GROWERTALKS

GT in Brief

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Fast and Flexible Transplanting

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When you have to fill (and refill) more than 100 acres of greenhouses with bedding plants, how can you be both fast and flexible? This new transplant-ing line is the solution at Dutch greenhouse Kwekerij Wouters, one of the largest potted and bedding plant operations in Europe.

“My problem at the company is I have a lot of different pot sizes,” manager Frido Wouters told us. That’s an understatement: Frido grows in at least eight different sizes, from 12 cm to 27 cm, plus packs.

“Every time I change from one pot size to another, it takes a lot of work to make the machine perfect again. And you must change the pot destacker and everything. So I was thinking I need a new machine where I can change the pot size really easily. Visser was, for me, the company who could make the machine how I want.”

The transplant line is built around Visser's Pic-O-Mat GR-2700 transplanter, which is equipped with 48 grippers, all of which have wireless servomotors
—meaning they move quickly, accurately and independently, with fewer moving parts for less maintenance, more flexibility for transplanting different plant patterns and fast, tool-free changeovers between pot sizes.



The Pic-O-Mat is linked to a pot destacker, pot filler and table loader, all of which communicate with each other. Select a new pot size program on the transplanter and the destacker, filler and loader automatically change to the new pot size, too. In fact, you can control the whole line from any one of three control panels. To make it easy for workers who may speak multiple languages, any problems and where to locate them, are shown in 3 -D graphics on the screens.

Another interesting feature is the pot carriers. Rather than run pots through loose or in their own carry trays, Visser has designed carriers that can hold the various pot sizes Frido uses and carry them through the transplanter in the proper position. Each carrier is the same length and width regardless of pot size, making for easy changeovers between pot sizes without having to make micro-adjustments to the machine, saving time and improving accuracy.

A third innovation is a planting aid for when they do multiple varieties in one pot. A series of six lights in various colors tell employees which supply belt gets which variety.

The line was installed in January and thus far has met all expectation for speed, accuracy and flexibility. With 12-cm pots, for instance, they can plant 13,000 per hour with three plants each. That's an impressive 39,000 per hour—"and I can do it with the transplanter running at 70%," adds Frido. And with just two employees to staff it. Changeovers take just 20 minutes, instead of 2 ½ hours, plus another hour or two of tweaking, as with their older line.

Credit goes to Visser's ability to run computer simulations of the line before it was ever installed, says Frido, helping them work through any design bugs.

"When the machine started last January, after a week, the machine was running good," he says. "And the speed was there. That, for me, was really important." **GT**

Hear Frido talk about the new line at www.youtube.com/watch?v=k3DQ3RCtzvM.