Tooling craft rapidly vanishes; 34,000 Michigan jobs lost since 2000, many moving to China

MADISON HEIGHTS - Interstate Tool & Die looks like so many of the low-slung cinder block toolmaking shops clustered around 13 Mile and Stephenson Highway in this aging suburb.

The 77-year-old business is filled with nearly obsolete machinery operated by toolmakers, average age 55, who started their craft right after high school and, until recently, earned \$80,000 a year, working six days a week. Once vital cogs in the nation's manufacturing sector, small tool and die shops such as Interstate are becoming symbols of a rapidly vanishing era. Interstate is being killed by fierce, cheaper foreign competition; a shortage of young, skilled labor; a changing U.S. economy; and escalating costs.

Many in the industry fear it is the death of a 20th century American tradition in which veteran craftsmen create the precise mechanical tools used to mass-produce everything from computer chips to car and truck parts. U.S. toolmakers were once so coveted they were exempt from the draft during War World II. Now they are losing out to foreign workers who often earn \$2 an hour.

"Do you want to buy a former tool and die shop on Stephenson? Just pick your color," Christopher Kirsch said.

In August, the business run by Kirsch, 35, and his father, Karl Kirsch, 60, and founded by Karl's grandfather will permanently shut. Late last month, Interstate sent a three-page letter to its remaining customers explaining its demise. It had tinges of bitterness.

"We have, due to a lack of responsibility, respect, integrity and loyalty, been reduced to a nameless entity with no past record or performance standing," the letter said. "This situation would be much easier to accept had we intentionally or willingly lost our desire or capability."

The company joins the dozen or so tool and die shops in Madison Heights that have gone out of business in the past two years.

About 4,000 -one-third -of the country's tool and die shops have perished since 2000, wiping away 100,000 jobs or more, according to the National Tooling and Machinist Association, an industry trade group. In Michigan, more than 16,000 tool and die jobs have disappeared since 1997, according to the state labor department. Fewer than 10,000 tool and die shops remain in the United States, the national toolmakers group estimates. National data about the number of toolmakers' positions that remain is expected to be released this month by the U.S. Department of Labor.

"This kind of downturn and this type of job loss has never occurred," said Matthew Coffey, president of the national machinists group. "The automotive sector is particularly hard hit."

Tool and die shops such as Interstate often need work from the automotive industry to survive, Coffey said.

Toolmakers have traveled to Lansing and Washington in the past year, railing about the exodus of jobs overseas and calling for new laws to level the playing field. A few bills have been introduced, but there's little optimism that the tool and die industry will rebound.

Working at Industrial Tool & Die is the only job Randy Ferguson, 45, has ever had. He started an apprenticeship there right after graduating from high school in Clawson.

Under the tutelage of a veteran toolmaker, Ferguson spent years learning how to master the mills and jig borers that can slice and bend a piece of metal within the width of a human hair. The heavy machinery, with its imposing height and smooth steel parts, like huge cylinders and spindly levers, look like something out of painter Diego Rivera's murals of the Ford Rouge plant, circa 1930. Ferguson and others use the machinery to hammer out a prototype tool or experimental part that a manufacturer wants. Manufacturers give Interstate a blueprint of a tool needed to mass produce a part such as a torque converter, a piston, or transmission valve gauge ? all of which are components Ferguson and his Interstate peers created. "I love the way it just gets in your head," Ferguson said. "You got this idea and you just have to go at it. You're tweaking it and slicing it and refining it. You can almost drive your head against the wall when it's not quite there yet. But when the job is done. It feels good.

"I can look at a car or truck and I know how I helped that vehicle get built. You feel like you accomplished something."

Most tool and dies shops stopped offering apprenticeships more than a decade ago, Coffey said, because they cost more than \$10,000. What Ferguson can't picture is how he will be out of a job in a few weeks and can't find another tool and die shop that's hiring.

"It's not like I can't do the job anymore. No one has ever said we don't have the skill anymore," Ferguson said.

"The rules just changed on us," said Karl Kirsh, as he stood amid the vacant workstations on Interstate's production floor. The company is down to five workers from 30 employees just four years ago. "It was like letting go of family," he said of the layoffs. The rules began to change back in the mid-1990s with the global embrace of free trade agreements, such as the General Agreement on Trades and Tariffs. Few in the industry noticed because they were riding the go-go economy. The work at Interstate and many other tool and die shops almost doubled. National sales by toolmakers rose to \$27 billion by the late 1990s, according to the U.S. Commerce Department.

But by 2000, the U.S. economy no longer was humming. Companies drastically cut new equipment purchases, thus eliminating the need to produce new tools. Orders for toolmakers have dropped by 70 percent in five years.

Interstate began to notice its contacts at auto companies, often veteran engineers and purchasers, took early retirement packages and were being replaced by much younger employees with computer training.

Art Schaupeter, who runs Ronart Industry, a Detroit tool and die shop founded by his father, said health insurance costs have increased an average of about 15 percent annually for six years. Ronart is down to 52 workers compared to 180 three years ago. "There's always been downturns, and every 10 years or so, the number of Michigan shops we compete with gets smaller," Schaupeter said. "But this length of downturn, that is what's different." Schaupeter, whose firm designs molds to make parts for car doors and

door components, said he feels lucky that he took the financial risk years ago and invested millions of dollars in computer-based mills and other equipment.

"That's helped us survive and go after some of the foreign automakers," such as Toyota, Honda and Nissan, he said. Interstate was not as fortunate.

"No one knows our reputation anymore," Christopher Kirsch said.
"You deal with people who have never heard of us, and all they really trust is computer design. They walk on out the (production) floor and see our mills and jig borers and they say, 'Where's the computers?'"

Then came the rise of foreign manufacturers. For Interstate, it's Asian and European competition that has vastly improved its quality in the past few years. And due to free trade agreements, the manufacturers can directly compete with shops like Interstate. Foreign firms often severely undercut the price of American companies such as Interstate. And automakers increasingly demand lower prices that only offshore tool and die shops can meet. "The last bid, we were in competition with the Chinese, we couldn't even cover our cost, let alone make a profit," Christopher Kirsch said.

In the past few years, many of Interstate's decades-old clients have stopped requesting bids from the tool and die maker. The national tool association says it looks like some sectors of the toolmaking industry are on an upswing, such as companies dealing with the construction and computer industry. But not for those dealing with the auto industry.

After finishing one last order to make a torque converter for DaimlerChrysler, Interstate will put its building up for sale. Its machinery will be sold for scrap metal.