

► BY ALAN RICHTER, EDITOR



Bob Winkel (left), manufacturing manager, and David N. Hendricks, vice president, in front of Walker Tool & Die's Makino A99E horizontal machining center.

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INTO THE Light

Tool and die shop continues to expand and add advanced technology to prepare for the road ahead.

It seems fitting that a tool and die shop located in a city known for its close ties to the automotive industry began operations in the back of a gas station. That was the case for Walker Tool & Die Inc., Grand Rapids, Mich.

The company dates back to 1959, when Gordon Hendricks, father of David N. Hendricks, Walker's vice president, became one of the partners at Central Tool & Die, Walker's predecessor. "They had three machines, one door and no windows," the younger Hendricks recalled. "It was the black hole of Calcutta."

Since then, the shop has moved from being a "black hole" to a bright, well-lit, highly productive manufacturer of fixtures and small-to-large progressive, transfer and line dies. Not only does it continuously update its metalworking equipment, Walker keeps its operators current through rigorous training and education. By becoming a "preferred



Walker Tool & Die

Walker Tool & Die is still located at the site of its original facility on Walker Avenue.

supplier” of reliable and long-lasting dies, among other products, Walker has managed to not only survive but thrive while others have gone out of business.

Continuous Expansion

Within a couple years of its founding, the shop purchased its own building and moved to its current location on Walker Avenue. In 1964, the shop incorporated and changed its name to Walker Tool & Die. “Not many years after that, my father bought the other [remaining] partner out and became the sole owner,” Hendricks said, noting that his father remains company president while living in Florida, conversing by phone and visiting often.

Although the original concrete-block building was about the size of a small garage, Walker has expanded at least 10 times and now occupies an approximate 97,000-sq.-ft. facility, including offices. Throughout the years, Walker has continued to add and replace equipment as it expanded and today operates an array of machines, including wire EDMs, more than a dozen machining centers, as well as small vertical and horizontal mills, grinders, saws and miscellaneous equipment.

In addition to this year’s 6,880-sq.-

ft. expansion, Walker recently purchased a neighboring property and is leasing the building to a machine shop that was the previous owner’s tenants. After the lease expires in a little over a year, Walker will then decide how it wants to use that property. “If we have a use for that building as a stand-alone, that’s what we’ll do,” Hendricks said. “If we don’t, we’ll take delivery, bulldoze it and add onto our building. There’s no way, because of elevation, that we can attach the two buildings.”

Out with the Old (Technology)

Hendricks understands that to remain competitive, functional but older equipment needs to be replaced with more productive machinery. This means eliminating manual equipment as it wears out. It also means retrofitting the shop’s oldest CNC equipment and eventually replacing it with more advanced technology. “We have to do things faster and cheaper and better,” he said, “and the only way to do that is to keep up with technology.”

That attitude can require being an early adopter. “We were probably one of the first tool shops in the area to have a laser machine,” Hendricks said. “And we were probably the first shop in the area with a wire EDM, which is old hat now.” However, because laser cutting

isn’t one of the company’s core competencies, Walker has held onto its 12-year-old Laser-Path C/1500-3D 6-axis laser machine even though that technology has advanced. “It’s obsolete, but it does what we want it to,” Hendricks said.

On the other hand, Walker requires the latest in CNC machining to produce parts faster. As a result, the shop recently purchased an Italian FPT Area 5-axis boring and milling machine that it expects to have up and running in February. In 2006, Walker spent more

than \$3.6 million for machine tools.

The shop generally buys new equipment, especially after its experience trying to buy a used Giddings & Lewis boring mill. Hendricks explained that Walker didn’t want to wait 10 months to receive a new one and found a used mill in Oslo, Norway. The salesman supposedly provided a footprint of the used machine, which would have been appropriate for Walker’s facility. However, after traveling to inspect the machine, the company realized that the mill had been customized, which added about 10’ to its dimensions—too big for the designated space.

The exception to Walker’s buy-new policy is mechanical presses, which are rebuilt and used to try out dies. The shop’s tonnage range for its five largest presses is 450 to 1,500. Most shops don’t have this kind of capacity for try out because of the capital investment required, Hendricks noted, adding that one press was retrofitted with a coil feeder as a requirement by a customer that wanted its production conditions simulated as close as possible during die tryout at Walker.

