

# Manufacturing job losses, yes, but gains for trained Minnesota workers

Here's one of the ironies in looking ahead at how the nature of work is going to change — manufacturing may actually be a bright spot.

FEBRUARY 18, 2017 — 12:25PM



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*Second in an occasional series on the future of work.*

A news release came recently that described a new finding of massive American job losses since China joined the World Trade Organization in 2001. What caught the eye was a specific estimate for Minnesota, of 89,100 mostly manufacturing jobs lost.

That's a lot of workers to be displaced in a state that only had 375,000 manufacturing jobs in 2001. There are few things more upsetting for a family than a job loss, and it's obvious that globalization has moved a lot of work overseas. That's why it's easy to overlook the current reality of the manufacturing sector in this state: Output has never been higher, and manufacturers can't seem to find enough workers.

Here's one of the ironies in looking ahead at how the nature of work is going to change — manufacturing may actually be a bright spot.

Right now, employers are fighting over the graduates of the Dunwoody College of Technology in Minneapolis, the state's venerable private vocational college. President Rich Wagner said the number of open jobs posted for every Dunwoody graduate has slipped recently — down to just eight.

If every graduate was hired — and by far most do get hired — there would be seven more openings for employers to fill.

That would be no surprise to readers of annual surveys of the Enterprise Minnesota industry group, which lately ranked recruiting and keeping a qualified workforce high on the list of challenges. In outstate Minnesota, where this worker scarcity is acute, at least half the time manufacturers say the problem is simply a lack of applicants.

"For anybody building anything," said Bill Blazar, senior vice president with the Minnesota Chamber of Commerce, "you've got to struggle to stay fully staffed."

This is not to suggest that Minnesota manufacturers survived the "China Shock" that hit during the George W. Bush administration without a scratch. China would have continued industrializing rapidly with or without joining the global free-trade regime, but what happened once it did was nothing short of an explosion of manufacturing capability. The shock wave upset the apple cart in region after region.

Minnesota manufacturers who suddenly faced lower-cost threats had to respond. As Bob Kill of Enterprise Minnesota described it, "there was a time we all were rushing to put things in Mexico or overseas. There still could be a reason for Mexico, but that's really slowed down."

One of the things Kill tries to explain to economic development officials is how larger Minnesota manufacturers came to understand the value of leaning on a set of local suppliers.

It might be easy to find parts from China quoted at lower prices, but a low-cost Chinese manufacturer easily can become high cost. Imagine that parts start arriving in Minnesota that are just slightly off on size. Odds are there will be faulty parts on the next delivery truck, too — and also in shipping containers on Seattle's docks, on ships in the middle of the Pacific Ocean and on loading docks back in China.

When a similar mistake gets caught at a Minnesota supplier, the correct parts could be hustled over the following morning. "There's not a tsunami [of manufacturing] back in our direction," Kill said, "but there's a better balance than there was 10 years ago."

If manufacturers do start bringing manufacturing capacity back to the United States, Wagner said, "particularly in the state of Minnesota, we are going to have to have more workers."



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GLEN STUBBE, STAR TRIBUNE FILE

Douglas Machine in Alexandria, Minn., had a thriving factory floor back in 2008 as technicians tested one of their packaging line...

One interesting aspect of the manufacturing employment story is that as a share of all jobs, factory jobs have only gone in one direction for decades, slipping again last year to less than 11 percent in the state. There's nothing particularly remarkable about that. Nationally, the share of jobs in manufacturing is now only about a quarter of what it was in the early 1950s, and has declined to fewer than one job out of 11 total nonfarm jobs.

The jobs that remain, however, are many times more productive than the factory jobs of the early 1950s. What's called "touch labor," repetitively inserting a part or tightening a screw, has increasingly gone offshore or has simply been replaced by machines.

Wagner sees machines not replacing the worker so much as augmenting the work. Instead of touch labor the workday will consist of setting up machines for a production run, monitoring equipment, maintaining equipment and the like. "The jobs are there, it's now a matter of getting people the right skill sets," Wagner said.

Educators hoping to develop a workforce for manufacturing, he said, have to first work on getting high schoolers through graduation. "Today that's a starting point," he said. "You have to get through high school, and then you have to have something else to get that skill. That's an apprenticeship program, or it's a certificate program to be a machine tool operator, or a two-year degree or four-year degree."

There is every reason to think there's going to be plenty of openings in Minnesota for young people who can learn their way around a high-tech manufacturing plant, Blazar said, as the manufacturers that have the right niche look to have real staying power. One group he described was a cluster of packaging equipment makers located in and around Alexandria, companies like Massman Automation Designs and Douglas Machine.

They are similar businesses, Blazar said, each developing flexible technology platforms and then filling each order with a machine customized for a specific application. It's the kind of strategy that should be able to fend off competitors intent only on exploiting low-cost labor.

"We're really good at that in our state," Blazar said. "And there's a big future in it."

If you happen to live near Alexandria it could be your future, too. Last week, Douglas Machine was looking to fill 20 job openings.

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