

AutoCone Systems

PRE-ROLL Automation

Plan Automation LP AutoCone: Weight and Fill Level Accuracy

As the leading cannabis project management and automation company in the market, Plan Automation LP understands the importance of accuracy in both weight and fill level.

The AutoCone pre-fill machine is, in fact, a volumetric fill-to-weigh system. The difference between it and our competitors, is Plan LP's use of superior, state-of-the-art technology to weigh and fill joints much more accurately and at an exponentially higher speed.

The AutoCone is designed specifically to prevent product buildup, and dispenses ground cannabis with a very tight tolerance, in a fixed volumetric space. After which it continues 4 stations downstream to two load cells. The process features 11 key stages for joint filling:

1. Magazine Carousel Loading & Automatic Cone Feeding System

Continuous production and increased throughput. System is protected by a light curtain for safe operation

2. Bulk Hopper – Continuous Computer Controlled Monitoring

Detects blockages in hopper, low product or no product
Hoppers incorporate mixing wheel and slow speed agitators to ensure even product flow

3. Cone Quality/Re-Shaping System

Ensures cones will accept delivery of product properly and reduces waste

4. Cone Sensor System

Identifies and confirms cone present/open and reduces product waste

5. Primary Filling and Compacting Station

Ground cannabis product is conveyed via vibratory feed tubes from dosing station. Primary compacting ensures cannabis is packed to "crutch" of filter

6. Secondary Compacting Station

Allows for recipe-controlled pack density with force feedback torque control. The compression of each joint is exactly the same every time unlike our competitors pneumatic tamp

7. Servo Driven 'Grip, Twist and Ascend' Finishing System

Provides for high quality recipe-controlled twist close with reduced potential for tearing

8. Adjustable Twist Depth

Automatically Accommodates various cone sizes

9. Individual Load Cells with Filler Feedback System

Provides dynamic check-weighing and continuous precision weight control



10. Final Cone Holder Cleaning Station

Air blast ensures no product remains in holders

11. PID Dosing Weighment Technology

Continuous filler feedback weighment delivering guaranteed target dose weight and best production yield and unit production speed possible. Delivers dosing accuracy without comprising production speed.



The PID feedback loop targets weight, by analyzing the first few cycles that pass through the load cells. The system then determines whether the product is on or off target, adjusting it to the most accurate number from zero. The amount of cannabis in a single pitch of the screw is extremely repeatable—providing the client’s grind is both consistent and homogenous. Utilizing our state-of-the-art test bench and years of experience with grind and moisture profiles, Plan LP works with our customers to determine the best possible input material for each of our client’s strains. A proper grind profile is not only important for allowing the AutoCone to perform at optimum level, but also to provide high quality joints that are on target for weight and fill level.

The key features result in **beneficial performance guarantees**, which are not offered by any other system available, such as:

- Accuracy: +/- 5%
- Quality: 97% (<3% Rejects)
- Speed: 35+ joints per minute
- Machine Up-Time: 98%

Compared to the AutoCone’s competition, which fill to weigh and feature slow feed trickling and settling time, the AutoCone eliminates wait time and increases accuracy, resulting in faster production time, added consistency, and less reject variation.

*See proposal for full performance guarantee details.