hard biscuit Manufacturing Line: Optimizing Production for Superior Snap and Texture

Introduction of hard biscuits

In the world of snacks, tough hard biscuits have become a classic snack loved by many consumers with their unique taste and flavor. It is not only a delicious snack after tea and dinner, but also a unique existence that carries childhood memories and life interests.

From the appearance, tough hard biscuits have various shapes, regular circles, squares, and animal shapes and cartoon patterns full of childlike fun. The surface of the hard biscuits usually has a delicate texture, which is a unique mark left during the baking process, like the texture of time, recording the story of the birth of the hard biscuits. The color is mostly elegant golden yellow, revealing the attractive luster after baking, just looking at it makes people salivate.

The taste of tough hard biscuits is unique. When you put it in your mouth, you will first feel the crispness of the outer layer. With a light bite, the "crack" sound instantly awakens your taste buds. Then, as you chew deeper, you can feel the toughness inside. This toughness is not hard to chew, but has just the right chewiness. You can feel the mellowness and sweetness of the flour in every bite. Its taste is rich and layered. The wheat aroma is the background, which becomes more and more intense under

the background of sweetness and oil aroma. The aftertaste is long and you can't stop.

How are hard biscuit made?

Making tough hard biscuits is a perfect encounter between ingredients and craftsmanship. High-quality wheat flour is the protagonist, which gives the hard biscuits a solid taste and unique wheat aroma. With the right amount of oil, it can

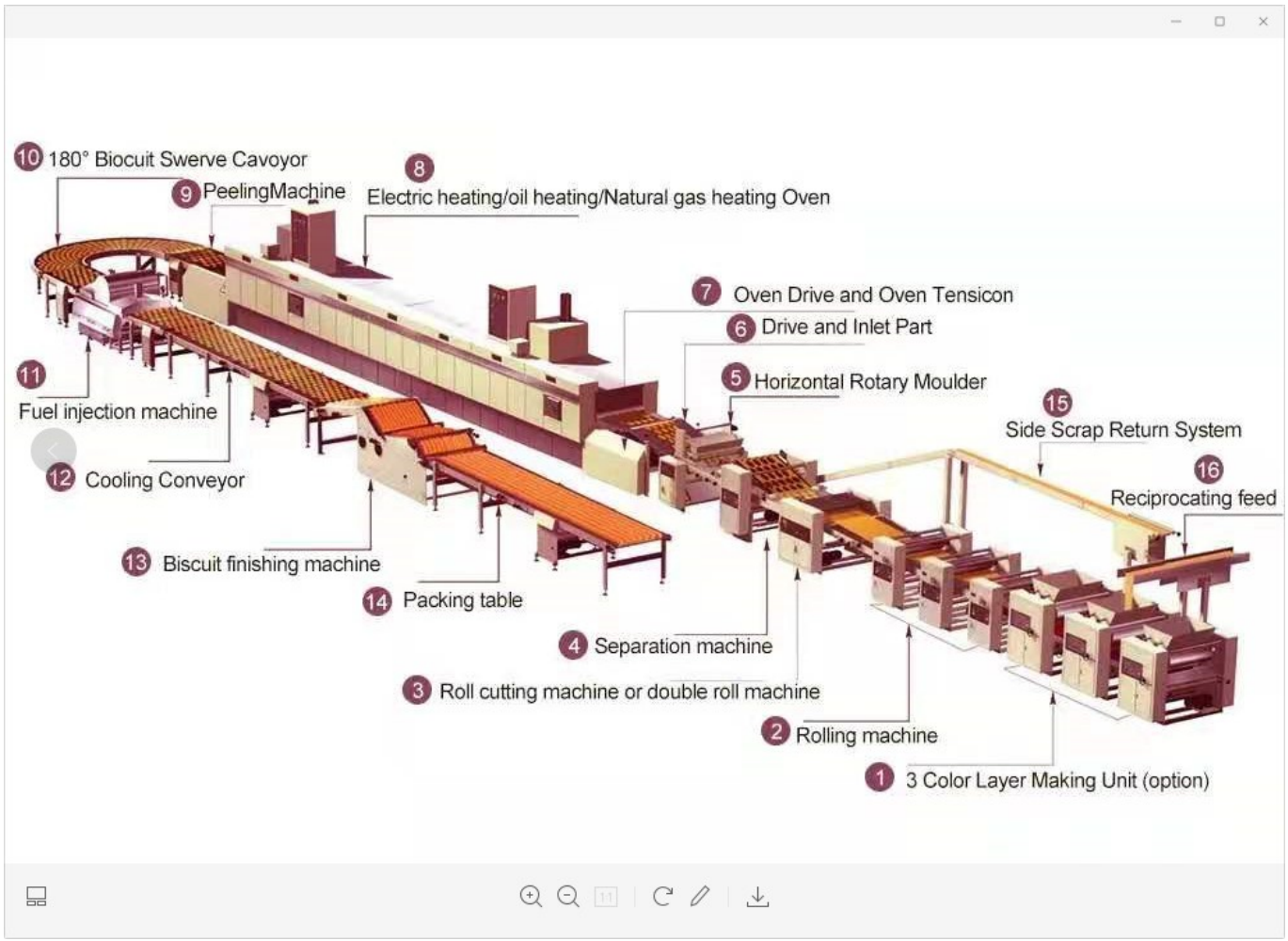
not only add a rich and mellow taste, but also make the texture of the hard biscuits more crispy. The addition of white sugar brings just the right sweetness to the hard biscuits, and when it melts in the mouth, it releases a full sense of happiness. In addition, leavening agents such as sodium bicarbonate and ammonium bicarbonate are also indispensable. They are decomposed by heat during baking, producing a large amount of gas, forming fine and uniform pores inside the hard biscuits, thus shaping the unique loose structure of the hard biscuits, making every bite full of air.

