



AUTOMATED GUTTER SYSTEM
FOR GREENHOUSES



RELENTLESS QUALITY. EXCEPTIONAL SERVICE.



OVERVIEW

Built to reduce overhead and increase efficiency, the AGS is focused on bringing automation to the small to medium sized greenhouse, and is engineered to fit any facility size. By keeping both the seeding and harvesting operations at the front of the greenhouse, the system indexes gutters through the various zones during the plant's growing cycle, bringing operational efficiency for the grower.

The result is less walking up and down the length of the greenhouse and less manpower needed.



Actuation Fingers

- Unidirectional fingers engage with hydroponic gutters to index them throughout the growing process
- Designed to be easily removed for serviceability and maintenance



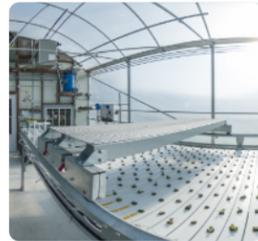
Powered Rollers

- Quiet, 24V, all-in-one powered rollers allow the transfer conveyors to be reliable and low maintenance
- Requires no external gearboxes or motors



Slip Joint

- Strategically placed slip joints allow the plants to spread apart as they grow
- Creates space between plants to allow maximum light coverage and airflow for foliage
- Customizable to specific crops



Trolley

- Optional add-on that allows the grower to access overhead components (lights, heaters, etc..) without needing to move the growing channels
- Stores above the transfer section of the system



Linear Actuators

- Quiet, 24V linear actuators are used to index hydroponic gutters
- These require no pneumatics and most systems can run off of standard 120V outlets



Tablet Control

- Interactive tablet facilitates control and monitoring of system
- Easy operation via touch screen



Transfer Conveyors

- Innovation that drives all seeding and harvesting to be performed at the front of the greenhouse
- Moves plants from the seeding table to the harvesting table



Modularity

- Components are designed to easily be scaled up or down to fit any size greenhouse
- Modularity allows the system to maximize growing space inside the greenhouse



ZONE 1

The beginning of the grow cycle packs together grow channels (4in center to center) to maximize plant space



ZONE 2

The middle of the grow cycle spaces channels at 6in center to center to allow the plants to expand



ZONE 3

The end of the grow cycle spaces channels at 8in center to center to maximize foliage light coverage and plant weight



FINISHED CROP

Grow channels are brought to you on the harvest side of the system eliminating the need to carry channels throughout the house



GUTTER COVER SPACING

Covers have premade holes to correctly space and fit growing medium



ACTUATION FINGERS

Easy to replace and minimal maintenance allow for set-it-and-forget-it operation



WATERING GUIDES

Predrilled holes in the structure of the system allow for consistent water tube placement and management



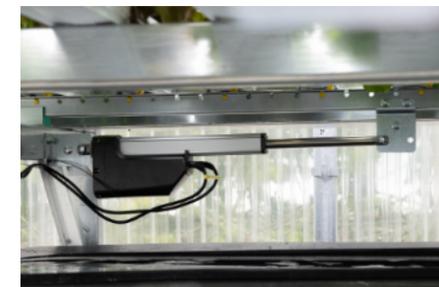
HARVESTING

Removable top cover makes harvest a breeze



SMART SENSING

Sensors are placed on both transfer conveyors to ensure a successful transfer of growing channel



LINEAR ACTUATORS

IP66 rated and quiet operation
Controlled by provided electrical system



SLIDE WAYS

UHMW slide bearings eliminate a maintenance point and keep system operating smoothly



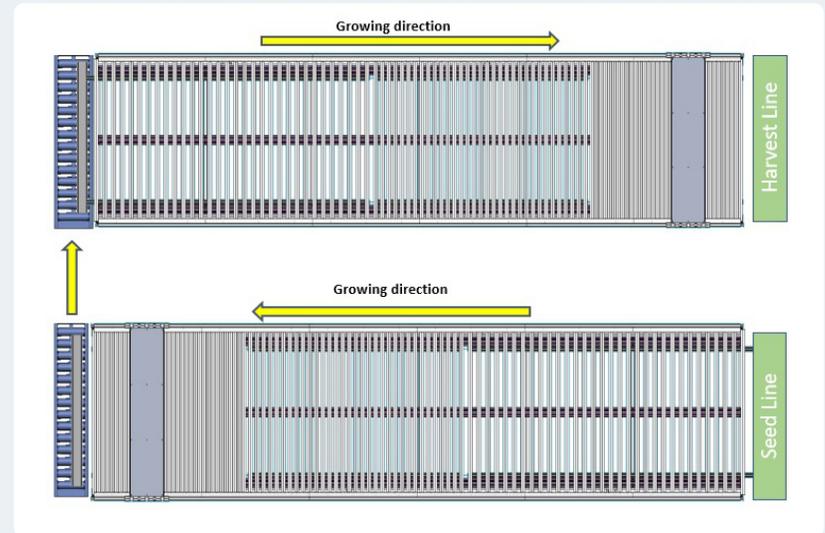
ELECTRONIC CONTROL

IP66 rated enclosure and easy-to-use tablet give easy access to AGS controls

POTENTIAL GREENHOUSE OUTPUT

Greenhouse Size	Grow Channel Length	Total # of Plant Positions (Low End)	Total # of Plant Positions (High End)
128' x 24'	10'	6,622	7,095
150' x 30'	13'	10,044	11,160
150' x 120'	27.5'	44,880	47,124

* For estimations purposes only, based on standard system layout



FROM OUR HANDS TO YOUR GREENHOUSE

LUBING is located in Cleveland, Tennessee, where we personally inspect every product before it arrives at your farm.

We maintain a large inventory to fulfill orders quickly, knowledgeable team members are available to help you determine what you need, and we work with you to ensure that your equipment is working to its full potential.

