The foundry industry is foundering

By Rodney A. Brooks

During more than 60 years in the business of selling supplies and equipment to Philadelphia foundries, Herman Mandell has never seen the industry in worse shape.

Mandell, president of Pennsylvania Foundry Supply & Sand Co. in Philadelphia, has watched his customers disappear slowly, one by one, over the years. Now a combination of economic problems is speeding the process, threatening to deliver a final death blow to the foundry industry here.

"I would say it is worse than I can remember," said Mandell. "It has to be comparable to the early '30s."

Back in the mid-1940s, according to local industry observers, there were more than 40 foundries in Philadelphia County alone. In fact, the International Molders and Allied Workers Union, the union that represents a large number of foundry employees, was founded in the city. Membership in Local 1 reached 1,000 to 1,200 at its peak.

Today, according to union officials, Local 1's membership has dwindled to 237, and it has contracts with only nine foundries, including three outside of Philadelphia. Many of those that remain are operating at only a fraction of their capacity.

Distressing as the numbers are, the problems facing the industry are not limited to Philadelphia. American foundries everywhere are in serious trouble and going out of business in record numbers.

Twenty-five percent — more than 1,500 — have gone out of business since 1947, according to a government report. Those still operating in the severely depressed industry can only hope they will survive.

"I started work when I was 13, and I said the world would collapse before it got like this," said the president of one local foundry who asked that he not be identified. He said he was continuing to operate with a skeleton crew, "just trying to survive."

"The picture is not nice," he said. "We are losing our work. Nobody has been doing anything about it."

The majority of the nation's approximately 4,000 foundries are small operations with fewer than 50 employees. They produce castings by pouring molten metal such as iron or aluminum into molds to make finished shapes for everything from manhole covers and appliances to auto parts and heavy machinery.

The $24 billion foundry business is the nation's fifth-largest manufacturing industry. But foundries have been closing at a frighteningly steady rate.

Many of the previous closings were blamed on Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) regulations, industry spokesmen said.

"That federal regulations has probably done as much as to close foundries as anything," said Jack Kelly, president of John P. Kelly Inc., a Philadelphia foundry. "Some of the standards were impossible to achieve. That equipment doesn't produce castings any faster or any better."

But the already immense problems have been aggravated by the added pressures of the recession. A number of new economic pressures threaten the existence of the struggling industry:

- A large portion of the cast metal went to the auto industry, which is not only manufacturing fewer cars but is making lighter and smaller autos requiring lighter cast metal.
- High interest rates caused companies to severely reduce capital improvement expenditures, resulting in additional operating problems for foundries.
- Construction and homebuilding activity is down drastically, affecting the foundries that produce plumbing and other materials used in construction.
- Farmers are suffering in the current economic slump, and purchases of farm machinery, which uses many foundry products, are depressed.
- And imports of cast metals from nations such as Japan, Canada, Taiwan, China and Korea are taking an increasing share of the U.S. market.

Distressing as the numbers are, the Pennsylvania foundry industry is foundering. The victims included Perseverence Iron Foundry Inc. in Philadelphia, which shut its gates after more than 100 years in the business; Pentax in New Castle; Central Foundry in Quakertown; the Mesta Machine Co. foundry in Pittsburgh, where 300 employees were thrown out of work, and Casting Services Inc. in Erie.

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Closing down fast

"They are closing down awfully fast," said James E. Wolfe, research and educational director at the International Molders and Allied Workers Union in Cincinnati, Ohio.

In the 18-month period that ended in March, 224 foundries closed their doors nationwide, Wolfe said. "They have added to that in the last few months," he said.

"For the last 15 years they have been going out of business at a rate of 100 per year," he said. "The recession pushed that up."

"We lost three in the last week," he said. "They all went out of business within a few days. The week before we lost three. They can't afford to stay open. Twenty-five percent of our members are out of work, and most of our workers work in foundries."

Pennsylvania, with approximately 350 foundries, is the largest foundry state outside of the Midwest. The state has not been as hard hit by the most recent rash of closings, because Pennsylvania foundries are more diversified in both their products and markets and, thus, not as heavily dependent on the auto industry as those in the Midwest. But foundries here are now beginning to feel the heat from the continuing economic slump.

Bruce Eckert, executive vice president of the Pennsylvania Foundrymen's Association in Plymouth Meeting, said that during the last six months a half dozen have closed across the state.

