

LONE STAR STATE OF MIND

Achieving long-term savings means analyzing every inch of an operation. For leading west Texas producer CSA Materials, calculating the costs of moving equipment and its method of stockpiling material led to an annual savings of nearly \$8 million.

CSA (Crushed Stone and Asphalt Products) Materials is a subsidiary of family-owned construction and paving firm Reece Albert, Inc., headquartered in San Angelo, Texas. CSA Materials was launched in the mid-1980s with the goal of supplying hot-mix aggregates and base material for Reece Albert, Inc. The company later grew and diversified by supplying asphalt aggregates and base material to other local contractors in west Texas.

In 2012, CSA Materials grossed approximately \$30 million in revenue. But its outdated equipment needed to be upgraded as the company sought to expand to meet the needs of the growing marketplace. With the development of west Texas oil boomtowns and \$1.4 billion dollars in state funding allocated to maintain Texas' massive highway infrastructure for 2015, CSA Materials knew it could achieve substantial growth with the right equipment and dealer support in place.

After in-depth testing and factory visits, CSA Materials purchased an all-new fleet of equipment from KPI-JCI and Astec Mobile Screens authorized dealer Texas Bearing Company, including eight FT4250 track-mounted impact crushers, a 4200 ProSizer, five 150' SuperStacker® Telescoping Stackers and three GT205 track-mounted screens. The company also recently purchased two FT2500 VSI plants – the first FT2500 sold in the United States – and is leasing a fourth GT205 screen plant.



In just three years with new equipment under its belt, CSA Materials had grown its revenue nearly 40 percent, bringing in about \$48 million and producing nearly five million tons of material.

"In the past three years, we've grown pretty fast since we came on board with KPI-JCI and Astec Mobile Screens," said Daniel Rowzee, operations manager for CSA Materials. "Our growth has just multiplied tremendously."

SMARTER STOCKPILING

One of the most significant cost-saving measures the company created was switching from stockpiling material with dump trucks and scrapers to stockpiling with a SuperStacker® Telescoping Stacker, Rowzee said.

"When I came to CSA Materials, I kept saying "We need a SuperStacker!" said Rowzee, who was familiar with the brand and Astec Industries from past experience as general manager of concrete paving for APAC-Tennessee. "There's no doubt that it's the best way you can stockpile material."

The road-portable SuperStacker is designed to increase stockpile capacity by 30 percent and is essential to building a desegregated stockpile and ensuring the quality of in-spec product. In-spec material prevents costly expenses associated with reprocessing materials, eliminating re-blending and product discounting. By controlling the extension of the stinger conveyor, producers can build layered windrows to minimize stockpile segregation.

Rowzee said the SuperStacker was capable of significant cost savings because there was no longer a delay from the haul trucks when stockpiling the material.

"The trucks aren't your limiting factor anymore," Rowzee said. "The crusher is the only limiting factor. So as a result of getting rid of the dump trucks, your costs go dramatically down. It's just a smart way to do it."

The switch to a SuperStacker led to a savings of \$1.50 per ton, Rowzee said, which at five million tons of production equates to a \$7.5 million savings each year.





TRANSPORTATION SAVINGS

When CSA Materials was formed, it started with crushing and screening spreads that included four used portable crushers, but the rapid growth demanded a newer, more powerful alternative, said Wesley Coleman, production and equipment manager for CSA Materials, who managed the purchasing decision for the company.

Coleman tested a variety of industry-leading brands of mobile crushers, including Powerscreen, Pegson, McCloskey, Kleeman and KPI-JCI and Astec Mobile Screens. For months, he trialed rental units, tracked production and then compared figures. His top priorities in equipment selection were production, mobility, service and parts availability, but he also wanted to find a one-source supplier that would simplify training and limit the number of stocked parts.

"I wanted to find something that I could use throughout the company that would keep everybody on the same page," Coleman said. "And I found that buying American-made meant I could get my parts a lot quicker and a lot cheaper, with faster service. Trying to find out-of-state parts would cost me two or three days of production, and that really turned me off from foreign manufacturers."

