

# GROWERTALKS

## Features

4/28/2017

## Are You Missing Something?

*Jennifer Zurko*

Some of you may remember the days when you actually had to water the plants by hand; now everything can be controlled by a computer that you can work from your smartphone.

As technology gets more advanced, you have more greenhouse “toys” to choose from. New equipment and tools are developed to make your life easier, and mundane, but necessary, jobs simpler.

A lot of these products are a big investment, so you want to make sure that you and your staff are educated about their proper use. But do you think it's possible that you're missing out on using that climate control system, pot filler, transplanter, etc. to its full potential? There may be a few bells and whistles that you may not be using or didn't even know existed.

It's like finding \$20 in your pocket—you didn't know it was there and are pleasantly surprised because you can definitely use it.

---

## No more pains with the pinions

If you have an open-roof greenhouse, most likely it's operated using a rack and pinion system. With how many times you open and close the roof—especially during peak growing times—there's wear and tear. And the first thing that usually goes are the rack and pinions that open and close the vents.

Before, you'd have to cut through the drive pipe with a hacksaw to replace it, but the new EZD 52 from Lock Drives comes in two pieces so it's easy to install and replace. You don't have to take apart the whole system or slide the pinion down the entire length of the drive pipe. Instead, the housing slides radially on to the pinion and the drive shaft, snaps into position and holds the two halves of the pinion together. Then the rack can slide into position and be secured in the normal way.



Because of the ease with which you can install it, it saves about 90% in labor, said Bill Webster, Application Engineer with Lock Drives. It only takes about 1/10 of the time now, he said.

The EZD 52 Pinion is compatible with standard 1.315-in. O.D. steel galvanized pipe.

To see how it works, visit <https://youtu.be/pdvjJIWE8ho> to watch it in action.

*The EZD 52 steel pinion from Lock Drives now comes in two pieces so it's much easier to install and replace.*

---

## Dibble me this

The EZ Potter Pro Potting Machine from Mitchell Ellis does exactly what the name implies: it fills pots and trays with soil. But did you know that you can also fit it with a multiple drill head for liners and a dibbler plate for seed?

The first machine of this type—that does four different jobs—is compact, so it fits almost anywhere. There are dual soil returns in the conveyor belt so that the soil stays in the machine instead of spilling over the sides onto the ground. And it's easy to use (you can learn to operate it in 20 to 30 minutes).



*The EZ Potter Pro Potting Machine from Mitchell Ellis comes with a multiple drill head for liners and a dibbler plate for seed.*

---



## More than just hot and cold

The STEP Up staged control system from Wadsworth Controls manages heating and cooling, but also has the capability to manage modulating equipment likes vents and energy curtains. Julie Dean, VP at Wadsworth, said this is an unexpected, but valuable, feature for a control in this price range. STEP Up also offers controls for six different stages—2 heating and 4 cooling—and three setpoint periods.

*The STEP Up control system from Wadsworth not only manages heating and cooling your greenhouse, but also operating vents and curtains.*

---

## Cool it

The Dramm MistTime Controller is primarily used for misting and offers cycling of up to 10 zones for propagation mist. This unit has a number of advanced features, such as the ability to build a misting curve that can increase or decrease the misting frequency during the day, said Dramm's VP Kurt Becker.



But MistTime does more than provide humidity to your unrooted cuttings; it can also be used as part of a cooling system for your greenhouse. Dramm offers an optional temperature sensor for MistTime.

When installed, the temperature sensor can influence misting cycles to increase frequency as the temperature rises, said Kurt, which is useful for adjusting mist for propagation. But when combined with Dramm's JetFog low pressure fog system, MistTime can be used to cycle a cooling mist above a set temperature, increasing misting frequency as the temperature rises. The system works well with both mechanical and passive ventilation systems.

*The MistTime Controller from Dramm not only helps provide the right environment during young plant propagation, but it can also be part of a cooling system to decrease the temperature in your greenhouse.*

---

## Less watering woes

The Trident, Nova and Super Nova irrigation control systems from Phytotronics offer growers a complete handle on misting and watering over a single zone. The one feature that's not used to its full potential on these units is the ability to program eight different "events," or on/off times, said Cliff Hoogland, GM of Phytotronics.

Cliff explained that when you're using bottom heat at its maximum capacity—normally around 20F above ambient temperature—the soil can dry out very quickly, making it difficult for a thermostat probe to read the amount of heat that's in the growing media. (When dry, soil is a great insulator, he said.)

This can be avoided by setting different watering times. For instance, using Event 1 to run the controller during the day and the other seven events to turn on for five minutes at a time during the night. Cliff said that five minutes is enough time for all of the zones to run once.

He gave this example:

Event 1: 7:00 a.m. to 7:00 p.m.

Event 2: 8:30 p.m. to 8:35 p.m.

Event 3: 10:00 p.m. to 10:05 p.m.

Event 4: 11:30 p.m. to 11:35 p.m.

Event 5: 1:00 a.m. to 1:05 a.m.

Event 6: 2:30 a.m. to 2:35 a.m.



Event 7: 4:00 a.m. to 4:05 a.m.

Event 8: 5:30 a.m. to 5:35 a.m.

Trident and Nova both have 24-hour clocks with built-in timers that allow you to program different events. And the battery backups ensure all of your settings are saved if the power goes out.

*The Super Nova and Trident irrigation control systems allow you to set different watering “events” to prevent the growing media from drying out, especially overnight.*

---



## Complete compaction control

“High-speed with a small footprint” is how SB Machinerie describes their flat and pot filler machines. Not only do they fill any container, but they’re meant to move anywhere in the greenhouse and take as little space as possible.

Yet another benefit is that four of their pot/flat fillers (SB01, SB03, SB05 and SB06) allow the user to control the compaction and the uniformity of the soil fill—and they say these machines are the only ones on the market to do that.

You can set how much growing media you want in your containers and the rubber fin brush ensures you have a clean soil line without making a mess, returning any extra soil back in to the hopper. The SB01 and SB05 also allow you to add water, fertilizer and other amendments. **GT**

*The SB01 pot/flat filler from SB Machinerie allows you to control the compaction and uniformity of the soil fill.*