

The Right Part at the Right Time Paid Off for a Virginia Company Paver

Improving storeroom efficiency netted bottom line results.

■ By Corey Crable

Superior Paving Corp. has been providing asphalt and paving services since 1976. As an industry leader, they have paved most of Northern Virginia's major arteries, including I-66 and I-95. The award-winning company has 10 asphalt plants strategically located throughout Northern Virginia with a large fleet of on-road trucking and off-road equipment.

For years, its asset management and inventory control process were on unsteady ground. Breakdown rates and fleet maintenance costs had been climbing, affecting competitiveness. Parts, both old and new, were scattered around the parts room. No records were being kept of what was coming in or going out and, even worse, no records were being kept of exactly who was using the parts or returning them to the parts room as the parts room had unsecured access. It had been that way for a long time, in fact, and something needed to change.

Calling in the Experts

As a result of a referral from peers, Superior Paving's executives and managers called upon the expertise of Preston Ingalls, President and CEO of TBR Strategies LLC and his team to help get their storeroom in order part as of their overall Total Process Reliability efforts.

TBR Strategies is a Raleigh, NC-based fleet and facility maintenance consulting firm specializing in uptime and cost reduction. They have implemented maintenance and reliability improvement efforts across 31 countries, targeting goals of 2 percent unplanned or emergency maintenance and maintenance costs less than 4 percent of asset value.

The flagship program of TBR Strategies' is called 'TPR,' or 'Total Process Reliability.' The TPR program taps into the Japanese concept of Total Productive Maintenance. The TPR process includes five phases,

When Ingalls and his team arrived at the site of their client's business, Superior Paving's woes became immediately clear—machine parts sat haphazardly on shelves, unmarked and uncategorized; inventory control was virtually nonexistent. And money was being wasted, by what Ingalls could see. "They had no idea what they had, (inventory) wasn't logged anywhere," says Ingalls. "There was no parts catalog—no listing. When we started working with (Superior), they were spending an astronomical amount as a percent of their asset value," he says. "They just didn't understand the true cost or burden to the organization."

Creating a More Secure Space

The storeroom was open, vulnerable and available to all employees, which is a major problem where security is concerned. "They had no inventory control. They had an open storeroom," Ingalls recalls. "You'll never have true accuracy if it is open to personnel. It was up on the mezzanine, which means it was difficult to get parts up and downstairs. They had lots of parts just sitting on the shelves gathering dust, they were undocumented and they didn't really know which ones to get rid of, so they kept lots of stuff. Because they didn't know what they had, they would often have to place emergency orders for items that were already there."

Not getting rid of obsolete parts translates into a lot of waste, Ingalls explains, which was another issue with which Superior dealt. "They would have duplicates of things, and they had a lot of stuff that had shelf life. Anything with rubber has a shelf life and, over time, it deteriorates. What we had to do was go through and do a large purge."

from diagnosing a client's asset management needs to post-program assessment: Conducting a Gap Analysis; Developing a Support Network; Development of a Plan; Education, Training, and Execution of the Plan; and Evaluation through KPIs and Auditing.

Improvements Start with Identified KPIs

First, Ingalls and his team sat down with management at Superior Paving to explain the problems they had documented. They discussed the best way to tackle these issues and bring the storeroom to a place where everything was neatly organized, catalogued and supervised. He



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recommended that they formalize their storeroom by implementing an MRO (Maintenance, Repair, and Operating Supplies) management program—a disciplined approach of managing inventory.

Ingalls jumped in and trained Superior Paving's leaders, first establishing a set of KPIs (key performance indicators) for the business—a set of measurable objectives on which a business can track its successes. One of the most important—tracking money spent, and, by extension, waste accumulated—was key. According to Ralph Sine, Equipment Manager, "Being able to track that waste opened the eyes of Superior's management to practices they simply had to change."

"When a business decides to reorganize its Asset Management, some of the biggest contributors to their success is establishing a base line for data to gather the age, hours and bad actors of the equipment," Sine stated. "And organized inventory management has been important to asset management by providing us with information on obsolescence. We had three times the value of our current inventory before we got started on TPR."

Ingalls assisted staff in discarding wasted and obsolete parts, as well as marking, cataloguing and organizing what remained. Though a lengthy endeavor, it was one that proved necessary and helpful to the company and its employees.

Inventory Specialist, Rocky Miller, says the organization of the parts

With Ingalls' training and guidance using the TPR program, Miller began the laborious process of surveying the company's inventory and ridding the parts room of obsolete or deteriorated inventory. That, of course, translated into not just more physical space in the parts room, but money saved, too. In fact, Ingalls, Miller and Sine all say they were surprised at the amount of inventory wasted over time.

