

Energy-Efficient Best-Selling Instant Noodles Manufacturing Equipment

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Introduction

The global demand for instant noodles has remained consistently high, driven by convenience and affordability, making the instant noodles production line a cornerstone of the food manufacturing industry. As environmental consciousness grows and energy prices rise, manufacturers face increasing pressure to adopt sustainable solutions without compromising productivity.

This article focuses on energy-efficient [instant noodles manufacturing equipment](#) that has emerged as a best-selling choice, balancing eco-friendliness, cost-effectiveness, and high performance production. At the heart of this trend lies the need for instant noodle production lines that minimize energy consumption while maintaining output quality and speed. The highlighted equipment integrates innovative technologies to address these challenges, offering a blueprint for sustainable manufacturing in the food sector. By exploring its key components, energy-saving features, and market impact, this article demonstrates how modern instant noodle production facilities can meet both commercial goals and environmental responsibilities.



Key Components of Instant Noodles Manufacturing Equipment

An advanced instant noodle production line relies on efficient, fully automated components that streamline every step of the production process, from dough preparation to packaging. These advanced systems focus on speed, precision, and minimal human intervention, making them ideal for large-scale production needs.

1. Dough Mixer

The dough mixing stage uses a fully automatic spiral mixer equipped with an intelligent control panel, which can process bulk flour and water into a uniform dough in minutes. Sensors monitor the consistency of the dough in real time, adjusting the mixing speed and duration to achieve the best texture without manual supervision. High-torque motors support continuous operation, while a self-cleaning mechanism reduces downtime between batches, ensuring a seamless workflow in a high-volume production environment.

2. Compound Rolling and Shaping Machine

The automated multi-roll calender system dominates the calendering stage, with electrically driven motors capable of precisely adjusting the thickness of the dough sheet (as thin as 0.5 mm). Laser centering technology ensures uniform flattening of noodles, while high-speed automatic positioning die cutting can produce noodles with consistent width (1-4 mm) at speeds of up to 300 meters per minute. The entire process is fully synchronized, eliminating waste and maximizing efficiency.

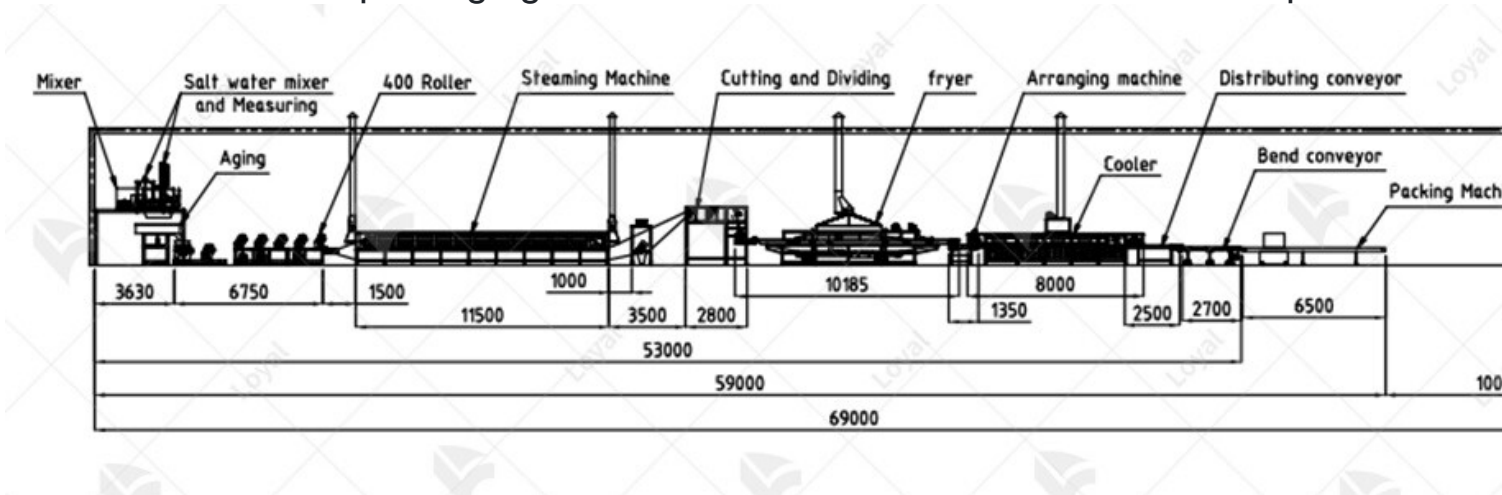
material waste and reducing labor requirements by 50% compared to traditional settings.

