## Horticultural Containers for Nursery Growers

# The Ideal Growing Container for Automation Equipment



Growers are pivoting towards automated equipment as a viable, scalable and cost-effective solution to current labor challenges.

#### Why is it important for growers to use automation compatible containers with their automated equipment?

Not all growing containers are created equal. If you are not using an automation compatible container with your new state-of-the-art equipment, you run the risk of internal damage which may not be covered under the manufacturer's warranty and could be very costly to repair.

#### When containers are stacked together, will spacing impact their use with automated equipment?

An automation compatible container should have uniform spacing between the container rims when stacked and a defined round or square rim for automated de-stacking tools to grab for easy denesting.

If there is not enough space for the automated flange, lugs or spool type strippers to grab the rim, you run the risk of pulling multiple containers into the machine all at once, with the loose containers becoming jammed in the equipment.

#### Are all containers compatible with fork systems?

If you are planning on using automated handling equipment such as fork systems, you will want to make sure that the rim protrudes far enough from the container body so it can securely rest on the tines. It's not only important the container rests on the tines but stays there securely in transportation.

Additionally, a sturdy side wall construction is necessary in order to withstand the force of the automated equipment (especially helpful on conveyers). If the walls are too thin, they can often crush under pressure.

#### What is suction type pot de-stacking equipment and are all containers compatible in this application?

In this application, a small suction cup grabs the bottom of the pot directly in the center - dropping or flipping it into the corresponding tray (or conveyor system) as part of the production line. If your automated equipment has this new technology, it is important that the bottom center of the pot be completely flat, otherwise the machine will be unable to properly grab the container.

This is important to remember when purchasing containers with "feet" designed for water mat and other unique irrigation practices as there may not always be enough surface area for the suction cup to grab on to.

### Do blow mold, injection and thermoform containers all function equally with automated equipment?

**Blow mold containers**, while a popular choice for nursery growers in the field, are not ideal for use with automated equipment. Their thin, side wall construction and ribbing causes challenges with denesting equipment and conveyor tables, and the absence of a pronounced rim prevents them from being used with fork systems.

**Injection containers** on the other hand are a solid choice for automated equipment. Injection containers are manufactured with thick side walls and heavy bottom construction to withstand the force of automated machinery, and sturdy, protruding rims provide excellent support for automated handling equipment, as well as seamless denesting.

For growers familiar with **thermoform containers**, they do pose some limitations you must consider before implementing. While they are promoted as automation compatible, thermoform containers are not an ideal choice for dispensing equipment based on denesting challenges, but can be used with fork systems if the rims protrude sufficiently.

It is important to remember that thermoform containers are traditionally lighter weight for a lower cost, which means they may not be able to endure the physical demands of some automated equipment (such as pruning, pot washing and top dress tasks).

For a listing of automation compatible growing containers visit **hc-companies.com/automation** 