"We trained Rocky on the program, and he made decisions on getting rid of a lot of stuff. The cost of maintaining a storeroom is 25 to 30 percent of the total value," Ingalls explains. "If you have \$1 million worth of parts, it will cost you \$250,000 a year to run it, including pilferage, losses, personnel, taxes, everything as far as the cost to have and to hold. It is called carrying or holding cost. If you have a lot of stuff that just doesn't have value, you're paying every year to shoulder that burden. It's like paying the interest on your credit cards. You never see it, but it accumulates."

Ingalls continues: "So, that was one of the things we did—start putting Key Performance Indicators in there. We started tracking things so they can start monitoring their metrics. We tracked accuracy levels, and we also examined service levels, which is the hit rates when they go to get spare parts and we looked at the turn rates measuring stock turnover. You can't manage what you can't measure. What gets measured gets done."

Growing Pains

Sweeping change at any company is also accompanied by a need to change the thinking, attitudes and deeply-rooted habits of its employees. As it became acclimated to TPR and greater levels of organization and declining amounts of waste, Superior Paving was no exception.

"We started (training) in the shop first, and in the shop, we went through probably a year or a year and a half of changing the culture," Sine says. "Everyone was concerned about their jobs because everything was changing. This was reorganizing, regrouping, getting more bang for our buck. It was just going to look different than it was before. Everyone got engaged within the shop. Then it spread out to the operators of the equipment to get operator care going. Now, we're at the point where it's starting to grab on. We've gravitated through the rest of the company."

Dipping Costs, Rising Efficiency

room has made it possible to quickly find needed parts, as well as a place to sign out those parts so others know who has removed them and where they have gone. A site map details the room itself, while clearly marked shelves and drawers make finding parts a snap.

Miller praises the company's management—specifically, Superior Paving President Jim Mitchell—for embracing the TPR process and being willing to make necessary operational changes. "It's all possible when the owners and the management get behind it and stick with it. That's what drives it home," Miller says. "Without management's support, you won't make it."

Obsolete Inventory Goes Out the Door

Before Ingalls arrived on the scene, the parts room was open to all employees. And with no plan to catalogue and organize the parts in place, the pilfering of parts would be easy for would-be thieves. "Having organized our inventory the way that we have, we've also been able to make the room a contained and secured space," Miller says, adding that only fewer than a dozen employees have access to the room.

Vendors with whom the company works have taken notice of this cultural and operational shift as well, Sine notes. "We've invited our vendors in, and we're spreading (ideas and practices taught in TPR) to our vendors," Sine says. "It's very helpful and useful, and the vendors are excited because they see we're taking care of our equipment. When it comes down to warranties, we get a whole lot better pricing because they realize they're doing operator care and taking care of our equipment."

Miller says he is excited to encourage other companies and vendors who might wish to follow suit in Superior Paving's reorganization journey. "Once they see how organized and clean the parts room is, they tell us it's the best and cleanest they've ever seen," Miller says. "We tell them, 'You can do it. You just have to get started. It's made a big difference for us.'"

Looking to the Bright Future

Thanks to the adoption of and adherence to the TPR program, both

Dipping Costs, Rising Efficiency

Eventually, all three men say, the company saw its maintenance costs slowly declining. Even more than that, they saw a decrease in down time, thanks to a new habit of tracking parts history and projected usage. That down time, Miller and Sine realized, had been costing them precious money as well.

Now that TBR had given Superior Paving's leadership the tools they needed to minimize waste and maximize their use of time, inventory management, and physical space, the company had positioned itself for greater future success. A message in the company's employee newsletter acknowledged the need for such practices to become more commonplace. "The objective is to buy and keep items 'Just in Time' as opposed to 'Just in Case,'" Miller wrote in a column published in the April/May 2019 issue. "Keeping unneeded items in stock is not only a waste, but it ties up company funds that could otherwise be used somewhere else that is much more important at the time. At Superior Paving we strive to keep what we need, when we need it. It is a delicate balance and we are always evolving in our processes."

someone depending on their own knowledge and recall—"I know where I put that thing.' But our memories are not reliable."

The Start of Success

For Miller and his co-workers, an efficient parts room is only the beginning—and the benefits are numerous and immediately seen. "At Superior Paving, by organizing our Parts Room, we've been able to establish data on what we have



Miller and Sine say that the long-term future of Superior Paving will be a bright one, short on waste and long on organization and inventory control—the way it should be. “Back when we moved into this facility, someone would say, ‘Officials are coming through and we need to clean up,’” Sine recalls. “Now we don’t need to worry about it. You can have visitors any day of the week, and we’re always ready.”

