



Added Bonus

Green Valley Greenhouse gets rebate from energy provider because of HV-100s

Many growers have come to rely on the HV-100 Robot for spacing, consolidation and collection of potted plants. Since coming to market in 2013, around 150 HV-100s are moving pots at over 30 U.S. facilities and that number continues to grow. This year one of our new customers realized an added bonus to bringing HV-100s into their operation: A rebate from their energy provider!

Green Valley Greenhouse in Ramsey Minnesota produces a wide variety of plants in their 740,000 square feet of conditioned space. Like many others, Green Valley was initially interested in automation to help with labor shortages and costs. CFO Phil Johnson says, "We saw real value in using the HV-100s for our spacing as it would reduce costs and free up tight labor resources for other tasks"



Green Valley brought in a fleet of HV-100s in July of 2016 and during the initial training it was clear the robots were going to be a great fit with their work-flow and operation. In addition to labor savings, the potential for other benefits started to become clear. One of these benefits came in the form of what we at Harvest call Efficient Hex.

The robots are capable of spacing in a square or hex pattern. When spacing in hex, the robot's pattern is slightly different from the way people traditionally space using a guide running across the bed (Manual Hex). You can see the difference in the illustration below. With Efficient Hex, the plants have the same amount of room to grow but you get 5 to 15% more product on the ground.

Being a numbers guy, Phil could see the additional benefits of the robots and Efficient Hex right away. "Having the robots allows us to fit an additional acre worth of plants into the existing facility".

This would not only reduce the amount of product they need to outsource to other growers, it would also save them a lot in energy costs.

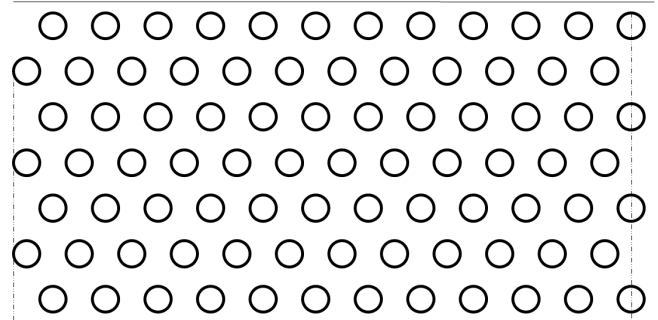
Since operating a greenhouse through a Minnesota winter is very energy intensive, Phil knew the extra acre of production was a big savings. He reached out to his energy provider to see if they offered any rebates or incentives. After an energy analysis was made, they agreed there was significant savings due to the robot spacing and granted a substantial rebate to Green Valley.

After all these years and all the millions of pots moved by HV-100 robots, we continue to discover new benefits for our customers. Labor savings, lower employee turnover, increased plant health, reduced worker's comp claims, and now energy efficiencies. As more growers bring the HV-100 into their operations, I am sure we will continue to be surprised!

For information about Green Valley Greenhouses please visit <http://www.gvgh.com>.

For information about Harvest Automation and the HV-100, please visit <http://www.public.harvestai.com>

Efficient Hex



Manual Hex

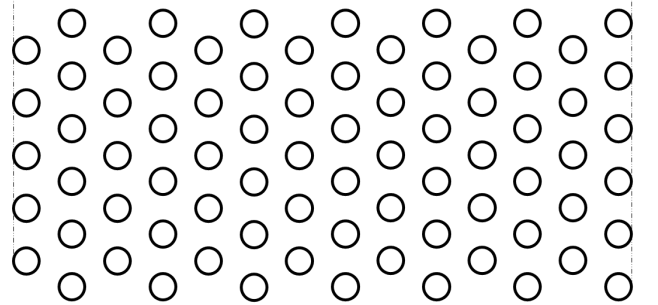


Diagram showing the difference between Efficient Hex and Manual Hex. Note that in Manual Hex, there is a half pot missing every other row the entire length of the bed. Efficient Hex essentially rotates this pattern 90 degrees. Now the missing half pot is only on the short end of the bed and this allows for up to 15% more pots on the ground.