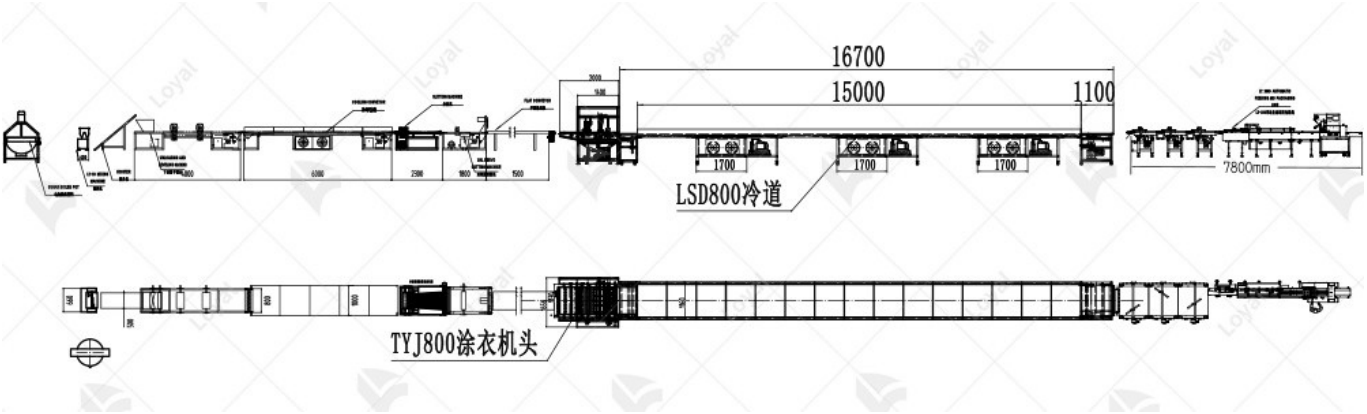
Efficient, precise, and safe—unveiling the three core advantages of the Nutritional bar production line

In recent years, with the rapid awakening of consumer health awareness, the global healthy snack market has been expanding at an astonishing rate. According to Market Research Future, the global nutrition bar market size exceeded $12 billion in 2023, with granola bars leading the way with a dual appeal of 'clean labels and functional nutrition,' achieving a growth rate of 15.8% annually. In the Chinese market, this figure is even more impressive—Euromonitor International reports that granola bar consumption surged by 237% from 2020 to 2023, making them the 'pocket nutrition managers' for three key demographic groups: urban white-collar workers, fitness enthusiasts, and parents of teenagers.

Behind the explosive growth lies a serious challenge for traditional manufacturing processes. Nutritional bar production line commonly faces three major challenges: efficiency, precision, and safety. First, efficiency issues mainly arise from production speed and

equipment utilization. Many lines suffer from slow production due to outdated equipment or improper operation, failing to meet market demands. For instance, old mixers and packagers often malfunction, requiring frequent shutdowns for repairs, which further delays production. Second, precision issues involve accurate control of ingredients and product consistency. Any minor error can affect the final product's quality, impacting consumer experience and brand reputation. For example, a slight deviation in protein powder ratio may alter the taste and nutritional value of the bars, affecting consumer purchasing intent. Lastly, safety concerns include raw material safety testing, hygiene conditions during production, and storage and transportation of finished products. Ensuring that every batch meets food safety standards is crucial for every manufacturer. For instance, each batch of raw materials must undergo rigorous pesticide residue and heavy metal testing to ensure safety. During production, cleanliness in the workshop must be maintained, regular disinfection is required, and operators must wear professional protective

clothing and gloves to prevent contamination. In storage and transportation of finished products, temperature and humidity must be controlled to prevent spoilage of the bars due to environmental factors, ensuring product safety and freshness.