Those visitors have indeed been coming and always express both surprise and awe at what they see at work in the company. It is a significant source of pride for Superior Paving’s employees. “Everyone here is proud of where the company has come,” Sine says. “We have lots of visitors, and everyone who comes through can’t believe it’s an asphalt company.”

Recently, Craig Parker, President of Silver Star Construction, out of Oklahoma City, was touring the facility and had this to say, “During my trip to see Superior’s new office and shop facilities, I was blown away when Jim took me into the warehouse and shop. We had been struggling for more than a year at our company trying to come up with a plan to better organize our warehouse and shop. Besides the amazing organization that was evident as soon as I walked through the door, there was a sign on the wall showing the weekly dollar volume of the inventory and the inventory dollar volume goal. Above that was a large, proudly displayed sign of Superior that had a logo for TPR. Seeing all of this, I immediately told Jim how impressive the warehouse was and had to ask, ‘What is TPR and how did you accomplish getting your warehouse in this condition?’ I hadn’t even seen the shop yet. I had the same reaction as soon as he walked me into the shop. I brought this information back to our team and they were immediately on board to bring TBR in for the initial audit.”

That readiness for anyone who might drop by and visit will benefit the company for years to come, Miller adds, saying he wants the principles of TPR to extend to other areas of the company. “I feel like we’re just getting started,” Miller says. “We don’t want to rest on how things are good now. I want to ask how things can be made even better. I’m so passionate about inventory and TPR.”

Ingalls praises Superior Paving as a company whose employees truly listened to the theories and practices espoused in the TPR program, and then successfully implemented them. It is not always as easy as it seems, Ingalls says, but it is always proven worthwhile. “There’s a place for everything, and everything in its place—a homesite for every item.’ People don’t always see the value in doing that,” Ingalls says. “You have

and what we need. Our fleet is always evolving, so we’re able to keep track of what equipment might become obsolete at the end of the next season, which in turn will help us evaluate just what we need to stock or not stock for that piece of equipment,” Miller says. “Also, the data that is provided with having an organized parts room has helped us reap more rewards such as tracking KPIs as well as a host of other valuable information.”

Throughout the company’s evolution, Miller adds, its leaders and employees have not forgotten its humble roots, and they stand ready to assist other companies that could benefit from the training they received from TBR Strategies.

Ingalls stated, “This has provided Superior with a major competitive advantage. Having the right parts at the right time in the right condition means less downtime, which equates to increased production. They have much to be proud about.”

Ingalls continues: “They have hosted many of our other clients, and they were astounded at how efficiently their storeroom is run, but we didn’t get that overnight. It took determination, leadership and dedication. Rocky did a phenomenal job of making this a priority and he did the right things right.”

“We’ve still been able to remain humble, because we can’t forget where we came from,” Miller says. “Every time someone compliments us, we assure them it’s possible for them, too. They just have to take that first step.”

Says James A. Mitchell, President of Superior Paving, “When I first learned about the TPR philosophy and TBR Strategies, I knew that we would benefit from this modern approach to managing equipment. We have benefitted from TPR for more than six years now. The best part is that while we have had many sizable one-time savings items, most of our savings are annualized, so we will benefit from them every year moving forward. Looking back on our experience, I have to say I did not have any idea how hard this was going to be. I can also say with full confidence, it is worth it!” | **WA**

For more information on TBR Strategies and the resources and services it offers, visit www.tbr-strategies.com.

For more information on Superior Paving, visit www.superiorpaving.net.

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Breakthroughs and Innovations

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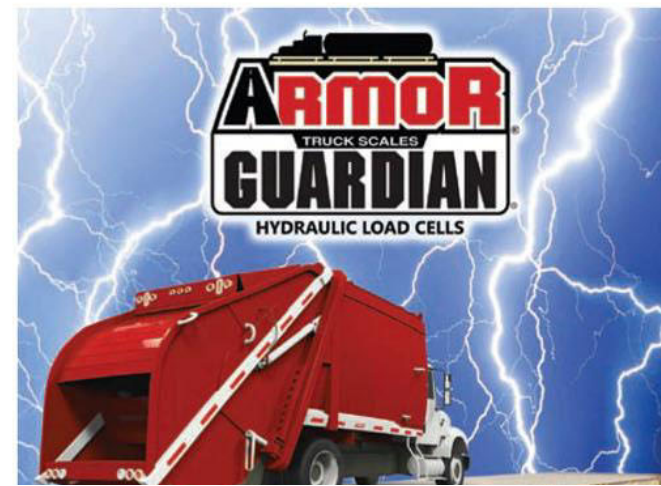
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