GROWERTALKS

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Tech Talk

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While operations can still thrive and be very successful using traditional methods, there's no doubt that growers of all ages and experience levels are embracing technology and the new products that it provides. In particular, growers are interested in technology that can streamline day-to-day labor and improve crop quality.

Pictured: Gaining complete control of various greenhouse systems has been significantly simplified.

And just like other tech, greenhouse tools and products are constantly changing, and nobody knows more about the current trends than Jon Kozlowski. Jon has decades of growing and farming experience, and he heads a team of greenhouse specialists and designers. He and his team are definitely industry leaders in terms of integrating the newest forms of technology into greenhouses and grow rooms, and he's helped growers in all degrees of technological proficiency.

"The name of the game is controlled environment agriculture. Growers want to implement technology and automation to create the perfect environment for their crops. Consistency in environment equals consistency in production, and we're looking to use technology to maximize the crop's output at all times," said Jon.

A lot of growers are concerned about integrating technology into their operation, because they're afraid that like other forms of technology, it will quickly become obsolete. A fair concern no doubt, but Jon highlighted a couple of his favorite tech tools that have long-term viability and can help to lower costs, allowing growers to put more money back into their operation. And who knows—maybe this money can be put towards improving operational efficiency with new tech.

Complete control

The two pieces of technology Jon continues to be excited about are the iGrow 1800 and the iDoser, both made in the U.S. by Link4. The iGrow 1800 is a cool, computer-like unit that combines powerful and versatile control with simplicity. The easy-to-use unit is a tool that can be appreciated by the most tech-savvy growers

and those new to the tech game.

The iGrow 1800 is a great example of how technology is changing growing for the better. It literally links together many of the tools and systems that a grower uses and allows them to program a schedule that ensures optimal growing environments. Operations will appreciate the labor-saving qualities that it provides. Not only do growers no longer have to go around turning on ventilation systems or irrigation, in large part, they really don't have to think about it. This unit is a great way to automate larger operations, as the iGrow actually has interactive communication capabilities that allow the controllers to communicate between zones.

"To quote Link4, the iGrow is 'high-tech control for the sophisticated grower.' A computer controller like this provides the grower with the ability to achieve the highest level of control and automation. Not only will technology, like the iGrow 1800, help a grower increase crop productivity, but it will also reduce energy and operating costs," Jon said.

For those who are wary about putting their growing operation in the hands of a computer, the iGrow 1800 features backup sensors that ensure the environment is being properly monitored, so there's no need to stress.

With years of experience on a farm, Jon was particularly enthusiastic about the iDoser.

"The days of hand-watering are over," he proclaimed.

However, the iDoser is definitely geared towards greenhouse and grow room operations, as opposed to traditional agriculture and field production, and it allows growers to create specific nutrient recipes that are delivered to crops on a programmed schedule.

"Link4's iDoser provides automation for irrigation and fertigation in grow operations," said Jon. "It ensures consistency in a grower's nutrient program and maximizes plant production, and at the same time reduces labor and nutrient costs."

Maintaining water quality and healthy nutrient levels is essential to growers utilizing hydroponics and irrigation systems, and to provide only the highest-quality water at all times, Link4 has included extensive safety monitoring with this unit. The monitoring allows crops to get the optimal nutrient levels at all times.

The unit's monitoring features programmable set points that trigger alarms to let growers know of any issues and it also maintains a record of all nutrient dosing. These records can be used and compared to past records, so that nutrient levels can always be optimized and adjusted, leading to healthier and more profitable crops.

While there are many other systems and ways to integrate new tech into an operation, there's no doubt that it can actually make you a better grower. Products like the iGrow 1800 ensure the perfect growing environment at all times, and, in turn, this provides the most profitable harvests on a year-round basis. Tech doesn't just allow you to become a better grower, but also a better business owner. Instead of spending hours on day-to-day labor, growers can have time to actively strengthen and grow business—whether that's through

researching different marketing avenues or actively acquiring new sales opportunities.

For those worried about successfully integrating new tech and of the possible ramifications of improper implementation, there are teams, like Jon's, that can provide expert consultation and an approach that's unique to each grow op.

"We are always sizing equipment and designing controls to create the perfect environment for whatever the grower is producing," he said. "A lot of times they've heard about new technologies, but have no idea how to design it into their operation. Specialists are able to provide the highest levels of technology and automation, but also ensure that it is seamlessly integrated, so growers can produce the highest-quality crop at the lowest cost." **GT**

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