Comfort, profit

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go hand in hand: New workstations at Mater Seed make users 25 percent faster, 100 percent more at ease

By BENNETT HALL
Gazette-Times business editor

Brad Whiting is a lot like your mother. He wants you to sit up straight.

That simple, old-fashioned injunction is one of the fundamental principles behind the Ergostation, the flagship product of Whiting's company, Mater Seed Equipment Inc. By making seed inspection equipment both more efficient and easier on workers, Whiting hopes to grow his niche business into some profitable new markets.

Whiting bought the business in November for an undisclosed sum from Jean Mater, who launched the venture with her late husband, Milt, in the 1950s. An engineer by training, Whiting began working with Mater in 1999, when the company partnered with the Oregon State University Seed Lab to redesign the seed inspection stations then in use.

The OSU Seed Lab is one of the country's largest, and its analysts inspect a huge variety of seeds, from turf grasses to vegetables and garden flowers to native trees. Some of the seeds they work with are quite small, requiring magnification to check for purity, quality, disease and so forth.

The old method involved using a hand lens to check batches of seeds under a bright light on a piece of white paper. Workers often had to hunch over the inspection stations for hours as they moved batches of seeds through by hand.

"The user had to accommodate the machine rather than the machine accommodating the user," Whiting said. "We turned that equation around. The net result was what we call an Ergostation."

The tabletop device consists of a flat work surface with two adjustable wooden wings for armrests. Electric-powered vibrators move seeds steadily through an inspection tray at a speed controlled by the user.

The Ergostation can be configured to work with various magnification options, from a four-power lens to a stereoscopic microscope. It can also be fitted with a video camera that allows capturing digital images of seed batches.

A basic Ergostation costs $1,950. Lenses, cameras and the mounts to hold them cost extra.

The OSU Seed Lab has 16 microscope-equipped Ergostations, and the seed analysts swear by them.

"It's more accurate, it's faster and it's more comfortable," said senior analyst Mary Grey, working her way through a
batch of barley seeds last week at the Corvallis facility. In the old days, Grey said, when she had to bend over and peer through a hand lens to do her work, she had a lot of neck and shoulder pain.

"We've had several people who've had to have back surgery," said Sherry Hanning, the lab's purity unit supervisor. "But with these machines we've been able to sit up better. There's not nearly the strain."

That ergonomic improvement - along with the system's mechanical feeder and stereoscopic microscope - has led to more efficient workflow as well, Hanning said.

"I think we've increased our production 20 to 25 percent since we put those in," she said.

Mater Seed Equipment makes five different products aimed at the seed industry, from a bare-bones $650 seed cleaner to a sophisticated seed blower that goes for up to $9,000. Whiting and one employee assemble the products to order in a small shop on Southeast Crystal Lake Drive.

"These are not high-volume items," Whiting acknowledged. "We sell a few a year of each item."

But he sees significant growth potential for the Ergostation, and he's ramping up his marketing efforts to get the word out to Mater Seed Equipment's traditional customers, mostly university and government seed labs plus some private testing outfits.

In addition, he's hoping to grow his customer base by branching out to seed processors. Whiting recently sold an Ergostation to a Hermiston grass seed producer who saw it as a way to fine-tune his operation.

Grass seed has to meet purity standards to ensure weeds won't sprout in lawns or putting greens, so processors take pains to cull out all foreign matter. But sometimes they go overboard, tossing out good seed in the process.

"If you're overcleaning, you're throwing money away," explained Whiting. "If you're undercleaning, you're devaluing your product."

By doing their own inspections as they go, producers can calibrate their cleaning equipment to meet purity standards with less waste.

Adriel Garay, manager of the OSU Seed Lab, said the universe of potential users for the Ergostation is currently limited to specialized facilities such as his. But he can see how that could change as seed producers and processors discover the benefits of doing their own inspections.

"What you're seeing is the beginnings of a new market," he said.

Bennett Hall is the business editor for the Gazette-Times. He can be reached at 758-9529 or bennett.hall@lee.net.