The equipment also had to thrive in the tough Texas conditions, Coleman said. The material found in west Texas is typically caliche, a very soft rock, with pockets of limestone that can be used to make base material. Limestone is wet and sticky, which meant any crusher and screen used had to be capable of processing that challenging material.

With 10 active mines spread across the large expanse of west Texas, it was important for CSA Materials to find equipment that was versatile enough to handle the diverse material that can be found at different sites.

"The material can be variable even inside each location," Rowzee said. "For example, in Midland, you find pockets of softer limestone. It's very hard to find – you have to do a lot of research and exploration to find something that would even marginally meet specs for hot mix aggregates out here. Generally speaking, if we can mine 30 feet deep out in west Texas, it's a gold mine. The top eight feet are usually a soft caliche and the bottom 18-22 feet are a good-quality material to use."

"So we have to take that into account when crushing," he continued. "I've been here for four years, and it's been an education to me. That's why Wesley Coleman, our production manager, is so important to me, because he grew up here, and it takes someone that really understands how to handle it out here and knows how to process the material to actually do it."

It was Coleman's extensive experience in the dusty, windy Texas climate that led him to shy away from electronic-heavy equipment.

"Electronics don't like dirt," Coleman said. "Some of the competitive machines we tested had way too many electronics on them. We're in a very dusty, windy climate, and dust has a huge effect on electronics. Without a doubt, having a lot of electronics on your equipment is going to lead to a problem down the road. It might run fine for the first year, but over time it's not going to last. It's a harsh environment, and it's going to break."

Mobility and ease of transportation also played a critical determining factor for Coleman and Rowzee, who move equipment regularly in the remotest parts of Texas. The idea was to find something highly mobile and road-portable where they could get in, crush and get out without any hassle or delay.

Coleman ultimately selected KPI-JCI and Astec Mobile Screens' FT4250 impact crusher along with the GT205 track-mounted screening plant and portable SuperStacker to pair together in three mobile crushing and screening systems. By replacing the company's aging portable system with more compact and efficient equipment, CSA Materials was able to reduce the required transport loads from 26 loads to just three. Additionally, when compared with other brands of comparable equipment, KPI-JCI and Astec Mobile Screens' track-mounted equipment cost half as much to move as its counterparts, thanks to the FT4250's reduced travel height, which allows it to fit on one truck instead of two.

With each move previously costing \$50,000 and



the current cost of only \$7,000 with the new crushing and screening plants, the company was able to achieve a savings of nearly \$400,000 per year, when calculated for three different plants moved three times a year.

"That's a huge savings," Coleman said. "Not only that, but I can be up and running in one day versus 10 days. That's an enormous increase in production as well."

With an eye to the future, CSA Materials also added two FT2500 VSI plants to add to its fleet, which is expected to triple asphalt rock production in 2016.

CUSTOMER COMMITMENT

For Coleman, who manages the day-to-day production, the most important factors included ease-of-use for his operators, high production, parts and service availability and factory training. For Rowzee, it was the relationship and support provided by the manufacturer and dealer. With a long history with Astec Industries, he knew there was a company-wide philosophy of commitment to the customer. "The company philosophy with Astec Industries and KPI-JCI and Astec Mobile Screens is support," Rowzee said. "They believe in it. If we have a problem and call Texas Bearing, we're going to have a representative from the dealership or the factory out to resolve it. That to me is important, because every piece of equipment is going to have an issue at some time. But the way it gets resolved, to me, goes a long way."

"Having worked for a large company like Oldcastle before, we've gotten the same support, even as a little guy," he continued. "KPI-JCI and Astec Mobile Screens has jumped through hoops for us. I'm a creative person, a thinker, and I like to dream up things. I'll call Texas Bearing Company, and two days later we'll have a crusher headed this way. We've got a good marriage, we all work together.

Everybody's on board if we have an issue and says, 'How can we fix this? What can we do?' And we have fun together. It's not a struggle, we all work together, and we have fun. And if you're having fun, it doesn't matter how much work it is, it makes it a whole lot easier."

