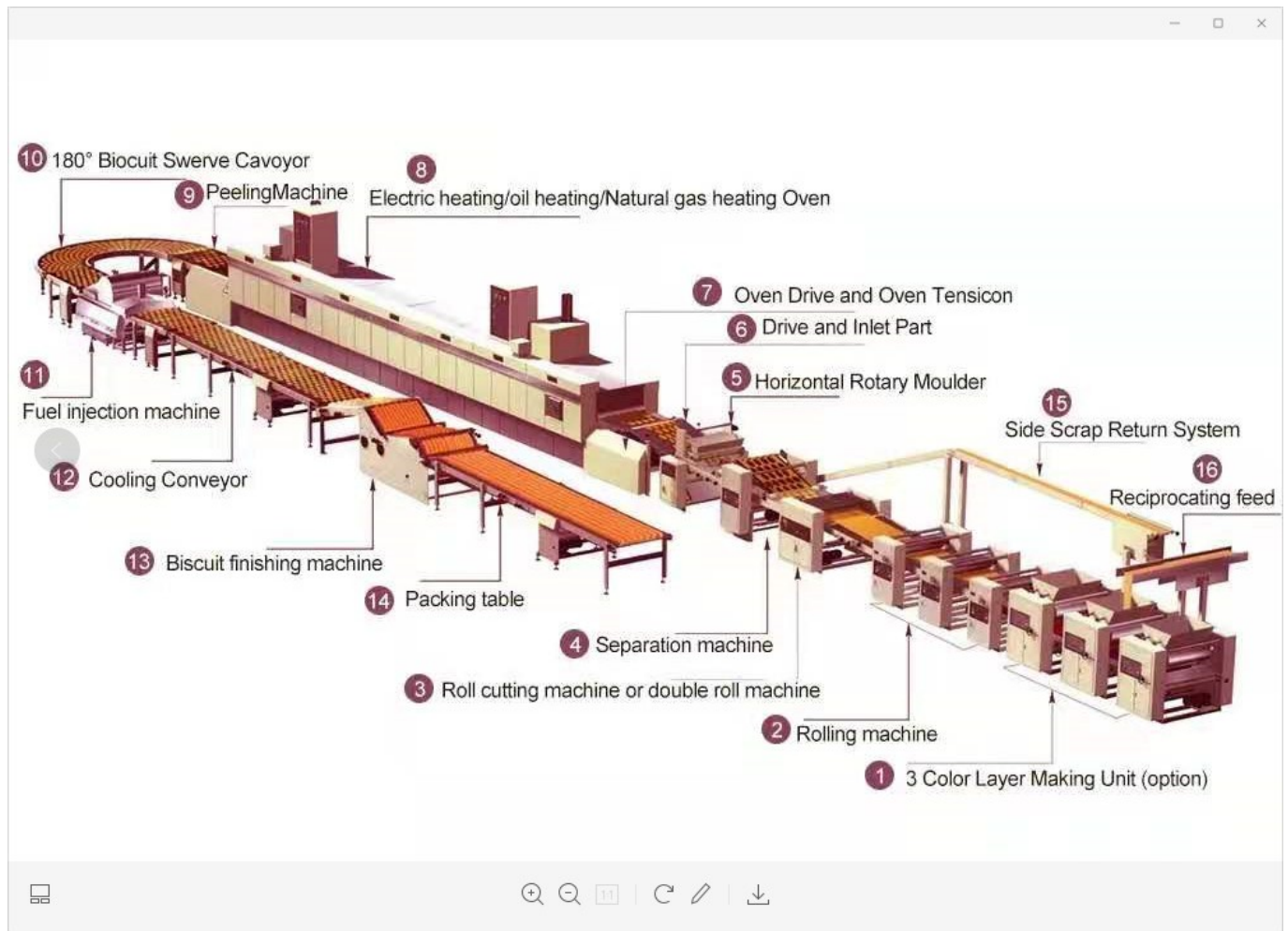
(1) Europe: Butter shortbread is a traditional Christmas gift (such as Germany's "Christmas star cake").

(2) China: Peach shortbread symbolizes "reunion" and is often used as a gift for festivals.

(3) Globalization: Oreo has become a cultural symbol through the "twist and lick" marketing.

From ancient oil experiments to modern industrial

production, the evolution of shortbread cookies reflects the combination of food culture, technological progress and commercial innovation. Today, it is both a nostalgic snack and a vehicle for bakers to compete with each other in creativity.