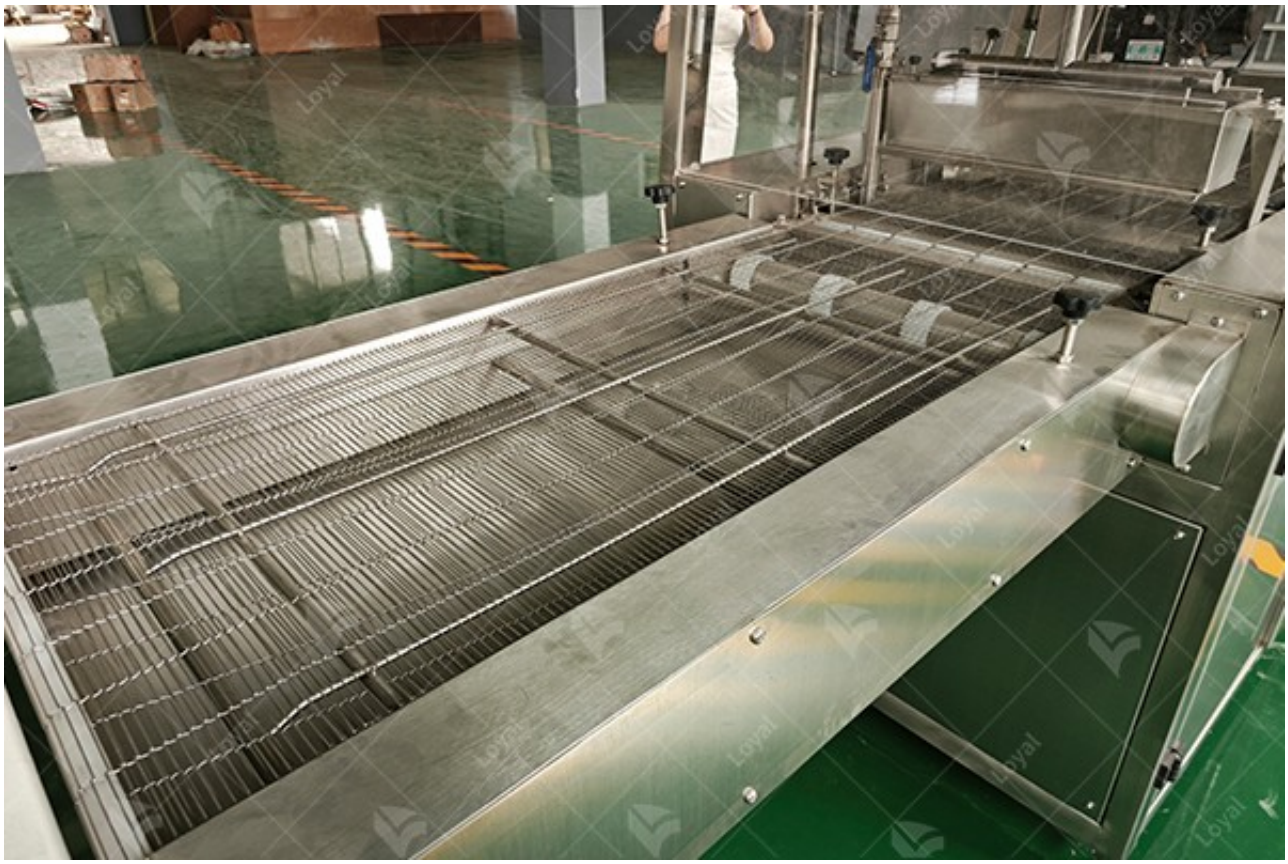
In the following content, we will take you deep into the core of this 'future nutritional bar production line' through three dimensions: efficiency, precision, and safety. You will see how 48 hours can complete orders that used to take seven days, how to ensure that each granola bar has its vitamin D content precisely measured in micrograms, and what innovative designs keep bacteria at bay. For food companies standing at the crossroads of transformation and upgrading, this might just be

the golden key to unlocking a market worth 20 billion dollars.

Introduction of this production line

Promotional new products low price hot selling puffed rice popcorn facility product line is used to mix various high-quality ingredients, extrude the mixture at precisely set temperatures, rapidly cool the product through an efficient cooling system, then cut it accurately according to preset dimensions, apply an even coating, and cool it again to ensure optimal taste and texture, ready for packaging. This nutrition bar maker can produce various types of nutrition bars, including high-protein bars, Snickers-style bars, candy bars, peanut brittle, and granola bars, catering to different consumer needs. The nutrition bar production line offers a one-stop solution for manufacturing high-quality, nutrient-rich bar foods, utilizing advanced energy-saving technology with extremely low energy consumption. This fully automated production line, from raw material processing, mixing, extruding, cooling, cutting,

coating to final packaging, operates entirely automatically, aiming to simplify the production process, improve production efficiency, and reduce manual intervention, making it an ideal choice for manufacturers focused on efficiency and sustainability.



