

How small manufacturers are filling the R&D gap

By Meribah Knight  March 16, 2013

While a recent study showed that private investment in research and development plummeted in the Chicago area over the past decade, small metal manufacturers say they're allocating more resources to research than ever before.

But their efforts are harder to measure than those of large companies like the old Motorola Inc., which cut a lot of jobs from its R&D lab, or firms focused on stacking up patents. Research at small fabricated metal and machinery firms usually focuses on finding more efficient ways to make components. Local executives say their large automotive, utility and telecommunications customers increasingly outsource component assembly and depend on subcontractors to do such research.

"Now they are relying on us to develop what the product and process will be for them," says Steve Kase, president and CEO of Aurora-based automotive and telecommunications parts maker Ask Products Inc. and chairman of the Tooling and Manufacturing Association in Park Ridge. "They are asking us to become the experts because they cannot afford to have an expert in every component technology." For instance, Ask Products recently was tapped by a large utility to make a connector capable of splicing two types of cable.

At Fusion OEM, a low-volume contract manufacturer in Burr Ridge, President Craig Zoberis says the decline of in-house R&D at bigger companies allowed his business to flourish. "The first thing they cut was research and development, and then they outsourced it," he says. "That was good. It opened up a market opportunity." The 11-year-old company, which has 48 employees and brought in \$8 million in revenue last year, has seen a 57 percent jump since 2009 in the revenue coming from original equipment manufacturers seeking Fusion's research services.

Three months ago, Chicago-based Transco Products Inc., a component supplier for the nuclear industry, hired a manager to develop a comprehensive plan for research and development at the 100-employee company. "We are looking at growing that investment because we see it as critical to our company's growth," President and CEO Ed Wolbert says.

The research investment study, performed by the Chicago Metropolitan Agency for Planning, used patent applications as a key measurement. But smaller firms say they tend to introduce new research in the marketplace and innovate on the factory floor rather than in the lab. At Transco, Mr. Wolbert says, patents almost always take a back seat to competing in the marketplace. "For intellectual property reasons, we want to have patents, but that is not our final deliverable. Our final deliverable is a product to our customer."

Rather than adding up patents, small and mid-sized firms point to the research-and-development tax credit as a more accurate measure of their efforts. "I think it's kind of shocking to say that R&D has fallen so much," says Walt Snodell, chairman of Aurora-based Peerless Industries Inc., a manufacturer of audiovisual mounting solutions. "The real question is how do you measure it?" At Peerless, the company's investment in R&D went up 20 percent in 2012, according to the company's tax filings. For Transco, R&D is about 6 percent of its nonproduction budget, according to the filings. The company aims to increase that amount to 12 percent over the next five years, Mr. Wolbert says.

CMAP researchers acknowledge that their tools are imperfect. "There is informal R&D that is really hard to measure, and maybe the official statistics don't get to it as well," says Garrett Ballard-Rosa, an assistant policy analyst at CMAP.

Some companies are creating formal R&D departments. Three years ago, Rockford-based Eclipse Inc., a manufacturer of industrial burners with 750 employees worldwide, realized it needed to grow its new-product sales by doing more with new technology. The company laid out a plan to hire scientists and engineers and invest in new equipment like a three-dimensional printer for rapid prototyping. Eclipse has approximately 20 people and is recruiting Ph.D. candidates in mechanical and chemical engineering. Kim Droessler, director of product development, says he plans to get the department up to 35 people by the end of next year.

"We were struggling to make R&D a priority many years ago, but now it is one of our top three initiatives," he says.