Four major characteristics of soft biscuits

1. High fat content (?12%)

(1) Use butter, shortening, etc. to reduce gluten formation

and make the biscuits more crispy.

(2) Typical representative: Danish cookies (fat content can reach 20%-30%).

2. High sugar content (?25%)

(1) Sugar not only provides sweetness, but also absorbs moisture to inhibit gluten and enhance crispness.

(2) For example: Margarite cookies, cranberry cookies.

3. Low-moisture dough

(1) The dough is relatively dry to avoid excessive stretching, and a porous and loose structure is formed after baking.

(2) Simple process

(3) No fermentation or long-term stirring is required, usually directly formed and then baked.

4. Common types of shortbread

(1) Cookies

American chocolate chip cookies, coconut cookies, etc., may have cracks on the surface.

(2) Shortbread

Traditional Scottish biscuits, with a very high butter content, melt in the mouth.

(3) Sandwich shortbread

Such as Oreo, two pieces of shortbread sandwiched with cream filling.

(4) Chinese shortbread

Peach shortbread, peanut shortbread, etc., are usually made with lard or vegetable oil.

Why are soft more popular?

(1) Pleasant taste: The crispy and crumbly texture brings satisfaction.

(2) Rich flavor: High fat carries fragrance (such as butter, cocoa).

(3) Suitable scenarios: Suitable for coffee, tea, and as a casual snack.

Health Tips

Due to the high oil and sugar content, it is recommended to control the intake or choose improved versions (such as

whole wheat crispy biscuits, sugar substitute formula).



Difference from hard biscuits

| Characteristics | Hard Biscuits | Soft Biscuits |
|-------------------------|-----------------------------------|--|
| Texture | Hard, chewy | Crisp, crumbly |
| Sugar/Oil | Less | More (oil ? 30%) |
| Gluten | Fully formed | Inhibited formation (avoid gluten formation) |
| Representative products | Soda crackers, digestive biscuits | Cookies, butter biscuits |

Benefits and characteristics of soft biscuits

Soft biscuits are popular among consumers for their unique taste, rich flavor and convenient eating experience. The following are their main advantages and characteristics:

1. Crispy and soft, melts in the mouth

(1) Low-gluten flour + high-fat formula: By reducing gluten formation, the biscuit structure is loose and the texture is light.

(2) Leavening process: Usually, leavening agents such as ammonium bicarbonate are added to produce gas during baking, forming a porous and crispy structure.

2. Diverse flavors to meet different needs

(1) Sweet flavors: such as cream cookies and vanilla cookies, suitable for tea.

(2) Salty flavors: such as cheese cookies and sea salt soda, can be used as snacks.

(3) Filling/coating: Jam, chocolate, etc. can be added to

enhance the flavor level.

3. Convenient to eat and wide range of application scenarios

(1) Ready to eat: ready to eat after opening the bag, no need to heat, suitable for office, travel and outdoor scenes

(2) Easy to match: can be combined with coffee, milk, ice cream, etc., with high adaptability.

4. Long shelf life and easy to store

(1) Low moisture content (usually $<5\%$): inhibits the growth of microorganisms and can be stored at room temperature for 6 to 12 months.

(2) Individual packaging: some products are packaged in small bags to further extend the shelf life.

5. Nutritional and functional selection

(1) Basic version: provides carbohydrates and fats for quick energy replenishment.

(2) Healthy version: can add whole wheat, oats, dietary fiber, or reduce sugar and oil content.

(3) Functionality: fortified calcium, iron, vitamins, etc., suitable for specific groups (such as children and the elderly).

Soft biscuit production line flow chart

It is the same as mentioned in the previous article, except that its mold is a soft biscuit mold, which is rolled and formed.

Flour Mixing---Hard Biscuit Forming machine---Oven---Oil Spraying ---Cooling Conveyor---Biscuit Stacking ---Biscuit Packing

Regarding biscuit making machine, We have small and large biscuit machines for you to choose from.If you need a packaging machine, we also provide it.



The function of soft biscuit production line

1. Mixer: Dough mixer is a machine that mixes flour with water or other ingredients into dough. It is widely used in making dough for various pastries, biscuits, bread, steamed buns, etc.
2. Soft Biscuit Forming machine: Crispness molding: put

the mixed flour into this machine, and it can be formed into biscuit embryos through roller printing, and then put into the oven to make various medium and high-end biscuits.