To make sure a die functions according to a customer’s requirements, Walker uses customer-provided tryout stock. This helps the lead die maker fine-tune a die and also enables customers to take delivery of tryout parts when those customers experience a parts shortage. “We have many seasoned die makers, but we also have a few amazingly talented young guys who have gone through our apprenticeship program,” Hendricks said. “It isn’t just a trade of a past generation.”

Most Valuable Assets

Similar to any successful U.S. manufacturer, Walker hires and holds workers with the skills to continue advancing productivity. The company has 115 employees and runs two shifts. “Our sales are about the same as they were 3 or 4 years ago,” Hendricks said, “but we have 10 fewer employees and are probably producing 20 percent more work,” which has enabled Walker to increase its profit margin.



Walker Tool & Die

Walker produces a variety of small-to-large progressive, transfer and line dies.

Quest for diversification

With car and truck sales in a bit of a slump, manufacturers primarily serving the automotive industry are looking to diversify their customer bases. Walker Tool & Die Inc., which has about 98 percent of its customers in automotive, is no exception. "We've done a couple nice jobs lately for Whirlpool," said David N. Hendricks, company vice president, "but, really, most of the die work is used in automotive."

That said, the Big Three's sluggish auto sales might actually generate an increase in tool and die work because they'll need to introduce new models to attract consumer interest and, ideally, move more metal. "For them to introduce new models for 2009, 2010,

they need to release tooling now," Hendricks said.

Of course, Walker faces stiff competition from low-labor-cost countries for the work, but often does less-lucrative reworking of defective dies produced overseas. Even though the total initial cost might still be less for a foreign-made die that's reworked domestically, Hendricks believes automakers pay more for it eventually. "We can't rebuild a foreign tool and guarantee it's going to make a million parts over 10 or 15 years. The only thing we can do is try and get it to make an acceptable part," he said. "Automakers think they're saving a dollar, but in the long run, I don't think they are."

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Not only are its workers productive, but they tend to stay with Walker. According to Hendricks, more than half have been with the company for over a decade and some for 25 to 30 years or more. One such employee is Bob Winkel, manufacturing manager, who's been with the company for 45 years. He noted that when he started, all the work was performed manually. "There isn't a lot of manual machining done anymore," Winkel added.

Winkel indicated that Walker is always looking for more-effective metal-cutting methods as well as the cutting tools to perform them. For example, Walker has been performing more and more hard milling since purchasing four Makino machining centers within the last 3 years: two vertical machining centers (V56 and V77) and two horizontal machining centers (A88E and A99E). "Hard milling enables us to reduce about 75 percent of our bench time," Winkel said.

Performing the hard milling requires tools made of a carbide grade that's able to handle cutting steel hardened up to 60 HRC. That requires finding and

testing cutters based on recommendations from distributors and Walker's own interests. According to Hendricks, distributors are more than willing to work with the shop on tool trials because of the shop's excellent reputation. "We've always paid our bills on time, so our suppliers are always anxious to work with us and give us help," he said. "They know we pay 'Johnny on the spot.'"

As the company expands, it's looking to hire a couple of workers, but that can be difficult. "The mediocre workers float around quite a bit," Hendricks noted. "We can put an ad in the paper and get a lot of applicants, but to find a really good, dedicated worker who's interested in staying in one place for a while is not that easy."

To train new machin-

ists, Walker runs an apprenticeship program with Grand Rapids Community College and generally has one or more workers in the program at any given time. "We prefer to hire them and run them through the 4-year program ourselves rather than hiring a graduate," Hendricks said. "That way, they have on-the-job training here while they're attending school. During that time, we can see how they're progressing."

Fortunately, Walker Tool & Die has been able to find the workers it needs to produce high-quality tooling and fixtures and long-lasting dies, such as one that, until it was retired last summer, was putting out nearly 600,000 parts per year since the early 1990s. "Right down from design to assembly, we have top-notch people and that's what it takes," Hendricks said. "Our company really is our employees." Δ

For more information about Walker Tool & Die Inc., call (616) 453-5471 or visit www.walkertool.com.



One of the larger mechanical presses that Walker Tool & Die uses to try out dies.

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