3. Steaming and drying equipment

The cooking module integrates multiple layers of cooking machines to meet customer different production requirements, and the conveyor belt movement speed can be adjusted according to production needs. Each layer of steam box has an independent steam source to ensure uniform temperature in each layer. After cooking, the multi-row cooling system provides forced hot air circulation to reduce the moisture content from 30% to less than 8% in 10 minutes. Both systems are equipped with automatic temperature control and quick-release devices for easy maintenance, ensuring non-stop operation and consistent product quality.

4. Packaging machine

The final stage relies on high-speed pillow packaging machines that can pack up to 100 bags per minute. These fully automatic systems handle film unrolling, filling (including insertion of seasoning packets), sealing and date coding in a single integrated process. The result is an efficient packaging line that minimizes errors and maximizes production.



Equipment list of Instant Noodles Manufacturing Equipment

Mixer?Compound rolling and shaping machine?Hoister?Steaming machine?Sorting Machine?Fryer?Cooling conveyor?Packing machine

Working Process of the Instant noodles Production Line

1. Mixer?Combines flour, water, salt, and additives into uniform dough through mixing blades or paddles, ensuring consistent moisture distribution and gluten development for subsequent shaping.

Compound rolling and shaping machine?Transforms dough into thin, uniform sheets through multi-stage rolling and cuts them into noodle strands of specific widths and shapes using precision blades or molds.

Hoister?Transports shaped noodles from the rolling/shaping machine to the s machine via a conveyor belt or elevator, ensuring gentle handling to prevent breakag

Steaming machineCooks raw noodle strands in steam chambers at 90–100°C minutes to partially pre-cook and set their shape, gelatinizing starch to prevent stickin

Cutting machineSlices continuous steamed noodle strands into individual "noodle bl standard sizes using sharp blades or wire cutters, with adjustable cutting leng consistency.

Sorting Machine?Separates and organizes noodle blocks, removing defective or i pieces via vibration tables, air jets, or sensors to ensure only high-quality blocks proc

FryerDehydrates noodle blocks by submerging them in hot oil (140–160°C) for seconds to create crispiness and extend shelf life, often with automated oil cir systems.

Cooling conveyorGradually cools fried or dried noodle blocks to room temperatur ambient or forced air, preventing condensation and reducing breakage during packag

Packing machineSeals noodle blocks into individual packets with seasoning sach heat-sealable film, and groups them into multi-packs or cartons, with high-spee motors ensuring accurate sachet placement and leak-proof seals.



Parameters of Each Machine in the Instant Noodles Manufacturing Equipment

NO.	MachineName	TechnicalParameter
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	MIXER	<p>Rotating paddle speed?260r.p.m Power?4Kw Maximum capacity?15-20kg/one time Size:800x500x600m Functional:Mixing the raw material uniform</p>
2	ROLLINGAND SHAPINGMACHINE	<p>Rolling and pressing machine Roller Length:2400mm Capacity?150kg/h Power?3kw Noodles Diameter:1-3mm(square or round) Dimension?LxWxH?:2200x800x1600mm Consist 6 sets of press rollers, Frequency Roller Material:45 # steel, after heat treatment increases the hardness of the roll, the noodles that are pressed out are lighter and stronger Cover Material:Stainless steel</p>
3.	HOISTER	<p>Lifting base: 50-100mm Transmission: Passive High and low points: 0.85m high and 0.35m Size: 1.9 x 0.4 x 1.1m To Deliver the Shaped Noodles to Next Drying Boiling machine</p>
4	STEAMINGMACHINE	<p>Boiling part:2 sets,5 m length/set,totally 10m length Material: Stainless steel Body thickness: 2mm Effective convey length?5m Convey speed?infinite variable speed Boiling time?70?90 seconds Boiling temperature?96?98? Capacity?180kg/h Heating Power?90Kw Driving power:0.75kw Totally powder:90kw+0.75kw Dimension?LxWxH?:10000x650x1100mm Using the electrical to heating the water to produce steam, then Boiling the noodles by steam</p>