Nutrition Bar Production Process

Sugar Melt ---Mixing Material --Shaping-(Coating)-Packing

117. Peanut roasting machine: Mainly used for drying and baking products. Such as peanuts, nuts, bean, maize etc.

117. Sugar Heating Machine: Sugar heating machine is made of stainless steel and has heating devices to melt sugar and other ingredients (salt, cocoa, milk, etc.). It has double layer wall which keeps the temperature of mixture. It has big heated area, high thermal efficiency, short liquid material boiling time and the heating temperature is easy to control.

117. Ingredients Mixer: Ingredient mixer is mainly used for mixing nuts, grains, syrup and other ingredients together. The inside of the hopper is made of food-grade Teflon material, which is resistant to high temperature and corrosion, so as to avoid the mixture sticking to the inside of the hopper. It is strong and durable, with long service life. And it has Thermostat to maintain mixture temperature.

117. Feeding Conveyor: To transfer raw material from mixer to cutting machine.

117. Cutting Machine with Cooling Conveyor: Cutting machine includes hopper, roller (adjust product thickness), fan (cooling products), cutter (cutting length and width), conveying (cooling products after cutting). Product width can be adjusted by the replacement tool. The frequency converter is used to control the production speed, the mixed raw material is evenly flattened by multiple rolls, and the blower can keep the mixture stable.

117. Snack Bar Packing Machine: The food contact parts are made of 304 stainless steel, in line with QS and GMP. Suitable for moon cake, bread, biscuits, candy, medicine, daily necessities, hardware accessories, paper boxes, plastic products or various shapes of regular solid goods.

Efficiency: Intelligent production creates core

competitiveness

1. **full-process automatic line**

Various shapes sesame halva bar machine employs an intelligent control system to achieve full-process automation from raw material handling to packaging. Utilizing advanced machinery and smart scheduling systems, it significantly boosts production efficiency, with single-line capacity reaching more than twice that of traditional equipment, effectively meeting market demand for explosive growth.

2. **Flexible multi-product adaptation**

with a quick mold change system and intelligent recipe management, easily meeting production needs for different specifications and formulas. Whether it's standard energy bars or special functional products, production line switching can be completed quickly, providing strong support for the company's diverse product strategy.

3. **Energy-efficient and environmentally friendly design**

integrates technologies such as thermal energy recovery and water recycling, significantly reducing energy consumption while increasing production capacity. The energy consumption per unit product is reduced by more than 40% compared to traditional equipment, meeting environmental protection requirements and saving companies substantial production costs.

Precision: Technological freshness preservation ensures that not a single gram of nutrition is wasted.

1.Gentle processing preserves nutrients

Our nutritional bar production line uses low-temperature roasting technology with precise temperature control to maintain the processing temperature within an optimal range of 110-130°C. Combined with automatic humidity adjustment devices, this ensures a crispy texture while preserving heat-sensitive nutrients in the raw materials to the greatest extent possible. Test data shows that the retention rate of Vitamin B1 can reach over 95%, significantly higher than industry

averages.

2. Guarantee of consistent taste

To address the common issue of uneven hardness in granola bars, we have developed a unique moisture activity balance technology. By using online moisture detection and an automatic adjustment system, we ensure that the moisture content deviation of each batch does not exceed ±0.5%, providing consumers with a consistent perfect texture experience with every bite.

Safety: Comprehensive protection from farm to shelf

In the field of food production, safety is always an unbreachable red line. Our nutritional bar production line has established a comprehensive safety protection system, ensuring full safety from raw materials to finished products for every single item.

1. Strict raw material admission standards
2. Intelligent production process protection
3. An international quality certification system

This comprehensive safety assurance system not only meets the strictest food safety regulations but also establishes a trustworthy quality endorsement for the brand. From farm to shelf, we diligently safeguard the safety and quality of every granola bar, ensuring consumers can eat with confidence and partners have no worries.

