

McLanahan Horizontal Screen Increases Tonnage and Improves Separation for McNamara Contracting



“Everything is way nicer with the McLanahan Horizontal Screen.”

Joseph Adelman
Crusher Operator

McNamara Contracting, Inc. is a third-generation infrastructure contractor located in Rosemount, Minn. With more than 60 years of experience, McNamara’s team assists their customers in project design through completion. They mine and process all the aggregates they use in their asphalt and base materials, as well as perform infrastructure services such as grading, base construction, concrete and utility installation, paving, and more.

In addition to mining new aggregate materials, McNamara also recycles every ton of asphalt and concrete from their projects and crushes it for reuse, keeping their use of our limited natural resources to a minimum.

Challenge

At their sand and gravel pit, McNamara crushes and screens aggregate material to the specific sizes necessary for their asphalt mix. They use mainly portable equipment in their pit, including jaw crushers, cone crushers and vibratory screens supplied by other manufacturers.

One day, the shaft and bearings went out on the vibratory screen deck, and Crusher Operator Joseph Adelman said it needed to be replaced.

“Our old screen deck finally had its wear and finally just broke down to where we had to upgrade,” he explained.

Solution

McNamara rented a McLanahan 6’x20’ Triple-Deck Horizontal Screen from Viking Aggregate Equipment, McLanahan’s dry processing dealer in Minnesota. The Horizontal Screen features McLanahan’s triple-shaft mechanism with an aggressive oval stroke and optimum adjustability, as well as an end-tensioned bottom deck for simplified maintenance and access holes with covers along the middle and bottom decks to assist with screen media replacement.



It also features adjustable speed, stroke and amplitude to give producers like McNamara the ability to fine-tune the screen to their application.

The McLanahan Horizontal Screen was installed on a portable chassis — complete with wide walkways, dual access ladders and a sliding discharge chute for improved accessibility — and delivered to McNamara's sand and gravel pit. Adelman said Viking did all the fine adjusting for them and “made sure everything was running good for us so we could hit the ground running.”

McNamara liked the McLanahan Horizontal Screen so much, they purchased it from Viking to permanently add to their operation.

“We ended up liking it,” Adelman said. “It handled a lot more material, and just the way everything was set up on it with the sliding chute and the accessibility to get to the screens, everything worked really well with that screen deck.”

As the finishing screen, the McLanahan Horizontal Screen splits all the crushed material from the primary and secondary crushers into the three products necessary for their asphalt mix. The vibrating motion of the screen causes the material to move across the screen decks, allowing the particles maximum opportunity to fall through the openings in the screen media. Material that is too large to fit through the openings in the screen media continues to move down the length of the screen to discharge onto the appropriate product conveyor. Any oversize material is directed back to the crushing equipment to be further reduced until it is able to be sized by the screen and sent to the stockpile.

Results

Adelman said the McLanahan Horizontal Screen is capable of processing more material than their old screening unit and gives them a better separation.

“It shakes a lot more to where it's able to sift a lot more and handle a lot more material to where we can put more out,” he shared, “and I feel like we gain more with the Horizontal Screen than we did with our past one. “Since the Horizontal Screen is able to handle more, we were able to get a new conveyor that could pour more material to that screen deck to where we're not wasting space.”

As for maintenance, McNamara has already seen the benefits of the end-tensioning screen feature, having had to change the screen media on the bottom screen deck twice. Adelman said the process was so much easier and faster, as it was made simple by better accessibility to the screens.

“Our last screen, you had to unbolt a hundred-pound plate at the end and put that off to the side and that's how you got into the screens,” said Adelman. “It's really nice to slide that chute back to where you can get in there and get everything, and then I really do like the end-tensioned screens.”

In addition to the end-tensioned screen deck and sliding discharge chute, Adelman also likes the wide walkways around the screen and the ladders on both sides. He said he gives the McLanahan Horizontal Screen a thumbs up in terms of maintenance and operation.

“Everything is way nicer with the McLanahan Horizontal Screen,” Adelman shared.

