

As Seen in . . .



# Enterprise Minnesota

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## TALENT SEARCH

*As the manufacturing workforce ages, attracting younger workers with strong skills will be critical. Some Minnesota companies are getting a head start.*

BY KATE PETERSON

By all accounts, Tom Partridge is an ideal manufacturing employee. His educational background—a two year degree in robotics and automation—perfectly match the needs of his employer, Delkor Systems, a Circle Pines manufacturer that designs and builds packaging equipment, primarily for the food and dairy industries. Because of his great technical skills, and a knack for listening and communicating well with customers, Partridge has filled a number of roles at Delkor during his career there, from building machines and installing them on-site for customers, to running initial tests on those machines, to setting up Delkor machines and fielding questions from prospective buyers at trade shows.

Partridge loves problem-solving, which is probably why he especially enjoys his current position as a mechanical designer in Delkor's engineering department, where in recent years he's worked

with a small team to develop solutions to customers' specific packaging equipment needs. In fact, Partridge confesses, "It sounds a little corny, but I have to have a reason to work, a real challenge.



*Tom Partridge (28), Mechanical Designer at Delkor Systems.*

"I'm not here just to bring home a paycheck."

For all his qualifications—the right education, excellent skills, good communication capability and the desire to meet new challenges—other manufacturers might actually find another of Partridge's attributes most appealing: his age. At 28, Partridge defies the norm in manufacturing in Minnesota, a fact that poses a significant threat to the future of the industry.

Across Minnesota, manufacturing firms face an aging workforce. A 2008 report by Minnesota's Department of Employment and Economic Development shows that as a sector, manufacturing has among the state's oldest employees, with 45 percent older than 44.

In the past, retiring workers simply left vacancies for the next generation of employees. Now, however, two forces are combining to limit that pipeline of workers to something of a trickle: tepid interest among young people for

careers in manufacturing, and a need for good training programs that give interested workers the background and skills they need for successful careers.

### Untapped Resource

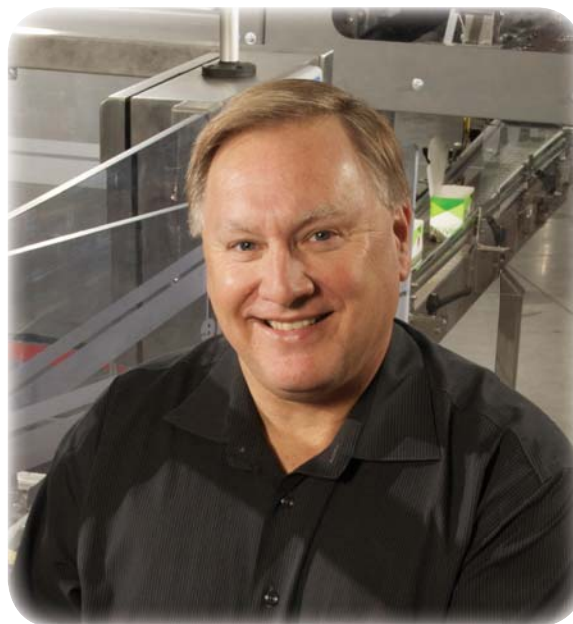
While the aging of the workforce cannot be slowed, across the state a number of manufacturers are working hard to reverse the trends that have curtailed the entry of young, qualified employees into manufacturing careers. Company owners and executives are reaching out to convince young people of the benefits of manufacturing, and working with institutions to provide them with skills they need to flourish. Many are finding that this effort, while laying the groundwork for a future workforce in the state's manufacturing industry, is allowing them to identify qualified and enthusiastic workers—like Tom Partridge—right now.

### Battling an Image Problem

Among the chief reasons for low interest among younger workers in manufacturing careers is the inaccurate notion that jobs in the industry are low-paying, and that they involve dull, repetitive tasks. Manufacturers face the enormous challenge of dispelling these two inaccuracies. Failing to do so could doom the industry's future, since a vibrant manufacturing sector depends on a strong and skilled workforce.

Perhaps the most potentially damaging, and pervasive, of these myths is the idea that manufacturing work is monotonous. Lori Tapani is co-president of Wyo-

oming Machine; she and her sister Traci Tapani, also a co-president, took over leadership of the company in 1994 when the firm's original owner—their father Tom Tapani—began his transition to retirement. Lori Tapani agrees that there is a deep misunderstanding of a typical day in the manufacturing arena. "There's a misperception that manufacturing is all about standing in one place all day long and making the same widget," Tapani says.



*Dale Andersen, president, CEO of Delkor Systems.*

Partridge says even his friends don't understand what he does. "People view my job as something on an assembly line," he says. In reality, for the last several months, Partridge has been involved with a project to develop a packaging machine that can efficiently form a three cornered box for individual pizza slices. As the project progressed, Partridge and his small team of collaborators moved from research and development, to building a prototype, to test-

ing and trouble shooting. There was great challenge and variety in each day. In the end, they created custom forming tools—for which a patent has been applied with Partridge's name among the applicants—that can produce the unique triangular boxes at a rate of 200 per minute.