3. Oven: Suitable for baking all kinds of biscuits. Use electric heating, temperature zone control, temperature of each temperature zone can be set in advance, uniform temperature in the temperature zone, use high-quality insulation materials, good insulation performance, high thermal efficiency. Temperature control system, automatic temperature control and constant temperature, flexible operation, high safety performance.
4. Oil Spraying: Spray oil on the surface of biscuits coming out of the baking oven to make the color, aroma and taste of the biscuits more distinctive and improve the grade of the biscuits.
5. Cooling Conveyor: This equipment fully cools the biscuits before they are conveyed to the packaging machine to ensure the quality of the biscuits after packaging and extend the shelf life.

6. Biscuit Stacking: sort biscuits and pick out unqualified

products.

Technical specifications of soft biscuit production line

| Model | Output |
|---------|-------------|
| LY-320 | 100-150kg/h |
| LY-400 | 150-200kg/h |
| LY-600 | 400-500kg/h |
| LY-800 | 600-800kg/h |
| LY-1000 | 1000kg/h |
| LY-1200 | 2000kg/h |

Layout for the soft biscuit production line

Our machines can be flexibly arranged according to the size and dimensions of the factory. We can also customize the size of the machine according to the data you provide.

Sample of soft biscuit equipment



Mastering the key points of fine control in the production of soft biscuits can significantly improve product qualification rate and market competitiveness. Here we provide a full set of solutions from process guidance to equipment matching.

About packaging and after-sales service

Packing: Plastic Film Suitable For Ocean Carriage

Technical Support: The customer can inform machine related problems to us via telephone, email or fax. All information will be recorded and will be reported to the After-sale Service team. Meanwhile, the sales person will be tracking the case until problem solved.

Service Team: We have a professional After-sale Service team including 10 professional engineers with at least 6 years working experience. They can handle technical consultation about manufacturing process, maintenance, fault diagnosis and troubleshooting, etc.

After-sale Service available : 1. Check & test before delivery
2. Instruction for installation 3. On site commissioning
4. Repair & maintenance

After the receipt the advanced payment, we will provide allocation chart at the buyer's request. When effect the shipment, we'll provide operation manual, etc. in English.



Recommended Company

Shandong Loyal Industrial Co.,Ltd. Is a Manufacturer Of Snacks Extruder Machine , Industrial Microwave Oven , Corn Flakes Production Line , And a Standing Director Of China Food And Drying Equipment Industry Association.

The Self-developed Twin-screw Extruder And Single-screw Equipment of Shandong Loyal Machinery Have Been Used In Production: Puffed Snack Food, Breakfast Cereal Corn Flakes, Fried Pasta, Bread Crumbs, Fruit Chips, Baby Food, Textured Soy Protein (tsp) Food, Fish Feed And Pet Food. a Variety of Snack Production Line Supporting Products.at The Same Time, The Batching, Drying, Flaking, Baking, Frying And Spraying Equipment Matching The Twin-screw Extrusion System Have All Achieved Independent Design And Production.

Our Extrusion System Is Widely Used In: Puffed Snack Foods, Breakfast Cereals, Vegetable Protein Meat Products, Soy Based Nutrition Bars, Reconstituted Rice, Grain Nutrition Powder, Modified Starch, Starch-based Sticky Music Children's Educational Toys, Degradable Starch-based Packaging Filling Materials, Bread Crumbs And Other Food Additives, Pet Food, Aquatic Feed, Biology And Chemical Industries.

Customer-specific Food Processing Plant Project Solutions

As one of the leading manufacturers of food processing equipment, we are always searching for new solutions that benefit our snack food customers. Our experienced frying engineers always find the optimal solution for your industrial

batch and continuous frying system line application. That's why we also develop, design and produce custom fried snack production line.

Close collaboration with our customer is important to us even in the early development phase. No matter what the special requirements of instant noodles production line, snack food extruder machine, pasta production line application, we can develop a custom made food processing equipment to match your needs.

Loyal have a unique and efficient industrial continuous frying equipment for snack food extruder machine that provides the right crunch and desired moisture level.

The Industrial Microwave Sterilization Defrosting Drying Machine can be designed as a dry powder dosing system and a wet slurry dosing system as required.

Some snacks can also be fried according to taste requirements, and we also provide Fried Snack Production Line for the processing and packaging of fried extruded snacks.

Loyal Food Production Line meet the needs of customers to obtain snack food that meet the needs.

In ovens or drying units, electric or gas can be used as heating sources.

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