

MILLING MACHINE 50 PERCENT MORE PRODUCTIVE THAN PREVIOUS MILLS

Road construction is all about precision work and meeting deadlines. Not only must jobs meet tight specifications, they must also be completed on time. Tri-City Blacktop, Inc. accomplished both of these goals at a milling job for the city of Bettendorf, Iowa.

A Tri-City Blacktop crew milled concrete at a depth of 2½-inches for the 0.8-mile Middle Road resurfacing. Milling was completed in four days. Cleaning and prepping the milled surface took another two days, and paving was finished in four days. In 10 days, one of the city's worst streets became one of the smoothest.

A Cat[®] PM622 Cold Planer helped the crew mill 5,600 square yards daily. With a milling width of 88 inches, the PM622 is 50 percent more productive than previous mills the crew operated.

"We're able to make a wider cut, for one thing," said Luke Carpenter, field superintendent. "We had high expectations for the PM622 on this job, and it exceeded them. We had a 4,000 square yardage goal every day, and we exceeded that every day that we milled." With an operating weight of 74,580 pounds and rated power of 630 hp, the PM622 easily milled the 2½-inch concrete layer. "We can mill with such precision with this machine. It doesn't chatter, the tracks don't jump. It handles tough jobs like this better than any machine that we've seen," Carpenter said.

The Tri-City Blacktop crew milled within 1/8-inch of the specified depth. "The city doesn't want us to get into the rebar that's in the concrete, so they didn't want us going any deeper," Carpenter said. "We didn't hit any rebar. It's been a very smooth job."

Meeting the milling specifications was also critical to keeping the existing hand-framed curbs intact. The city didn't want the road height changed, which would have required curb replacement. Tri-City Blacktop met the specs, and new curbs weren't necessary.

Perfect Every Time

The PM622's technology helped the crew complete milling quickly. "True zero for matching is stored in the grade control system. There's never



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> **LUKE CARPENTER** FIELD SUPERINTENDENT TRI-CITY BLACKTOP, INC.



any second guessing. Once you get the machine set up, it's always set up," Carpenter said. "You can set down at two and a half inches and taper that out 30 feet to two inches and not have to do it manually. It will do a perfect taper every time."

A highly skilled crew is necessary to mill at the rate that Tri-City Blacktop did on the Middle Road resurfacing project. "We've had this crew together for 20-plus years. They do a great job,"



Carpenter said.

Sometimes you catch a break, too. Topography worked in favor of Tri-City Blacktop. "This job has some hills, and we're using them to our advantage. Downhill, with the gravity, is helping us move a little quicker through the concrete," Carpenter said.

Tri-City Blacktop successfully met a 0.25-inch over 10 feet bump specification. The crew used a Cat AP655F Asphalt Paver to place three



lifts (1-inch sand level mix for crack fill, 2-inch intermediate lift, and a 1.25-inch surface lift). A total of approximately 6,000 tons of material was placed. The asphalt was produced at a Tri-City Blacktop plant three miles from the jobsite.

The PM622's controls are similar to those on Cat pavers. "We're all familiar with the pavers. Caterpillar did a really good job tying the two together. You can jump from one to the other without having any doubt in what you're doing. Grade control is laid out the same on both," Carpenter said.

And when the Tri-City Blacktop crew was finished with the job, a rough section of Middle Road was smooth driving—on time and with all specifications met.

ADDITIONAL SERVICES AID **GROWTH**

Tri-City Blacktop, Inc., Bettendorf, Iowa, added asphalt milling to the services the company provides in 2010. This not only provided another revenue stream, the work also enables asphalt recycling, reducing the need for virgin aggregates and asphalt binder. This can reduce the environmental impact by up to 30 percent on a project.

Making as small a footprint in the environment as possible is a priority at Tri-City Blacktop. The company owns two full-size, state-of-the-art asphalt and concrete recycling centers that produce 200,000 tons of recycled material annually that can be used on other jobs.

Tri-City Blacktop, Inc. was founded in 1969 by Larry Carpenter and remains under family ownership today. The company does new construction, overlays, and a variety of other types of asphalt work. "Basically, we do anything from the ground up, except for general contracting," said Luke Carpenter, field superintendent. "Seventy percent of our work is milling and paving."

Paving work is primarily within a 60-mile radius of the Quad Cities (Davenport and Bettendorf in Iowa, and Rock Island and Moline in Illinois). The milling crew will work as far as 200 miles from home.

Tri-City Blacktop has grown to approximately 70 employees. The company runs one asphalt paving crew, a milling crew, two base crews, the recycling facilities and two asphalt plants.



JUST LIKE GRANDAD

When Larry Carpenter founded Tri-City Blacktop, Inc. in 1969, he used Cat[®] machines. Two generations later, the company's fleet has grown to more than 30 Cat machines, including loaders, a dozer, rollers, a motor grader, cold planer and a paver.

A PM622 Cold Planer is the newest Cat machine owned by Tri-City Blacktop. "When they released this mill, there was no question that we were going to have one," said Luke Carpenter, field superintendent.

Support and service that the contractor receives from both Caterpillar and Cat dealer, Altorfer, were key components in the decision to purchase the machine. "They've never let us down," Carpenter said.

Dependability of Cat machines was also a significant factor. "Our uptime with Cat equipment is 98 percent. We've virtually eliminated downtime," Carpenter said. "The way that jobs are figured now, you can't afford downtime."



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The PM622's service points are quickly accessible. "Everything is easy to get to-the filters, the drains, everything," Carpenter said. "The tool holder system is very easy to change, very fast. There's no bolts to tighten. It's a 30-second change."

And the machine is equipped with Product Link[™], which provides a wealth of information about machine performance to identify and address any problems to prevent breakdowns and keep uptime high.

CAT