

## Automatic Tube Filling and Ultrasound Sealing Machine



The Fully Automatic Tube Filling and Ultrasonic Sealing Machine is a high-precision, efficient solution tailored for manufacturers in the cosmetics, pharmaceutical, food, and chemical industries. This machine integrates advanced filling and ultrasonic sealing technologies to ensure accurate dosing, secure seals, and smooth operations, enhancing production quality and output.

### Automatic Tube Feeding and Positioning

The system uses an advanced tube feeder to automate the loading and positioning of tubes onto the rotary worktable. With precision sensors and alignment arms, each tube is positioned correctly to avoid misalignment and ensure a seamless transition through each stage. This feature supports continuous production, minimizing manual intervention and maximizing efficiency.

### High-Precision Filling Mechanism

Equipped with a high-precision dosing pump, this machine can accurately fill tubes with a variety of products, from thin liquids to thick creams and gels. The servo-controlled filling mechanism allows for easy volume adjustments, ensuring consistent fills without overflow or underfill. The anti-drip filling nozzles help maintain a clean workspace, eliminating waste and ensuring precise dosing at high speeds.

### Ultrasonic Sealing Technology

The ultrasonic sealing unit provides a fast, strong, and secure seal, ideal for various soft tube materials like plastic and laminate. Ultrasonic waves generate localized heat at the seal area, bonding the tube ends without affecting the contents or damaging the tube's structure. This sealing technology ensures a clean, professional finish and minimizes product contamination, making it suitable for high-quality and delicate formulations.

### Precise Trimming System

After sealing, the excess material at the tube end is trimmed to create a neat and uniform finish. The trimming unit is equipped with adjustable cutting blades that cater to various tube diameters, ensuring a clean appearance and consistency across all products. This step enhances the tube's final appearance and prepares it for subsequent packaging stages.

## Integrated Coding System

For batch and product traceability, the machine includes a coding system that applies production dates, batch numbers, and expiration dates to each tube. Coding methods can include inkjet printing, laser marking, or embossing based on specific requirements. This feature helps manufacturers meet regulatory standards, ensuring each product is easily traceable.

## User-Friendly Touch Screen Interface

The machine's touch screen control panel offers intuitive control over settings like filling volume, sealing intensity, and chiller temperature. The interface displays real-time data and alerts, including error diagnostics and maintenance notifications, allowing operators to optimize machine performance and quickly address issues.

## Durable Transmission System

The machine's robust transmission system ensures smooth and synchronized operation across all stages of production. Built with high-quality gears, belts, and motors, it provides stable motion with minimal vibration, extending the life of machine components and ensuring consistent, high-quality output at high speeds.

## High-Throughput Production

Designed for fully automatic, high-speed production, this machine supports continuous output with minimal downtime, making it ideal for large-scale manufacturing. Adjustable speed controls enable operators to match production rates to specific batch requirements, providing flexibility across various product lines.

This Fully Automatic Tube Filling and Ultrasonic Sealing Machine offers unmatched precision, durability, and efficiency, making it a valuable asset for manufacturers seeking reliable, high-quality equipment to meet demanding production requirements.

## Parameter

Tube type:	Plastic tube, Multiple tube
Filling range:	A.6-60ml, B.10-120ml, C.25-250ml, D.50-500ml
Sealing type:	Ultrasonic sealing
Capacity:	1300-1800 tubes/hour
Number of work positions:	10
Safety protection:	overload protection
Filling nozzle:	Anti-drop
Filling accuracy:	±1%
Sealing shape:	Flat tail, curved tail, special-shaped tail
Applicable tube diameter:	12-50mm
Applicable tube height:	50-250mm
Automatic detection function:	No work without tube
Tube loding:	Automatic
Air pressure:	0.6-0.7Mpa
Air comsumption:	0.3m3/min
Power:	2.6KW
Voltage:	220V/50Hz
Working air pressure:	0.4-0.6Mpa
Machine size:	1590×1400×1650mm
Machine weight:	450kgs