5	CUTTING MACHINE	<p>Lifting base: 50-100mm Cutting Power Power:0.55kw Size:1900×400×1500mm It is used to cut noodles and adjust the frequency by controlling the size of noodle</p>
6	SORTING MACHINE	<p>Dimension:600*600*800mm Function: Put the cutter noodles here. The workers need put the noodles from the plate to the noodles box of next device-Drying machine</p>
7	AUTOMATIC ELECTRIC FRYER	<p>Shape of per noodles:round,square(accro customer request) Production Capacity: 11000pcs-13000pcs hours Per piece weight:=> 120g/piece Speed?adjustable Temperature?150?~170? Frying time?60?90 seconds Installation Power?90Kw Consumption Power :65KW Oil consumption ratio?20?22% Dimension?L×W×H?:5100×1100×2000mm</p>
8	COOLING MACHINE	<p>Effective length?5m Convey speed?adjustable Cooling power?5×120W, 5 PCS fans Dimension(L×W×H):5000×600×1200mm</p>
9	CONTROL SYSTEM	<p>Dimensions: 600*400*1200mm Weight: 100kg Motor: Domestic Electric appliances: Delixi Huibang, etc. Inverter: Pioneer Intelligent temperature control meter Electric control cabinet is used to control temperature and speed.</p>



Advantages of Instant Noodles ProcessLine

The popularity of this instant noodle production line stems from its unmatched production reliability and versatility in fully automatic packaging. Here are the reasons why it outperforms traditional systems:

1. Unparalleled production speed

With fully synchronized components, this line achieves a production rate of up to 1000 packs per hour, making it ideal for small-scale manufacturers. The kneading and cooking stages run continuously, while the high-speed packaging machine ensures that there are no bottlenecks in the production process. This efficiency enables producers to meet market demand during peak seasons such as holidays or emergency food shortages without compromising product quality.

2. Reduced labor and improved cost-effectiveness

By eliminating manual intervention at every stage, from dough preparation to palletizing, the production line can reduce labor requirements by 40-50% compared to semi-automated equipment. Operators only need to monitor the HMI interface and perform routine maintenance, reducing labor costs and minimizing human errors. In addition, low-maintenance design

self-lubricating bearings, modular components) reduces downtime for repairs, improving cost-effectiveness.

3. Consistent product quality

Automated precision control ensures uniform noodle texture, cooking consistency, and packaging integrity for every batch. For example:

- Dough roller thickness tolerance maintained within ± 0.05 mm
- Cooking tunnel temperature stability maintained within $\pm 2^{\circ}\text{C}$
- Packaging seal leakage rate less than 0.05%

This reliability earns consumer trust and brand loyalty, as retailers and end users receive consistent taste and quality from package to package.

4. Scalability and flexibility

The line's modular design enables easy integration of additional components, such as:

- Multi-bag machine for premium noodle + stew products
- Nitrogen flushing system for extended shelf life
- Custom branding unit for film printing

Manufacturers can adapt their instant noodles production lines to produce a wide range of products, from affordable single-serve packs to delicious instant noodles with a variety of sauces, ensuring long-term competitiveness in a fast-changing market.

5. Fast Return on Investment (ROI)

Although the upfront cost of automated equipment is higher than traditional setups, ROI is typically within 18-24 months due to:

- Higher production volume (30–50% increase compared to old lines)
- Lower labor and maintenance costs
- Less waste from precision processes

For small manufacturers, this means significant long-term cost savings and competitive pricing capabilities.



Our Services

1. Recipe: The company's after-sales service department can provide free basic recipe and 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 relevant problems encountered in the use of equipment.
4. Maintenance: our company provides quality and inexpensive spare parts to the 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, custom equipment to produce a variety of food categories. Whether it is a product based on 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, United States, South Korea, Nigeria, Zimbabwe, Afghanistan, Algeria, Ghana, India, the Philippines, Malaysia and Sri Lanka. Our customers include many large food corporations 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 a professional manufacturer of food machinery, snacks food machinery.

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

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

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

high quality products all the time.