



# Navigating the MEP map

*Matt Bolch looks at how Manufacturing Extension Partnerships are finding their way in a rocky US economy*

**H**eale Manufacturing President Elliott Erickson credits the Wisconsin Manufacturing Extension Partnership with helping the company secure a defense contract valued at \$10 million over three years.

And Dan Nash, director of operations for surveillance and reconnaissance systems at Goodrich, says that a workforce training grant and able assistance from the Massachusetts MEP have brought \$2 million in annual cost reductions.

In fiscal year 2003, the National Institute of Standards and Technology MEP program served 18,422 manufacturers, resulting in new and retained sales of \$4 billion and the retention or creation of more than 50,000 jobs.

Partially funded by the federal government, MEPs help small and medium-sized manufacturers improve their processes and technologies and address other business needs through staff and contract consultants who charge near-market

rates. For the smallest manufacturers or those in rural areas, MEPs often are the only way to receive competent assistance at a price they can afford.

In fiscal year 2004, federal belt tightening reduced support for the program from \$105.9 million in 2003 to \$38.6 million. Although the Bush administration has expressed support for manufacturers in public, the MEP program has been targeted for elimination for several years. While the cuts were painful, many agency directors say their organizations became leaner and more focused on their mission: helping manufacturers stay competitive in a global marketplace.

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The American Small Manufacturers Coalition, a trade association for MEPs, is trying to gain additional funding to aid manufacturers in the Gulf Coast get back on their feet in the wake of Hurricane Katrina.

With a documented return on investment of \$6 for every dollar invested, according to NIST research, MEP officials argue that the program should be expanded, not shrunk or eliminated. The 64 percent drop in funding served as a wake-up call for the MEP network, which receives roughly one-third of its funds from the federal government, with the rest from state and local governments and fees paid by manufacturers for MEP assistance. Faced with severe budget cuts, many MEPs were forced to cut staff and trim services to survive the downturn.

"Right now, the administration has that silver bullet aimed at our head," says Mike Coast, president of the Michigan Manufacturing Technology Center and ASMC chairman. "After 2004, we realized we needed to get our ducks in a row and do the due diligence with champions in the House and Senate." He adds that MEPs have received heightened local support after taking members of Congress to manufacturing facilities in their districts to demonstrate the good that MEPs do.

Funding for fiscal year 2005 is \$107.7 million, but the administration has requested only \$46.8

million for the 2006 budget year. Fortunately, the House and Senate both have earmarked \$106 million in funding, which is likely to pass.

"\$106 million is the overrun on one battleship," Coast says. "The conversation we should be having is how much more can we invest."

Robert Loderstedt, president of the New Jersey MEP, calls the \$106 million "a rounding error in the federal budget." Loderstedt, an ASMC board member, notes that federal agencies such as the US Department of Defense, US Department of Education, US Department of Labor and National Institutes of Health are among those who recognize the value of MEPs and are using them to spur new ideas and technologies.

The 60 MEPs spread throughout the US and Puerto Rico just want a little respect—and a chance to showcase the success stories of the mainly small manufacturers that they assist. One such manufacturer is 70-employee Jøtul North America. The Gorham, ME-based company manufactures cast iron wood and gas stoves, inserts and fireplaces, ringing up \$31 million in annual sales.

A recent lean manufacturing project, partially reimbursed with a government training grant and with the assistance of the Maine MEP, brought a 22 percent improvement in labor for yearly savings of \$66,000. The initiative also helped Jøtul reduce its manufacturing footprint from 21,000 square feet to just 7,500, which allowed the company to relocate from two buildings into one for an annual savings of \$285,000. "Without (the MEP), we would have been much more reluctant to scale up like this," says Bret Watson, Jøtul North America's president. "The private sector is much more expensive."

Nash from Goodrich says a workforce training grant that included a lean initiative and skills development through the Massachusetts MEP has energized the 220-employee division of the Fortune 500 supplier to the aerospace and defense industries. Each division within the company operates as a decentralized organization, Nash explains. "It really got us started," he says of the training. "We recognized a business need to do this before getting guidelines from corporate to do more in this area."

Starting in January 2004, 30 employees in the SRS group, which manufactures surveillance and reconnaissance systems, went through an introductory lean program. Follow-up training

included hands-on instruction in 5S, kaizen and value stream mapping.

The company developed metrics in key areas and achieved remarkable reductions, including an 80 percent reduction in setup time (the goal was 50 percent), an 80 percent reduction in open work order cycle time and a 90 percent drop in the amount of time projects are in queue for the next process. Goodrich also used 5S metrics within each lab area in the shop, focusing on safety, on-time delivery and general housekeeping, including electro-static discharge (ESD) protocols. Goodrich employees have a goal this year of 50 kaizen projects, says Nash. "Without the grant and the MEP, we wouldn't be where we are today," he says. "We'd worked with the MEP in the past. Their people are senior, and they bring a wealth of experience to the table, having seen best practices across industries."

While quality systems were a large focus of MEP efforts a decade ago, today's projects often encompass lean initiatives or a shift toward innovation and technology, says Roger Kilmer, acting director of the NIST/MEP program. Larger manufacturers also are helping their vendors strengthen the supply chain, placing greater value on an efficient flow of parts instead of the lowest possible price.

The yearly fight over funding and failure to expand the program "is a slow death," maintains Larry Alford, director for the Georgia MEP at Georgia Tech. The Georgia MEP lost 20 positions during fiscal year 2004. "Losing [funding] and getting it back could be the best thing that ever happened, but there's a risk you won't get it back," says Alford.

Nearly half of all projects in Georgia are conducted for manufacturers with 100 to 500 employees. "I just hope the next Administration, whoever it is, will help build momentum and understanding of the (MEP) program," Alford says.

The American Small Manufacturers Coalition is pushing for additional funding to help manufacturers ravaged by Hurricane Katrina, says Carrie Hines, executive director of the MEP trade association. "We want to send a tiger team into that area to help them rebuild," says Hines.

Helping manufacturers will take more than cleaning or re-equipping factories. In many cases, whole supply chains will need to be reconstructed or built from the ground up so

manufacturers have a steady flow of parts and materials as well as customers that need their products. But it's difficult to have a conversation about funding a special project such as this when those on the other side of the negotiation table continually seek to cut your funding, Hines says. "I think (the Administration) doesn't understand the MEP structure," she says, noting that manufacturers pay close to market rates for services and that MEPs should derive one-third of revenues from service fees. "Without the (MEP) infrastructure, the cost of sales to manufacturers would be too high."

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Elliott Erickson, president of Heale Manufacturing, gives the Wisconsin MEP "the vast majority of the credit" for improving operations at the electrical wire harness and cable assembly manufacturer. Erickson started with a small project in 1999 and built on that success with ambitious continuous improvement and ISO 9000 certification projects at the company, which employs 45.

"We needed to get better," says Erickson, president of the Waukesha, WI-based manufacturer. "We did a fair amount of government work, and they were changing regulations, using ISO 9001 as the new quality standard."

The company was honored in June by the US Department of Defense for maintaining 100 percent quality and on-time delivery marks over a 24-month period. And in September, Heale Manufacturing was awarded a multiyear contract to supply wire harnesses and cables to BAE Systems in Anniston, AL, which will result in 10 to 20 new hires, Erickson says. "MEPs are designed for small companies like ours, who need a good consulting company to help them without the cost," he says. "We're more productive, producing better quality products and working better as a team because of the MEP projects. They've been the prime mover to accomplish this." ■