Ideas At Work
Precision Machined Products Association

PMPA's National Technical Conference Tracks To Success By Miles Free, Director, Industry Research and Technology, mfree@pmpa.org



More than 420 people attended the 2007 PMPA National Technical Conference, held in Columbus, Ohio, in conjunction with the Precision Machining Technology Show from April 22 to 24. This conference offered attendees "tracks" of programming along the manufacturing technical, management and quality areas of interest.

The track programming made it possible for attendees to select from a range of program options, rather than having to follow a single program schedule.

After the formal NTC session, attendees were able to see the actual technology at the Precision Machining Technology Show exhibits right across the hall.

Manufacturing Track. As might be expected at any gathering of precision machinists, manufacturing topics held the attention of many attendees. On the first day, a session on Geometric Dimensioning and Tolerancing was presented. Respondents indicated that with more and more of today's jobs using GD&T callouts, more programming in this area is desired. Print discussions gave attendees the opportunity to compare their machining and

estimating layout skills against those of other attendees, as they developed machining plans to complete the challenging parts that were presented. Machine types included CNC and cam-type multi-spindle automatics, CNC multi-function machines, rotary transfer and Swiss automatics.

Other programs included Parametric Programming and a session on Machining Ferrous Materials that used chips as the starting point for understanding how the machining process should be adjusted. The ever-popular Best Practice Round Tables allowed members to self-select discussion tables by topic, with lean manufacturing being the most frequently attended round table topic.

Sessions titled "Applications of Robotics in Shops," "Tooling Packages for Swiss Machines" and "Lights-Out Manufacturing" rounded out the Manufacturing Track. A highlight for attendees was the post-conference showfloor demonstrations of Index, Tornos and Citizen-Cincom machines.

Management Track. Gaining a competitive and sustainable advantage in manufacturing today requires more than machinery and technology. Our real competitive advantage lies in the application of the knowledge and talents of our people. The Management Track at the 2007 NTC led off with a doubleheader on the Predictive Index, a statistically validated tool for identifying our innate drives.

Matching people to jobs and making sure they understand their drives helps ensure optimum performance of both the personnel and the organization. Both PI sessions attracted more than one-third of the attendees, demonstrating the importance of management topics and manufacturing success.

Another Management Track topic was titled "Blended Technologies" in which companies jointly cowork based on their particular strengths and capabilities. One of the companies that presented is using its "lessons learned" to further reduce its non-core manufacturing capability and grow into its strength. That session also attracted more than 100 attendees.

The Total Quoting Process session was presented by speakers from three different PMPA member job shops. This was seen as a great opportunity to revisit a key company process, in light of the latest developments in how organizations organize, collect and use data. Quoting is a crucial and competitive process, and the attendees left with a new understanding of how a "best-in-class quoting process" can be achieved.

The session "How to Evaluate the Payback of Implementing New Technology" featured a shop president and the president of a machine tool builder. The dialogue between these two leaders and I de as At Work
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PMPA's National Technical Conference...continued •

the presentation of their different points-of-view brought many new issues to light in the minds of the attendees. They also led to a new understanding of the role of management investment decisions in establishing a machine shop's competitive ability. The number of questions from the audience after the session was over showed the high relevance of this topic to North American manufacturing.

Quality Track. Having the right equipment and processes and having the right people are only two legs of the stool of manufacturing competitiveness. Having systems to ensure the quality of the production and the continuous improvement of the processes employed is the key third leg. The Quality Track was highlighted by a session called "World-Class Organization" presented by Steven Tamasi of Boston Centerless, a company that was awarded the Shingo Prize for excellence in manufacturing. The session was packed with those interested in benchmarking their operations to the award-winning performance of Mr. Tamasi's company.

A session titled "Applied Process Intelligence Systems" enabled attendees to compare their company's systems for managing and controlling their processes to those of Topcraft Metal Products. Topcraft has implemented an automated system rather than a manual paper-based system. A highlight of the session was on the company's adoption of an online predictive tool software system to ensure that tools are replaced before it takes the process out of control.

Another double feature that was well attended and highly regarded was the session called "Root Cause Analysis" presented by "them that's doing" at two PMPA member shops. Having a system to determine root causes is essential to companies on the path to Zero PPM through continuous improvement. Using root cause analysis tools eliminate costly trial-and-error methods by helping a company create a sustainable culture of learning about its processes rather than relying on reactionary firefighting techniques forever and ever. Members of the PMPA Quality Committee hosted the Best Practice Round Table sessions, so attendees could bring up their personal concerns or experiences for discussion and consultation with their quality Control peers.

Not All Work And No Play.

Comedian Wayne Cotter—you know him from his appearances on Jay Leno, David Letterman and his stint on Comic Strip Live—addressed the attendees with an hour of humor gently poking fun at our obsession for precision, quality and productivity. The attendees were impressed with Mr. Cotter's insights into our manufacturing culture. As a selfdescribed "equipment voyeur," Mr. Cotter adapted material from our sessions and exhibits into a hilarious routine that positively addressed the funny side of our lives in manufacturing.

Victory Lap! New at this year's conference was a popular session called The Conference Challenge, which was presented by two representatives from the Vanamatic Company. They outlined their process on how to bring back best practice ideas from the conference, present them to management and then implement them to get the company an immediate payback for its investment in attending the conference.

This sharing of Vanamatic's process for capturing the value of attending the conference was, in the words of one attendee, "the single best idea I've ever gotten from all of the conferences and seminars that I have ever attended. Trust the PMPA to come up with the way to assure that my investment for attending can pay off immediately."

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The real benefit of attending a conference is to bring the lessons learned back to the shop for implementation. The attendees in this Tuesday morning session were shown a tried-and-true practice for doing just that. Shops with a process for learning and adopting best practices will find themselves competitive in the year ahead. This session shared a great way to implement the lessons learned once the attendees arrived back at their shops.