

# Everything You Need To Know About instant noodle production line

Detail Introduction :

Reference

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<https://www.facebook.com/foodmachineloyal>

The **instant noodle production line** has undergone a revolution with the advent of fully automated machines, combining speed, precision, and sustainability. As global demand for instant noodles grows—exceeding 120 billion servings annually (World Instant Noodle Association, 2023)—manufacturers are turning to energy-efficient food processing machinery to meet production needs while reducing operational costs. Automation in instant noodle manufacturing eliminates human error, ensures consistent quality, and significantly cuts down on waste.

Key drivers behind this shift include:

**Sustainability:** Energy-saving technologies (e.g., low-emission fryers, steam recycling) are being adopted to meet with stricter environmental regulations.

**Scalability:** Fully automatic production lines can adapt to small batches or mass production without compromising output.

**Hygiene & Safety:** Automated systems minimize human contact, critical for complying with food safety standards like ISO 22000.



## Production Process: How a Fully Automatic Instant Noodle Machine Works

The **instant noodle production line** leverages advanced automation to transform ingredients into packaged noodles with minimal human intervention. Below is a step-by-step breakdown of this energy-efficient production system:

### 1. Automated Mixing & Kneading

The process begins with precise flour blending, where ingredients (wheat flour, water, and additives) are fed into a computer-controlled mixer. Smart viscosity sensors adjust hydration levels in real-time, ensuring dough consistency meets exact standards.

### 2. Rolled & Laminated Dough Sheets

The dough passes through a series of stainless steel rollers, gradually thinning to a uniform thickness.

### 3. Noodle Strand Formation

Rotary cutting blades slice the sheets into strands (straight, wavy, or custom shapes).  
Key Feature: Adjustable cutting dies allow rapid product diversification—critical for favoring regional varieties (e.g., udon, ramen).

#### 4. Steaming & Frying: Energy-Saving Core

Steam Recycling System: Reclaims 60% of thermal energy during steaming (Dr. Lian Chen, Asian Food Tech Institute).

Low-Oil Frying Tech: Uses air-impingement drying as a healthier alternative, cutting oil use by 40% without compromising crispness.

#### 5. Cooling & Packaging

A multi-zone cooling conveyor prevents condensation before packaging.

## Key Features of the Fully Automatic Instant Noodle Machine

The modern instant noodle production line stands out due to its innovative engineering and smart automation. Below are the critical features that make this energy-efficient production system a game-changer for manufacturers:

#### 1. High-Speed Production with Precision

Output Capacity: Processes up to 35,000 packets per hour, ensuring mass production without quality compromise.

Automated Thickness Control: Laser-guided sensors adjust dough thickness ( $\pm 0.1$ mm accuracy), eliminating inconsistencies.

#### 2. Advanced Energy-Saving Technology

Heat Recovery System: Captures and reuses 70% of wasted steam energy, dramatically lowering fuel costs.

Eco-Friendly Frying: Patented low-temperature frying chambers reduce oil consumption by 50% while maintaining texture.

Smart Power Management: AI-driven load distribution minimizes idle power usage.

#### 3. Intelligent Automation & User-Friendly Controls

PLC & HMI Interface: Operators can adjust settings (cutting width, frying time) via a touchscreen dashboard.

Predictive Maintenance: IoT sensors detect wear-and-tear, scheduling repairs before breakdowns occur.

#### 4. Hygienic & Safety-Compliant Design

FDA-Grade Stainless Steel: Corrosion-resistant, easy-to-clean surfaces meet HACCP and ISO 22000 standards.

Closed-Loop Production: Minimizes human contact, reducing contamination risks.

Emergency Shutdown: Auto-triggers if deviations (overheating, pressure spikes) are detected.

#### 5. Customization & Scalability

Modular Design: Easily upgradable for new noodle types (e.g., non-fried, gluten-free).





## Is It a Rumor That Eating Too Much Instant Noodles Is Unhealthy?

Instant noodles are a popular convenience food enjoyed worldwide, but they've long been surrounded by health concerns. Some claim they're toxic, full of harmful additives, or even carcinogenic. But how much of this is fact, and how much is just rumor? Let's examine common myths about instant noodles.

### 1. Does It Really Take 32 Days to Detox After Eating Instant Noodles?

**The Claim:** Some viral posts suggest that eating just one pack of instant noodles leaves your body needing 32 days to detoxify due to "toxic" ingredients.

