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# IN BUSINESS

## They're stronger under pressure

*MBI's prestress division sees a surge in business from state*

By **ALEX PAUL**  
For the Gazette-Times

**HARRISBURG** — Byron Surface dips a paintbrush into a small bucket and pulls out a gooey blob of dark gray epoxy. He dabs it on the end of the massive concrete girder until it covers every divot and pit. The Morse Bros. Inc. employee has done this type of work for nearly 30 years. His fa-

ther, Bob, did it for 33 years years before he retired.

When every inch of the ragged endcap is painted, Surface applies a special concrete mix until the uneven concrete is nearly as smooth as glass. When the girder is put into place, no one will ever see its endcaps, but their appearance matters to Surface and the 100 other employees at MBI's prestressed concrete

division.

"I love doing this," Surface says, explaining why he pays so much attention to detail. "It's nice to work someplace that allows you to take pride in what you do."

Loren Later has managed the MBI prestress division for 2½ years. Born into a construction family in Anchorage, Alaska, Later is a Brigham Young University graduate who also earned an MBA at Angelo State University in Texas.

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MBI prestress division manager Loren Later stands near a set of bridge girders, 90 inches high and 140 feet long.

## ● Prestress: Morse Bros. division makes bridge trusses

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He's spent a quarter-century in the construction industry, including projects in New Mexico and Texas.

Employee numbers are down at the plant this time of year, Later said. But when summer arrives and the state's bridge improvement program ramps back up, Later expects to add several new employees. At one point, the prestress division had grown from 80 to some 230 people. The 10-year bridge program involves repair or reconstruction of 300 Oregon highway bridges at a cost of about \$1.4 billion.

In July 2005, the Harrisburg plant made history when it delivered seven single-span concrete beams, each 184 feet long and weighing 179,000 pounds. The beams were installed at the Chemult Bridge on U.S. 97.

In addition to bridge girders, the plant manufactures prestressed panels for projects such as the expansions of Autzen and Reser stadiums, as well as warehouses and office buildings throughout the Pacific Northwest.

Although there's no question that concrete is the mainstay of any project on the 38-acre site, steel and wood are also important ingredients.

Large multistrand steel cables are vital to the prestressing process, which increases the strength of the concrete building components. Some employees

spend the workday tying steel reinforcing bars inside huge forms. A team of skilled woodworkers creates the one-of-a-kind wooden forms to meet specific project needs. Many employees have been with the company more than 20 years.

The plant utilizes 18 large casting beds where prestressed panels are created. Removable forms are used to cast the huge girders, which range in price from \$4,000 to as much as \$30,000.

Prestressing is created by running multistrand wire cable the length of the beam. Clamps are attached to the ends of the 42 strands, and 33,000 pounds of pressure is applied to each one, about 1.4 million pounds in all, according to foreman Tom Walker. Concrete engulfs the rebar and steel cables.

The girders and panels cure overnight. By the next morning, beds and forms are removed so another 18 project pieces can be cast.

"We use concrete that's five times stronger than the concrete used in the foundation of homes," Later said. "We use the highest-quality rock and sand. Then we add special cement and chemicals that give us the super strength."

Later said he doesn't have problems finding good employees because Morse Bros. has a solid reputation as a good place to work. Wages run from \$12 to \$20 per hour, and the fringe benefit package is excellent, he said. Most



ALEX PAUL/For the Gazette-Times

Ray McIntire scarifies a prestressed panel at the Morse Brothers prestressed concrete division.

training is on the job.

Morse Bros. Inc. was a family-owned company founded by brothers Joe, Forrest and Bill Morse in 1941. In 1998, the company was sold to Knife River Inc., which is owned by MDU Resources, a diversified company headquartered in Bismarck, N.D. MDU has interests

in natural gas and oil production, construction materials and mining, independent power production, pipeline and energy services, electric and natural gas distribution, and construction services.

Later said his goals are to make sure the prestress division is an employer of choice, where people

look first when job-hunting. He wants the division to create products of such high quality that customers refer them to other businesses and think of them first when a project is needed.

"And I want to make good financial results for our stockholders," Later said.