When making, first mix flour, oil, sugar, leavening agent and appropriate amount of water. During this process, the dough gradually forms, and it needs to be fully stirred to form a fine gluten network, which is the source of the "toughness" of tough hard biscuits. The dough needs to be left to mature for a period of time to allow the gluten to relax fully and improve the ductility of the dough. The matured dough is pressed into a uniform thickness of dough, and then stamped or cut by a mold to shape it into various shapes. Subsequently, the hard biscuit blank is sent to the oven. Under high temperature baking, the water evaporates quickly, the leavening agent releases gas, and the hard biscuits gradually expand and color until the surface presents an attractive golden color, exuding a rich wheat and sweet aroma.

Eating scenarios of hard biscuits

Hard biscuits are very widely used. In a busy morning, with a cup of hot milk, it is a convenient and nutritious breakfast that injects vitality into the new day; in the lazy afternoon, brewing a cup of fragrant tea and savoring a few tough hard biscuits is a great way to relax; when you are watching TV series, it is also an excellent snack companion. A bite of hard biscuits brings happiness, adding a lot of fun to your leisure time.

Whether you enjoy it alone or share it with friends and family, chewy hard biscuits can deliver deliciousness with their unique taste and charm, bring people closer together, and become an indispensable sweet taste in life.



The difference between tough hard biscuits and soft biscuits

1.Texture Differences:

Hard biscuits: These are generally more elastic and have a certain chewiness to them. They don't break apart easily and offer a more substantial bite, giving a chewy experience when eaten.

Soft biscuits: These are usually very crunchy and break apart easily. The texture is light and crisp, offering a flaky sensation as you bite into them

2.Preparation Methods:

Hard biscuits: The dough typically has a higher moisture content or is kneaded for a longer period, often using a more compact dough. Ingredients like syrup or honey may be added to create a denser and chewier texture.

Soft biscuits: The dough is usually drier, with a higher fat content (like butter), which helps create a flaky, light texture. During baking, the fat creates layers that separate, giving the cookie its crispness.

3.Ingredients:

Hard biscuits: These may contain more syrup or honey to make the cookie denser and give it a chewier bite.

Soft biscuits: These tend to have more butter, lard, or other fats that create a flaky texture, making the dough lighter and more airy.

Production line Parameters of hard biscuit processing line

Host Model	LY225	LY280	LY400	LY600
Power and voltage	380V/50 HZ	380V/50 HZ	380V/50 HZ	380V/50 HZ
Installed Capacity	28.5KW	55KW	110KW	220kw(gast type2

				5kw)
Baking temperature	200-300ºC	200-300ºC	200-300ºC	200-300ºC
Production capacity	200-300ºC	200-300ºC	200-300ºC	200-300ºC
Production line length	21000mm	30000mm	43000mm	60000mm

Hard biscuit making machine including:

Item No.	NAME	QTY
1	Flour Mixer	1set
2	hard	1set

	biscuit Forming Machine	
3	Soft hard biscuit Forming Machine	1set
4	Inlet Oven Machine	1set
5	Intelligent Temperature Control Tunnel Oven ? Electrical Heating?	32m
6	Outlet Oven Machine	1set
7	Oil Spray	1set
8	180°Turning Machine	1set
9	Food Grade Cooling Conveyor? 16 m?	16 m
10	hard	1set

	biscuit stacking machine		
11	Packing plate		1set
12	Control Cabinet	1set	
13	Mold(choose from loyal molds)	2 SETS)	

Equipment list of hard biscuit production line

dough mixer?compound rolling and shaping machine?oven?oil sprayer?cooling machine?sorting machine?packaging machine

Working process of the hard biscuit making machine?

