

## Marvel City Mini Mill

A turnkey operation, U.S. Pipe's new Mini Mill will allow the company to reduce costs while Improve quality.

<b>Project:</b>	U.S. Pipe Mini Mill
<b>Location:</b>	Bessemer, AL
<b>General Contractor:</b>	EC&S
<b>Engineer:</b>	EC&S
<b>Major Subcontractors:</b>	Goodhart and Sons (heavy equipment Assembly), Oak Mountain (Concrete Project Value)
<b>Construction Project Value:</b>	\$32 million

The U.S. Pipe Mini Mill in Bessemer, also known as the Marvel City Mini Mill, is the first ductile iron pipe mill to be built in the last 60 years, according to EC&S, Inc., which upgrades and builds turnkey industrial facilities around the world. "It was a challenging and rewarding project," says Greg Bray CEO for Birmingham-based EC&S, Inc.

The 80,000-square-foot automated ductile iron pipe manufacturing operation is more efficient and cost-effective than older mills and requires far fewer workers. U.S. Pipe and Foundry, based in Birmingham, needed only to employ a total of 100 workers over three shifts for the plant.

While the plant uses fewer workers than for older facilities, the workers are highly skilled and cross trained to perform multiple jobs at the plant.

The mini mill has allowed U.S. Pipe to improve quality while reducing costs, critical in the economic turndown especially considering global competition in the ductile iron pipe industry.

Continuous improvement of automated flow-through processing at the plant is made possible through the application of sophisticated software integration included FactoryTalk from Rockwell Automation, Microsoft SQL., and smart integration from Revere Control Systems, Inc. and Stone Technologies, Inc.

Many older plants have been upgraded to use more automated equipment over the years, but the mini mill is a standout because EC&S was able to coordinate design, construction and installation.

"We worked with our subcontractors to be able to provide U.S. Pipe with a turnkey operation," Bray says.

**Because 95 percent of EC&S industrial construction is done elsewhere, as far away as China, company worker were pleased to be able to work on such a large project in the Birmingham area, Bray says.**

**“It makes us proud to see our work in our own backyard,” he says. Much of the heavy machinery used to manufacture the new Bessemer plant’s pipe had to be custom built. Some automated machinery from shuttered operations in older plants was incorporated into the new plant.**

**U.S. Pipe, a wholly owned subsidiary of Mueller Water Products, Inc. is the largest domestic producer of ductile iron pipe from 4-inches through 64-inches in diameter.**

**The company first incorporated in 1899 as United States Cast Iron Pipe and Foundry Co., consolidating 12 companies in eight states. At that time it encompassed 75 percent of the production capacity in the United States. Now the company only runs a few mills.**

**The eventual rebound in residential construction will allow U.S. Pipe to make greater use of the new Mini mill’s production capabilities.**

**“We’re hoping to see more mini mills being built in the future,” Bray says.**

*Kathy Hagood is a freelance, writer for Business Alabama. She lives in Homewood.*