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Another one bites the dust

On June 30 another foundry will be added to the growing list — Rockwell International Corp. will shut its foundry in Reading permanently. The closing of the Rockwell foundry, which produced castings for the auto industry, including brake drums and wheel axles, will affect 328 hourly and salaried workers.

In making the announcement in April, Rockwell said it reached the decision because of excessive capacity and dwindling demand. "We knew that they were having problems with the foundry, so it wasn't a great shock," said Richard Nelson, president of the United Steelworkers of American Local 6996 in Reading, which represents the Rockwell employees. "We had made concessions, but it just didn't work out. With the auto industry down, it's just tough."

The Reading closing will be the second this year by Rockwell. An automotive foundry operated by the company in Chattanooga, Tenn., was shut down in February. Most of the foundries that closed their doors in the past had been small. But in the last two years a number of giant automotive foundries have joined the list, and that is causing increasing concern. Foundries operated by Chrysler Corp., Ford Motor Co. and General Electric closed in 1980. "In our case we just didn't need the capacity," said a spokesman for Chrysler in Detroit. "The switch to smaller cars with smaller engines is a primary reason. The auto industry just doesn't need as much metal as it used to."

At the rate foundries are closing, it comes as no surprise that one-quarter of the nation's foundry workers are out of work.

A GAO warning

The crisis in the industry led to a special report by the General Accounting Office (GAO) late last year. The report said that the reduction in foundry capacity might pose a threat to the nation's defense needs, especially in light of the defense buildup planned by the Reagan administration.

The concern was that the nation no longer had adequate capacity to produce armaments because of the rash of closings. "Auto foundry closures reduced domestic casting capacity by over one million tons in just one year, 1980," said GAO director J. Dexter Peach in a letter to Defense Secretary Caspar Weinberger and Commerce Secretary Malcolm Baldridge. "This one-year tonnage loss equates to about 5 percent of foundry shipping capacity of all metals."

Since the report was issued, the condition of the industry has gotten worse, and the outlook is not bright. While high wages are blamed for many of the problems in America's basic industries, especially autos and steel, the same cannot be said of the foundries. At the Reading facility, for example, the base salary is approximately $7 per hour, the union spokesman said. That compares to more than $20 an hour for many steelworkers.

"Our hands are pretty well tied as for what we can do," said Andrew Swafford, secretary-treasurer of the national molders union. Swafford said membership in his union has shrunk from 68,000 in the mid-1970s to 51,000 today. And 15,000 present members are on indefinite layoff.

The United Steelworkers of America, which also represents a large number of foundry employees, is in the same situation. "Foundry employment is down with the rest of the steel and aluminum industries," a spokesman said. "It's down 25 percent."

Cars with more plastic

The industry spokesmen agree that the revolutionary changes in the auto industry are one of most pressing problems for foundry operators. When American automakers switched to smaller and lighter autos, they used more plastic and light aluminum and less cast metal. The foundries found themselves with excess capacity.

"Autos used to contain an average of 1,152 pounds of cast metal," said William Pizer, vice president of Pennsylvania Foundry Supply & Sand Co. "A compact car like the Chevette or Horizon would have half that amount or less."

Jack Schaum of the American Foundrymen's Association said that before 1975 about 25 percent of the castings produced at foundries went to the auto industry. That has since been cut in half.

The import problem is another growing concern in the industry. Though it does not get as much attention as the effect of imports of other basic industries.

Walter Kiplinger, a vice president of the Cast Metal Federation, who works in the organization's Washington office, said it is difficult to measure imports of castings because they take so many different forms. Some come in as finished products, and others as components for a wide variety of uses.

Imports of those iron castings that could be identified have increased from $141 million in 1979 to $244 million in 1981. "Many foreign foundries exist in an atmosphere void of EPA, OSHA and other federal mandating agencies so costly to domestic foundries," he said.

Swafford said the molders union has fought unsuccessfully for federal legislation limiting castings imports. "We have had shops closing as a direct result of castings imported from Taiwan and Japan," he said.

Most industry observers agree that an upturn in the economy is necessary before the industry can come out of its slump. "It would help," said Pizer, "but we don't expect it to ever come back to what it once was."

"We hope we will see a break, but we don't see any big upturn in demand for castings," said Wolfe.

And, added Eckert: "There are going to be a lot more foundries closing. That's the general perception. For those that are around in the next five to 10 years, most industry observers agree they will do well."