

Auto Tube

System Descriptions

The Auto Tube is an automated system designed to insert pre-rolls into plastic tubes and seal them with a clear nylon shrink wrap.

When integrated with the AuraX and the optional AuraX Weight Check system, Auto Tube provides a fully automated pre-roll production line, verifying weight accuracy, inserting the product, and sealing it within MAP-protected (Nitrogen-filled) plastic tubes.



Key Features:

-  Automatically inserts one or two pre-rolls into each plastic tube.
-  Replaces air inside the tube with medical-grade Nitrogen (MAP) to preserve freshness and quality.
-  Provides real-time monitoring and production data for full process control and traceability.

System Requirements

Electricity



- Input power*: 120V (With Robot two outlets)
- Single Phase
- Frequency: 60 Hz
- Amperage: 20 A

Pneumatics



- Supply pressure: 8–10 bar
- Nom. working pressure: 7 bar
- Min. working pressure: 6 bar
- Air consumption: 10–14 cfm (283–396 L/min), with the AuraX.

Notes:

- The air must be dry.
- The AuraX requires an air tank reservoir of 250–300 liters.

Weight



- Tube feeder: 50 kg (441 lbs.)
- Tuber: 300 kg (661 lbs.)

Dimensions



- Height: 172 cm (68 inches)
- Width: 118 cm (46.5 inches)
- Depth: 125 cm (49 inches)

Environment and Installation



- Indoor use only
- Operating: 0 °C to 35 °C
- Humidity: < 70% (relative, non-condensing)

Nitrogen^(N2)



- Medical 99.9% grade.
- Pressure: 3–5 bar
- Supply tube: Ø8 mm

System Specifications

Tube size	Ø19.5 mm, 118 mm long
Tubing Rate	Up to 30 tubes per minute
Pre-rolls per tube	One or two
Monitor	Colored touch panel



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Core System Functions

Communication

The Auto Tube module connects seamlessly to the AuraX, ensuring fast, stable data exchange so both systems operate in perfect sync. This integration keeps production continuous and gives operators accurate, real-time information at every stage.

Modified Atmosphere Packaging (MAP) – NitroSeal

Each tube is flushed with medical-grade Nitrogen (N_2) to protect the pre-roll from oxygen and humidity. This controlled atmosphere maintains freshness, preserves flavor, and ensures every joint remains stable and consistent through packaging and distribution.

Shrink-Wrap Perforated Seal

A transparent perforated nylon film is heat-shrunk around each tube to create a clean, tamper-evident seal. The result is a tight, professional finish that protects product integrity and keeps every unit ready for retail.

Principle of Operation

01 Tube Feeding

Tubes are fed into the system via a vibration bowl feeder, which ensures each tube is oriented correctly before entering the line.

02 Pre-Roll Placement

Pre-rolls are positioned in the required orientation and placed onto a belt conveyor with dedicated compartments that transport them into the machine.

03 Tube Transfer

The tubes are transferred into a rotating carousel, which moves them smoothly through each operational station.

04 Pre-Roll Insertion

One or two pre-rolls drop by gravity into each tube.

Modified Atmosphere Packaging (MAP)
The air inside each tube is replaced with medical-grade Nitrogen (N_2) to preserve product freshness and prevent moisture exposure.

05 Tube Sealing

The tube cap is automatically closed, and a transparent nylon seal is applied, cut, and heat-shrunk to ensure a secure, tamper-evident finish.

06 Labeling (Optional)

Once sealed, tubes can be directed to the Auto Tube Labeler add-on, which applies product labels with precise alignment and adhesion.

Available Options

Weighing & Validation

The Auto Tube can integrate seamlessly with the AuraX and the AuraX Weight Check System, offering full automation from rolling to packaging.



Alternatively, validated pre-rolls can be manually transferred to a robotic unit that connects directly to the Auto Tube system via conveyor for fully automated loading and sealing.



Tube Label and Printing

The Auto Tube can be paired with an advanced tube labeling and printing system that integrates seamlessly with the Auto Tube line. This fully automated module applies labels with precise alignment and secure adhesion.



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