Dale Andersen, president and CEO of Delkor Systems, says that to today's younger workers, a job or career needs to be fulfilling and challenging. When Andersen addresses potential employees, at technical colleges for example, he spends a lot of time on the culture of Delkor, describing the dynamic environment. "It is really exciting to work in a place that's doing a lot of innovation. We're very actively doing things companies haven't done before. Manufacturing can be very exciting," he says.

Lori Tapani says her company has worked with a number of organizations that offer direct exposure to manufacturing to students when they are quite young. Getting them inside a facility, where they can actually see what is involved in a manufacturing operation, makes a huge difference in fostering an interest in manufacturing, for future skilled workers, as well as potential engineers and managers.

Some national organizations offer summer camps for students.

“Anytime kids can go to a camp at one of the colleges, they are learning what the industry is about. We’ve posted kids on internships after they’ve gone through camps, where they are rotated through different areas of manufacturing,” says Tapani. “That gives us an ability to expose kids to a range of opportunities within manufacturing.”

A related myth about manufacturing is that the jobs are low-paying and offer limited room for growth. Clearly, Partridge’s experience at Delkor indicates otherwise. That’s why executives carefully highlight the advantages of manufacturing careers, including wages, benefits, and the potential for advancement.

At Delkor, for example, Andersen says employees enjoy a very competitive compensation package, with all the features a larger company would offer, including a generous 401(k) match. Andersen also likes to point out the company’s culture of promoting its employees. “We emphasize on our website, and have testimonials and profiles of people who have risen through the ranks here,” he says.

Traci Tapani adds that manufacturing can be very rewarding financially. “When I came back to run the company in 1994, I left a good job in a bank, doing international finance. At that time, there were many employees on the shop floor who were making more money than I was in that bank job,” she says. “The truth of the matter is these are high paying jobs that require skills.”

## Developing the right skills

Once students develop an interest in manufacturing, they need to cultivate the skills required to perform well on the job. Because of the dynamic nature of the industry, manufacturers must remain engaged with the institutions that train future workers. In many cases, manufacturers are finding that high schools and community and technical colleges are eager to work with them in this pursuit.

Richard Davenport is the president of Minnesota State University, Mankato. As the lead institution selected by the Minnesota State College and University System Board of Trustees for the Minnesota Center for Engineering & Manufacturing Excellence, Minnesota State works closely with several community and technical colleges that have programs to help develop the manufacturing workforce. The members of the advisory board for the Center for Excellence—most of whom are manufacturing executives—help that process by offering input on the skills employees will need, and the curricula they might use to impart those skills.

Davenport says several hundred high schools across the state also offer programs to help prepare students for careers in manufacturing. Manufacturers who reach out to those high schools can ensure students are aware of the great career opportunities available in manufacturing, boosting the number of workers in the next generation, he says.

Andersen says Delkor works with

five or six different colleges to identify potential workers and help them develop their skills. “Our HR department stays in contact with them, and we arrange for them to have tours,” Andersen says of the colleges. Delkor regularly has employees who are former students from the program visit with the students. “We often bring them on board if they need to do internships to finish their degrees,” he adds, noting that Partridge was one of those interns back in 2004.

The relationship between technical colleges and manufacturing is often mutually beneficial. Traci Tapani says she typically encourages interested high school students to pursue technical degrees, since most of the jobs at Wyoming Machine require skills beyond those acquired in high school. “Right out of high school, many kids are simply lacking the problem solving skills needed to trouble shoot the problems and challenges they will face in the manufacturing environment,” she says.

“We are particularly trying to dispel the myth that going into manufacturing, going to a technical school is an afterthought. It’s not something people do because they couldn’t do anything else,” Tapani adds. “They should be excited. They need to know these are good paying jobs with a full range of benefits.”

Tapani is passionate about the need for boosting manufacturing’s image as a great place to work, and attracting more young

people in the process. "This issue could not be talked about enough. Quite frankly, there are a lot of people in this industry, but only a small number are talking about this issue," she says. "This will be the number one issue that keeps manufacturers from competing in the world market."

Concern about manufacturing's future workforce drives executives like Lori and Traci Tapani and Dale Andersen to speak out to young people. Their success will impact the whole manufacturing sector because it depends so profoundly on a strong, highly skilled workforce.

In the meantime, other manufacturers might want to follow their lead, not only for the sake of the industry, but for the sake of their own companies. Traci Tapani reports important short-term benefits from her company's efforts. When it comes to finding qualified employees right now, she says Wyoming Machine hasn't had any trouble. High visibility on this issue has been the key. "Part of it is trying to make sure the pipeline is flowing with employees for the future by working with the high schools and technical college," she says. "Part of it is Lori's and my involvement in the community. We meet and network and know

lots of people and lots of people know us, so they seek us out. They see us as an innovative, progressive company and they want to work for us."