**The Truth:** This is an exaggeration. While instant noodles contain preservatives and additives, they are approved by food safety authorities (like the FDA and EFSA) in recommended amounts. The human liver and kidneys naturally process these substances within hours—not weeks.

**Digestion Time:** Most food passes through the digestive system in 24–72 hours.

**Expert Insight:** Dr. Mark Hyman, a functional medicine expert, states: "The body doesn't store noodles for weeks. Detox myths often ignore basic human metabolism."

**Conclusion:** No, your body doesn't need a month to "cleanse" after eating instant noodles. Moderation is key.

## 2. Are Barrel Instant Noodles Lined with Paraffin Wax?

**The Claim:** Many believe the inner coating of cup noodles contains paraffin wax, which melts into the soup and cause health issues.

**The Truth:** This is a misconception. Most food-grade containers use polyethylene or polystyrene (PS), not wax.

**Safety Standards:** Food packaging must meet FDA/EFSA regulations—paraffin wax is not used in noodle cups.

**Melting Point Myth:** Even if wax were used, it wouldn't dissolve in hot water (it melts at much higher temperatures).

**Conclusion:** The "wax coating" rumor is false. Cup noodles use food-safe plastic, not paraffin.

## 3. Do Preservatives in Instant Noodles Cause Cancer?

**The Claim:** Some fear that preservatives like TBHQ (tert-butylhydroquinone) in instant noodles are carcinogenic.

**The Truth:** TBHQ is approved in small doses (0.02% of total oil content) and has no proven cancer link in humans.

**WHO & FDA Stance:** TBHQ is safe at regulated levels.

**Actual Risks:** The bigger concern is high sodium and low fiber, not preservatives.

**Conclusion:** Preservatives in instant noodles do not cause cancer when consumed occasionally.

## Final Verdict: Instant Noodles - A Smart Choice for Modern Lifestyles

Instant noodles have long been misunderstood, but the truth is they offer convenience, affordability, and versatility that perfectly suit today's fast-paced world. Rather than demonize them, we should recognize their benefits when consumed wisely:

? **Time-Saving Nutrition:** In just minutes, you get a satisfying meal that provides quick energy—ideal for students, busy professionals, and emergency situations.

? **Customizable & Balanced:** Boost their nutrition by adding veggies, eggs, or lean protein to create a wholesome, balanced dish.

? **Global Comfort Food:** From ramen in Japan to Indomie in Indonesia, instant noodles are a cultural staple loved by billions, proving their enduring appeal.

**Tip for Healthier Enjoyment:**

? Choose non-fried or air-dried varieties for lower fat content.

? Use half the seasoning packet to reduce sodium.

? Pair with fresh ingredients to enhance flavor and nutrition.

**Bottom Line:** Instant noodles are not the enemy—they're a practical, delicious option when you need a quick meal. By making smart choices and occasional upgrades, you can enjoy them guilt-free as part of a varied diet. After all, in moderation, even convenience can be healthy!





## Parameters

Model	Capacity	Heating type
LYN-11 3Y	30,000pieces/8h	Electrical,gas,steam
LYN-11 6Y	60,000pieces/8h	Electrical,gas,steam
LYN-11 8Y	80,000pieces/8h	Electrical,gas,steam
LYN-11 10Y	100,000pieces/8h	Electrical,gas,steam
LYN-11 12Y	120,000pieces/8h	Electrical,gas,steam
LYN-11 20Y	200,000pieces/8h	Electrical,gas,steam

The fried instant noodle production line has advanced technology, large production capacity, low consumption and high degree of automation. It adopts touch screen parameter preset, photoelectric tracking, frequency conversion speed regulation and PLC program control from ripening to cooling process, which realizes single-machine adjustment, Full line linkage, synchronous speed up and down program control. It has synchronous and coordinated control of the whole line, the number of cutting knives is displayed, and the weight of noodle blocks can be adjusted without stopping the machine. The dough mixer adopts the double-shaft and double-speed technology of elliptical blades, which can add more water and combine materials and water more evenly.

# The Classification And Development Trend Of Instant Noodle Production Line

(1) According to the drying process of instant noodles making machine processing, it is divided into fried instant noodle production line, hot-air dried instant noodle and air-dried instant noodle.