Machine Name	Founction
Dough mixing machine	Wheat flour, sugar, oil, eggs, dairy products and other raw materials are mixed here according to precise formulas to provide uniform dough for subsequent

	production links. During the mixing process, the temperature and time are precisely controlled to prevent the raw materials from overheating or over-mixing, ensuring the texture and taste of the dough.
Compound rolling and shaping machine	Common ones include punching and forming machines, roller cutting and forming machines, roller printing and forming machines, etc. These equipment process the dough into various shapes according to different hard biscuit types and shape requirements. For example, tough hard biscuits are often punched or rolled, and their mold shapes are mostly concave flowers with pinholes on the surface; crisp hard biscuits are mostly rolled, and the mold shapes are mostly convex flowers

	with obvious patterns. The design and adjustment of the mold are crucial in this link. Different molds can produce hard biscuits of various shapes and flavors, such as round, square, animal shapes, etc.
Oven	Tunnel hot air circulation oven is a common baking equipment. It uses precise temperature control and timing functions to bake the formed hard biscuits in the best condition. The baking temperature and time will be adjusted according to the type and thickness of the hard biscuits to ensure that the hard biscuits are crispy and delicious without being overbaked. Generally speaking, the baking temperature is between 200-300?, and the time ranges from a few minutes to more than ten minutes.

Oil sprayer	The oil sprayer can evenly spray oil on the surface of the baked hard biscuits, making the hard biscuits more attractive in color and richer in taste.
Cooling machine	the cooling line is used to cool the baked hard biscuits to room temperature to prevent the hard biscuits from deforming or the packaging materials from being damaged due to excessive temperature during packaging.
Sorting machine	The sorting machine can sort the cooled hard biscuits so that they are neatly arranged for subsequent packaging.
Packing machine	The automatic packaging machine completes the packaging of hard biscuits. It can realize a variety of packaging methods, such as

	independent packaging, multiple packaging per bag, etc. The packaging process not only improves production efficiency, but also ensures that each hard biscuit can be kept in the best condition and extend the shelf life of the hard biscuits.

FAQ

1.What is the production capacity of this tough hard

biscuit production line per hour?

This production line has a high production capacity. In normal operation, it can produce about 150 - 2000 kilograms of tough hard biscuits per hour. The specific output may vary slightly depending on the hard biscuit specifications and production process adjustments.

2. Can this production line adapt to different sizes and shapes of tough hard biscuits?

Yes, our production line is highly flexible. By simply replacing some molds and making minor adjustments to the settings, it can easily produce tough hard biscuits in various sizes and shapes, such as square, round, rectangular, and even custom - designed shapes to meet your diverse market demands.

3.What quality control measures are in place during the production process of the equipment?

We have a strict quality control system throughout the production process. All raw materials are sourced from reliable suppliers and are subject to strict inspection before entering the production line. During production, multiple sensors and monitoring devices are installed on the equipment to continuously monitor key parameters such as temperature, pressure, and speed to ensure product quality stability. In addition, each batch of finished products undergoes a comprehensive quality inspection to meet international quality standards. -

4.What kind of after - sales service and technical training can you provide?

We offer a one - year warranty for the production line. During this period, if there are any quality problems, we will provide free repair or replacement of parts. Our professional after - sales team is available 24/7 to respond to your inquiries and provide remote or on - site technical support. Regarding technical training, we will send experienced technicians to your factory to conduct on - site training for your operators and maintenance personnel, covering equipment operation, daily maintenance, and common fault troubleshooting to ensure that your team can use and maintain the equipment proficiently.

5.How does the price of your tough hard biscuit processing linecompare with that of other manufacturers?

Our production line is priced competitively in the international market. Although the price may seem slightly higher than some low - end products at first glance, considering its high - quality performance, long - term stability, energy - saving features, and the comprehensive after - sales service we provide, it actually offers a higher cost - performance ratio. You'll find that in the long - term operation, it can help you save production costs, improve production efficiency, and bring more economic benefits.

Why Choose Us

We are a professional manufacturer of food machinery and

we have been manufacturing nutrition cereal bar processing line for nearly 20 years. In addition to the Nutrition Cereal Bar snack processing line, we also manufacture lines for deep-fried food, pet feed, modified starch and many more. Each of our lines has basically a variety of moulds, which can be adapted to produce a wide range of food products. We are not satisfied with the status quo but are constantly upgrading and innovating our products, adapting our production plans and designs to the changing needs of the times and keeping up with the pace of progress. Never satisfied with the pursuit of excellence!