

After 150 Years, Atlantic Still Looks Ahead

By Thomas Gaudio - 4/10/2006

Phillipsburg

There was no such thing as a telephone and nothing was made of plastic when the company now called Atlantic States Cast Iron Pipe built its foundry in Phillipsburg. The venerable company celebrated its 150th anniversary last month, an unlikely milestone in today's culture of corporate Darwinism.

Throughout 15 decades, the foundry has specialized in one product: ductile—or moldable—iron pipes, primarily used to carry drinking water from lakes to streets. Although it has known several owners, Atlantic's durability seems to lie both in its ability to change with the times and in its focus on a product that requires grit and skill to make.

The foundry's 200 workers turn out about 2,500 units a day. For raw material, Atlantic trucks in some 130,000 tons of scrap metal a year that is melted in a furnace that burns at around 3,000 degrees Fahrenheit. The metal pipes—about 18 inches long and ranging from 6 inches to 24 inches in diameter—weigh up to 550 pounds each and sell for around \$750 per ton.

About 15% of the company's pipes are used to make up sewer and drainage systems, says Mitchell Kidd, vice president. Atlantic States also makes pipe fittings.

In 1856, the product line was broader. Originally named The Warren Foundry and Machine Co., it pumped out everything from stoves to ammunition. Adaptability came in handy as the company adjusted to manufacturing innovations and changed hands several times over 150 years.

"We've come a long way from cannonballs to ductile pipes," says Kidd. "You have to be flexible to stick around this long."

In fact the company underwent a major makeover in its first year. Two foundry workers from England—John Firth and John Ingham—joined Warren Foundry in 1857 and brought to Phillipsburg their knowledge of vertical molding, a technique that allowed the foundry to make pipes of up to 30 inches in diameter. At that point Warren began to focus exclusively on pipe making, according to Atlantic States' Website.

The company's methods for producing pipes didn't change much until the 1950s. During that decade, Atlantic States replaced its sand molds with ones made of metal. Sand molds must be rebuilt after every pipe is made, and they produce pipes at a much slower rate than their metallic upgrades, says Kidd.

Perhaps the biggest historical shift in this type of manufacturing came in the mid-1940s, and it's one that passed Warren by, says Philip Scranton, a professor of industrial and technology history at Rutgers University.

He says an editor from a publication called Metal Progress correctly predicted in 1946 that all future foundries would have to be built close to shorelines in order to receive iron ore brought in on ships because U.S. railroads were deteriorating.

"Americans for the most part failed to follow that argument," says Scranton. "Brazil, Japan and South Korea did [heed the editor's words]."

He says the inland location of the country's foundries, along with their failure to adopt innovations in the steel-making process, doomed many U.S. metal plants and companies. "That's why it's exceptional for a foundry [like Atlantic States] to be around for 150 years," Scranton says.

Still, the factory changed hands twice before being bought by Atlantic States in 1975. It is now a division of McWane, a pipe company based in Birmingham, Ala.

Scranton says the foundry's longevity can be pinned in large part on its products. "There's probably only a couple of major producers in each region. It's the perfect definition of a niche market," he says, adding that the pipes take "a tremendous amount of skill to make" and are "enormously heavy," making them very expensive to transport.

He says that he "wouldn't be surprised if they've been supplying the same municipalities for decades. It's a classic business model that allows for a long life. There's not a lot of incentive for a new company to try to break into that market."

But there are competitors: 45-year-old Griffin Pipe is based in Downers Grove, Ill., and has a plant in Burlington County's Florence; and 107-year-old U.S. Pipe in Birmingham, Ala., that also has foundry here in the city of Burlington. Makers of ductile iron pipe also compete with producers of concrete ducts to carry potable water.

In addition, Atlantic States is contending with a suit filed in 2003 by the U.S. Department of Justice. The company and five of its executives were charged with polluting the air and the Delaware River, and of covering up the death of one employee and the maiming of several others. Kidd acknowledges the trial is ongoing but refused to comment further, citing a federal gag order.

Even with that lawsuit and the weight of history, Atlantic States is looking forward: While the state Department of Environmental Protection has promulgated stricter air pollution regulations that are set for 2010, the foundry this year installed a \$9.5 million system that brings mercury emissions below the level required by the new rules, says Kidd.