## 1. Fried instant noodles

The drying speed is fast (about 70s to complete the drying), and the gelatinization degree is high (the starch gelatinization rate is more than 85%). The noodles have a porous structure due to rapid evaporation and dehydration in a short time, so the product has good rehydration and is in wastewater. It can be eaten after soaking for 3 minutes, with good convenience and pleasant frying fragrance. But because the product contains 20%-30% oil, the cost is high. In addition, despite the use of palm oil with a higher content of saturated fatty acids. However, after a period of storage, oxidative rancidity will still occur, resulting in a greasy taste, which significantly reduces the taste and taste of the product, so the storage period of fried instant noodles is shorter.

## 2. Hot air drying instant noodles

The steamed and gelatinized wet noodles are dehydrated and dried at a temperature of 60-90. Because no oil is used, the cost is low, it is not easy to oxidize and rancid, and the storage time is long. Due to the low drying temperature, the drying time is long, the gelatinization degree is low, the internal porosity of the noodles is poor, the rehydration time is long when eating, and the convenience is poor.

## 3. Boiled instant noodles

Boiled instant noodles (also known as fresh instant noodles), it caters to the taste of different consumers and meets the consumption requirements of different consumers. Convenient to eat, boiled instant noodles have more advantages over air-dried and fried instant noodles: its rehydration time is short and it is more convenient to eat: low oil consumption without frying is good for human health, especially popular among young people. : There are many ways to eat, you can make noodle soup, cold salad, or stir-fried. Each way of eating has a different taste.

## (2) According to the packaging method

It can be divided into three types: bag, cup and bowl.

Our country is currently dominated by bags and bowls. The bag is low in cost, easy to store and transport, and tableware is needed for eating, so its convenience is not as good as bowls and cups.

Bowls and cups of instant noodles have better convenience due to their own tableware, but because the packaging container is more expensive, the cost and price of this product are higher.



At present, the recycling rate of various packaging materials used for packaging noodles in my country is low, which will cause environmental pollution.

### (3) According to product flavor

It can be divided into several types, such as Chinese-style soy sauce fried noodles, soy sauce flavored shrimp noodles: Japanese-style soy-flavored thick noodles, curry soba noodles. According to different needs, different nutrients are added to the instant noodle production line, such as corn instant noodles, Mung bean instant noodles, soy flour instant noodles, other grains, beans instant noodles, etc.

### (4) According to the shape of instant noodles

It can be divided into square instant noodles and round instant noodles.



## FAQs About Instant noodles production line

Q1: What's the production capacity of a standard instant noodle line, and can it be customized?

A: Standard Output: A mid-range production line typically produces 10,000–30,000 packets per hour, depending on noodle type (fried/non-fried) and packaging complexity.

Customization Options: Capacity can be scaled up (to 50,000+ packets/hour) or down (for small-batch artisanal brands). Adjustable cutters, fryers, and drying tunnels allow flexibility for thickness, shape, and moisture content.

Q2: How do I ensure hygiene and food safety in the production line?



### A:Critical Measures:

**Stainless Steel Surfaces:** All contact parts should be FDA/EC-grade stainless steel for easy cleaning.

**Closed-Loop Systems:** Minimize human contact in mixing, cutting, and packaging.

**Automated CIP (Clean-in-Place):** Self-cleaning nozzles for pipes and tanks.

**Certifications:** Look for lines compliant with ISO 22000, HACCP, or GMP.

**Testing:** Regular microbial swab checks on conveyor belts and extruders.

**Q3:**How much energy does an instant noodle line consume, and are there energy-saving solutions?

**A:**Energy Use: Traditional lines consume 200–500 kWh per ton of noodles, with frying being the most energy-intensive step.

**Eco-Upgrades:**

**Heat Recovery Systems:** Reuse steam/waste heat (cuts energy use by 20–30%).

**Solar-Assisted Dryers:** Renewable energy for non-fried lines.

**Low-Oil Frying Tech:** Reduces oil heating time and waste.

**ROI:** Energy-efficient retrofits often pay for themselves in 1–2 years via lower utility bills.



## Reference

The following are five authoritative foreign literature websites in the field of Industrial machinery:

1. Food Engineering Magazine

Website: <https://www.foodengineeringmag.com/>

2. Food Processing Magazine

Website: <https://www.foodprocessing.com/>

3. Journal of Food Engineering

Website: <https://www.journals.elsevier.com/journal-of-food-engineering>

4. Food Manufacturing Magazine

Website: <https://www.foodmanufacturing.com/>

5. International Journal of Food Science & Technology

Website: <https://onlinelibrary.wiley.com/>