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Training Brings Tooling Care to Forefront

By Rhoda Miel PLASTICS NEWS STAFF

Ashland, Ohio — Tooling specialists from four companies are hunched over wood workbenches at ToolingDocs on a gray April afternoon in Ashland, nudging and tweaking the readout from precision measuring tools, fine-tuning them to get a reading accurate to 0.0001 inch.

Steve Johnson, operations manager for ToolingDocs, stands at a workbench in front of them, encouraging them to check and double-check their readings, starting by cleaning the granite slabs on each table so not even a speck of lint will interfere with a proper reading.

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Steve Johnson ToolingDocs LLC

"When you're working in tenths of thousandths, everything matters," Johnson says. "If you can master this part of it, you're on the right track."

For three days, the three men and one woman from companies scattered across the U.S. will hone their skills on tooling repairs. They will learn repeatable methods of repair and maintenance, ways to use computer technology to track mold history, and other lessons they can then take back home to help their employers improve mold performance — and potentially save money over the life of the tool, both in the tool itself and in its performance on the press.



Blackwell Plastics' Michael Keown and Marcia Albert from Rexam Mold Manufacturing inspect a mold during their ToolingDocs training session.

The regular training sessions at Tooling-Docs' model tool shop are designed as tooling's equivalent to lean manufacturing production on the molding floor. For a company that has streamlined and automated and invested in Six Sigma and Toyota Production System methods, it's a natural extension, Johnson said.

"There is a new, heightened sense of urgency out there," he said. "Maintenance is the final frontier — it's the last rock to turn over and see if there's some money under there that they're missing."

Molds only make money when they're in the press, turning out parts. The more a company can keep the mold in production — and keep that mold operating at full capacity — the better the financial flow from that mold, Johnson pointed out. But historically, he said, mold maintenance has been either overlooked or misunderstood by executives in the front

office and on the manufacturing floor. Regular maintenance is put off as repair technicians rush to handle emergency repairs. When repairs are done, they are not always documented properly.

"The mold will come in and the guys in your shop will get it running again, but they'll grab that log book and write down, 'Fixed it,' "Johnson said. "They might have done \$5,000 worth of repairs, but the only thing the maintenance book says is, 'Fixed it.' "

ToolingDocs, part of Progressive Components International Corp., is out to change the old way of doing things, through repeatable training and documentation. Its Ashland base has a tool shop set up in ideal situations, with best practices in mind. Each workbench keeps tools close at hand in lean manufacturing style so workers know exactly what is where when they need it. Power, water and air hoses at each

bench give workers a chance to test each system on used tools they take apart, inspect and repair during their three-day sessions.

Specialists in finishing and welding also visit the classes to show the latest equipment.

"There's a lot about how to approach a new mold, and some new technology, and how to check everything on a mold, how to record that information," said Michael Keown, who attended the Level 2 classes April 5-7. Keown works for Blackwell Plastics Inc., a Houstonbased custom injection molder and mold maker.

Keown said he had already learned a lot of the information covered, from tool shop manager Kevin Cutshall.

"That's a reassurance for me," he said. "This is the only place I've worked in, and now I know that he's been teaching me the correct way to do things."

Cutshall, meanwhile, attended an earlier session aimed at mold shop managers. A 30-year veteran of mold making, he was able to finetune his own practices and share ideas with other managers during a March session aimed at decision makers.

"This is something that's never been available before," he said. "We both got a lot out of it, and it's going to move us to different ways to do things."

While ToolingDocs mentioned its own software system, MoldTrax, in the sessions, Cutshall noted that ToolingDocs didn't push for specific systems or tools, but instead gave him background on how Blackwell could organize its tools by using its existing equipment. Cutshall and Keown will work with Blackwell President Jeff Applegate and other executives to make sure everyone within the company will be part of that information system, so they can all share the same understanding of the molds' conditions.

"We're in the beginning stages of gathering data on our molds, but we didn't really have a way to organize it," he said. "This was a great way to begin."

Johnson said he realizes most companies cannot afford the ideal setup, but the training gives workers and managers alike a solid idea of a best-world scenario they could try to replicate back at home.

"There are so many shops that are just afterthoughts for their manufacturers," Johnson said. "They do all this work setting up their presses, then decide to just put a few benches over in that dark corner."

In addition to its mold-repair classes and managers' sessions, ToolingDocs is planning other classes focusing on runner maintenance and mold-component maintenance. Blackwell is already planning to send Keown to another class.

Back in the Level 2 class, as students split into teams to evaluate, repair and document everything about a used mold, Mike Burroughs, plant manager at ToolingDocs, mentions a company that preferred sticking to its old ways, rather than adapting to new tools and new technology.

"There's a soccer field now where that shop used to be," he says. "The economy will not support the old attitude much longer. That's clear."

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