The Main Features of Nutrition Bars Making

Machine

The Advantages Of Snack Bar Production Equipment	
	Adopts advanced computer touch screen, plc control, variable frequency speed control and automatic deviation.
	It adopts continuous automatic feeding, flattening,dicing and conveying.
	Snack bar manufacturing line frame is made of standard heavy profiles through welding, ensuring sufficient rigidity and strength. The external part is made of 304 stainless steel.
	Snack bar manufacturing line can make cereal bar snack, peanut candy and so on.
	Cut the specifications can be adjusted to meet customer’s needs of different products.

The Detail Descriptions Of The Nutrition Bars Making Machine

No.	Item	Detail descriptions
1	Raw materials	Sugar, corn flour, rice flour, peanut butter, nuts and so on.
2	Consumption	Low power and labor consumption
3	Capacity	100-300kg/h, 200-450kg/h, 400-600kg/h
4	Machine material	Stainless steel (Food contact parts are made of 304 food grade stainless steel)
5	Products	This line can produce protein bar, snickers bar, candy bar, nougat candy, cereal bar, and so on.

FAQ:

?What is the production capacity of this production line, and what size of enterprise is it suitable for?

A: •Standard capacity: 100kg/h-600kg/h (customizable small or extra-large equipment).

• Suitable customers:

?Small and medium-sized enterprises: 100-300kg/h modle, low investment threshold, suitable for start-up brands or contract manufacturers.

?Large enterprises: 300-600kg/h, fully automated design, suitable for bulk exports or chain brands.

?Does the equipment meet food safety certification requirements?

A: Certifications: CE, FDA, ISO 22000 certifications.

Material Safety: All parts that come into contact with food are made of 304 stainless steel, eliminating any risk of contamination.

?What does after-sales service include?

A: • Basic services:

? Free installation and commissioning + operation training

? 1-year full machine warranty

• Value-added services (optional):

? Remote monitoring system (real-time fault diagnosis)

? Annual maintenance plan

?How automated is the production line? Is it necessary to have a technician operate it?

A: • Automation level:

? The entire process from raw material input to packaging is fully automated, requiring only manual input of raw materials and random inspections.

? Touchscreen control allows for one-button start-up after parameter settings.

• Operational difficulty:

? Ordinary workers can be trained to operate within 1 to 3 days.

? We provide operation manuals in both Chinese and English along with a fault code guid.

Performance And Other Instructions

The food contact location is made of high-quality stainless steel 304 material, which not only meets the stringent food QS (Quality and Safety) standards but also complies with pharmaceutical GMP (Good Manufacturing Practice) hygiene requirements, ensuring maximum safety and hygiene in food packaging.

The double frequency conversion system control allows for precise setting and immediate cutting of bag lengths, significantly saving time and reducing the use of film, making the process both efficient and environmentally friendly. The high-sensitivity electric eye automatic tracking system eliminates the need for manual adjustments once set, providing accurate sealing and cutting sizes with a

strong and aesthetically pleasing seal.

The temperature is independently controlled through an intelligent PID system, ensuring stable temperature regulation that is perfectly suited for a variety of packaging materials, enhancing the overall performance and versatility of the packaging machine.

Sample

The Nutrition Bar Process Line ensures each bar maintains optimal nutritional value by meticulously blending high-quality ingredients such as organic nuts, seeds, and superfoods. This process supports health-conscious consumers who seek nutritious and delicious options while achieving high productivity. The state-of-the-art machinery operates seamlessly, minimizing waste through precise measurements and automated controls, ensuring that every batch is consistent and of premium quality. This efficient setup not only minimizes waste but also maintains consistency and quality in every batch, establishing a reliable and premium standard in the nutrition bar industry. The line's advanced technology guarantees that each bar meets stringent nutritional guidelines, providing consumers with a trusted source of energy and wellness.

As a professional Small-scale Snack Bar Production Line manufacturer, snack bar production line was created to meet the rapidly growing demand for snickers bars, nougat, cereal bars, energy bars, fruit bars, protein bars and other products using high snack bar machine technology,

have low snack bar machine cost. Snack bars can be made with oats, rice, nuts, dried fruit, chocolate, chocolate coated, cream coated, etc as snack bar material. The whole snack bar process of mixing, cutting and packing to make all kinds chocolate compound products. Snack bar production line adopts advanced fully automated production technology. Snack bar production line has CE ISO9001 and can be used to produce puffed rice bars.

For more information, please visit the Facebook page:

https://www.facebook.com/Foodextruderfactory