

November 14, 2007

## Raise your hand

On Monday Jim Reeb, director, manufacturing R&D for **Caterpillar**, asked some hard-hitting questions of several hundred members of the metal fabrication industry.

“So how many of you want your children to grow up to be welders?” A fraction of the audience members raised their hand. “OK, now how many of you want your children to go on to college?” A sizable number of hands went up in response.

Reeb hit the nail on the head and drove it hard down into the lumber, raising eyebrows even for a problem that for years has played like a broken record. Industry has repeatedly said shop floor workers lack not only the basic skills and creative and critical thinking that company leaders need, but sometimes they don’t even show up to work regularly.

That’s scary. Work ethic is waning, and that’s more frightening than any lack of education or skill. Someone eager but lacking knowledge can be taught; someone who doesn’t even show up isn’t of much use.

Reeb spoke Monday morning at the Leadership Summit keynote roundtable on skilled labor here at the **FABTECH Intl. & AWS Welding Show**, running Sunday through today at Chicago’s cavernous McCormick Place.

Only this week it doesn’t look quite as cavernous, with more than a thousand vendors doing business with tens of thousands of attendees. For the first three days at least, many have said it’s the busiest—and biggest—show they’ve seen in years. This makes sense after speaking with attendees. Business continues to chug along at a steady clip—not necessarily as hopping as in recent years, but still very strong.

But that still doesn’t solve the problem Reeb mentioned Monday morning. The Caterpillar executive spoke alongside local industry advocates and representatives from local and national government, including Dan Swinney, executive director, **Chicago Manufacturing Renaissance Council**, a consortium of several advocacy groups promoting Chicagoland manufacturing; David Hanson, a Chicago commissioner for the **Mayor’s Office of Workforce Development**; and Anthony Swoope, administrator, office of apprenticeship, employment and training administration for the **Labor Department**.

Drawing from the panelists’ comments, the skilled-labor problem in manufacturing could be grouped into two areas. One, current manufacturing job recruiters have been scraping the bottom of the barrel, with too many unfocused, unmotivated workers ending up on the factory floor.

Two, the skilled-labor problem won’t be just about the lack of skilled workers, but about the lack of workers—period. Said Reeb, “In the near future we will lose about 76 million baby boomers, and we only have about 46 million Gen Xers behind them. Now that’s a labor shortage. Soon we will outsource not because of cheap labor; it’s because we’ll want any labor.”

The problem seems so daunting, especially at a time of record production. Many have said the future U.S. manufacturing worker will need to produce tremendous amount of goods thanks to automation and innovative thinking. This represents a new breed of manufacturers, those having the skill of a trained journeyman together with an entrepreneur’s creativity.

And here’s the rub: Not just any Joe Schmo can do these jobs.

Fellow panelist Dan Swinney said his organization has made an attempt to help. His Chicago Manufacturing Renaissance Council spearheaded a project with the help of local government programs and industry associations to launch what many in metal fabrication have yearned for: a school that focuses on educating this new breed of manufacturer.

**Austin Polytechnical Academy**, a public school on Chicago’s North Side, launched this year with 140 freshmen. The school has more than 70 local manufacturing companies serving as partner organizations that provide summer internship programs and related support. Most important, said Swinney, “the school provides a kind of ‘pre-engineering’

program that takes students through the big-picture processes [of modern manufacturing].”

The school does cover the fundamentals behind metal fabrication and metalworking, so much so that students will depart with at least two **National Institute for Metalworking Skills (NIMS)** credentials by the time they graduate, Swinney said. But combining shop skills with creative thinking may be a key to the school’s success. The goal, he added, is for these students “to become highly skilled manufacturing workers, and even eventually owners of local manufacturing companies.”

This kind of program could serve as a model for such manufacturing programs elsewhere. Most important, those kids graduate knowing the gamut of what manufacturing has to offer as a career.

To be sure, metal fabrication continues a transition away from the repetitive and toward high-value, highly specialized work. Of course, those repetitive jobs are still there. I’ve seen many fab shops with manual grinder operators finishing metal all day, or welders laying a single kind of weld joint day in and day out. Let’s be honest, those jobs aren’t fun, and they fit the old perception of “the manufacturing job.”

But if the ideas Swinney and many others in this business champion come to fruition, Polytech’s graduates might see a different industry, one without the image of backbreaking or boring work, where everyone—from the operator to the board members—has the opportunity to question and perhaps change the ways a company does things (think continuous improvement and lean manufacturing).

And one day those graduates may sit at a tradshow roundtable, raise their hands and say, “Yes, I hope my kids get into this business too.”

Posted At : 1:19 PM. | Posted By : Tim Heston