

AuraX Weight Checker

System Descriptions

The Hefestus AuraX Weight Checker is a precision add-on weighing system engineered to integrate seamlessly with the AuraX high-speed pre-roll machine. Designed for accuracy and efficiency, it ensures every pre-roll or blunt meets exact weight specifications, maintaining consistency, quality, and compliance across production.

The system operates through an intuitive Graphical User Interface (GUI) on a touchscreen display, giving operators full control to monitor performance, track data, and make real-time adjustments.



Accurately weighs each pre-roll or blunt to confirm it meets defined weight tolerances, providing detailed statistics and reports.



Automatically sorts and rejects pre-rolls that fall outside the acceptable range, ensuring only in-spec products continue down the line.



Supports a wide range of pre-roll and blunt shapes and sizes.



Delivers real-time monitoring, analytics, and data logging for ongoing quality assurance and process optimization.

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



- 150 kg (331 lbs.)

Dimensions



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

Environment and Installation



- Indoor use only.
- Sensitive to gusts of wind.
- Requires a concrete floor.
- Operating: 0 °C to 35 °C
- Humidity: < 70% (relative, non-condensing)

*For the USA, a Step-Up Transformer is used:
220 Volt/50Hz AC Power Source - Step-Up Voltage & Frequency Converters (2000VA/1800W) UX-2K.

System Specifications

Joint Sizes	Any produced by the AuraX
Weighing Rate	According to AuraX, up to 2,000 joints per hour.
Accuracy	±0.005 gr.
Maximum weight	300 gr.
Monitor	Colored touch screen panel.



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Core System Functions

Reliable Communication

The AuraX Weight Checker connects directly to the AuraX control system, delivering fast, stable data exchange so operators always have accurate, real-time information.

Versatile Weighing

The system supports every pre-roll format produced by the AuraX, including cones, straights, blunts, and infused products. If the line can run it, the Weight Checker can measure it.

Real-Time Statistical Insight

The touchscreen interface displays live and historical weight data, giving operators instant visibility into individual results, averages, pass counts, and reject counts. This data-driven insight enables proactive quality control and smoother production decisions.

Clear, Automatic Separation

As each pre-roll moves through the line, the Weight Checker automatically sorts it by weight accuracy. Products within tolerance advance to the "passed" drawer, while those outside the range are diverted to the "rejected" drawer – maintaining strict quality standards without slowing production.

Principle of Operation

- 01 Transfer from AuraX**
Pre-rolls are transferred from the AuraX ejection station to the Weight Checker slides.
- 02 Slide Positioning**
The slides move pneumatically into position above the two feeding funnels.
- 03 Feeding Funnels**
Each pre-roll falls through the funnels into the corresponding set of holes in the ejection wheel.
- 04 Weighing Process**
The ejection wheel rotates counterclockwise (CCW) to position each pre-roll above the weighing sensors, where weight measurement occurs.
- 05 Passed Product Handling**
The ejection wheel continues rotating CCW until aligned with the passed slots.
 - If the pre-roll's weight is within the acceptable range, the passed slot opens pneumatically, allowing the pre-roll to fall into the passed drawer.
- 06 Rejected Product Handling**
 - If the pre-roll's weight is outside the acceptable range, the passed slot remains closed.
 - The wheel continues rotating CCW until it reaches the rejected slot, where the pre-roll drops automatically into the rejected drawer.

Available Options

Auto Tube Integration

The Auto Tube system can be seamlessly integrated with the AuraX Weight Checker via a conveyor, creating a continuous, fully automated workflow from rolling to tubing and sealing.

Alternatively, passed pre-rolls can be manually transferred to a robotic unit that interfaces directly with the Auto Tube system. This setup allows flexible production configurations based on each facility's layout and desired level of automation.



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