

Tuckahoe Sand and Gravel Triples Production with New Eagle Iron Works Wash Plant

Tuckahoe Sand and Gravel produces numerous aggregate materials at their location in southern New Jersey, including concrete sand, various types of golf course sand and gravels used for drainage and landscaping. Known up and down the East Coast for their quality and consistency, sand and gravel products produced at Tuckahoe are used in Department of Transportation projects, construction and residential job sites, and countless golf courses.

Background

Because the sand and gravel market is so competitive, Tuckahoe needs to produce high-quality material at prices their customers can afford. In order to accomplish these goals, they have to make as much material as fast as they can.

However, with two small, aging plants, they weren't able to meet those productivity goals, and sales were suffering as a result.

"Production was the problem," said Tuckahoe plant manager Ron Sutton, Jr. "We just weren't able to increase inventory and maintain production and supply our customers."

Tuckahoe didn't have belt scales on their old plant, but Sutton estimated their production was under 100 tons an hour at times.

"It was the writing on the wall that we had to increase our production," Sutton explained. "We proved the sales were there to support the purchase of a new dredge and a new plant."

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"We've always been very satisfied with Eagle Iron Works' quality. We talked to our competitors that use Eagle Iron Works. They also have been very satisfied with Eagle equipment. It's no secret that Eagle Iron Works equipment is of good quality."



Ron Sutton, Jr.
Plant Manager

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Approach

Familiarity with Eagle Iron Works equipment and support from their local dealer, Dibble Equipment, influenced Tuckahoe's decision to upgrade their old wash plant with new equipment from Eagle Iron Works.

"My employees are familiar with Eagle products, so there was no learning curve," Sutton explained. "They knew how to maintain the Eagle product, and we've always been satisfied in my tenure here at Tuckahoe in the quality and reliability of the Eagle product."

Tuckahoe's new wash plant included two 10' x 40' Eagle Iron Works Classifying Tanks for separating and blending pre-screened material into three different products and two

54" x 34' double screw Fine Material Washers for washing, classifying and dewatering those products before stockpiling.

Eagle Iron Works Classifying Tanks are perfect for dredge operations like Tuckahoe's because they remove large volumes of excess water from feed materials, smooth out feed fluctuations and produce a consistent, reliable in-spec product. They make it easy for Tuckahoe to produce secondary and tertiary products, like mason and golf sand.

"The Eagle Iron Works Classifying Tanks allow us to fine-tune the products that we're producing," Sutton said. "If one of those products becomes too coarse, we can then put that extra material to the third product to keep an eye on it and maintain the quality we're looking for."

Material discharged from the Classifying Tanks is sent to one of three Eagle Iron Works Fine Material Washers, one of which has been in operation at Tuckahoe since 1999. These machines remove deleterious coatings and fine material from the sand products. They also dewater the product as it is conveyed up the screw shaft for discharge.

"It's important to use the Eagle Iron Works screws to produce a drier product faster. Our customers do not want to pay for water. They want to buy sand."

Impact

To maintain the high-quality products for which Tuckahoe is known, the Eagle Iron Works wash plant is key.

"The equipment is very important, and familiarity with the equipment is important," explained Sutton. "It was important for us to have a product that our employees were familiar with. We didn't really want to change. We didn't want there to be a learning curve with the new plant. We wanted to hit the ground running and be able to transition from the old equipment we had to the new equipment, and staying with Eagle Iron Works allowed us to do that smoothly."

After installing the new Eagle Iron Works wash plant, Tuckahoe tripled their production to 300 tons an hour. As they continue to familiarize themselves with the new plant and optimize their process, they plan to produce even more.

"We're satisfied," Sutton said. "We feel as though our plan has come together. You always have a plan and goal on paper, but to feel as though you've reached those goals is rewarding."

Since start-up, Tuckahoe has found the Eagle Iron Works Classifying Tanks and Fine Material Washers to be both very reliable and user-friendly — something they also found from their past experience with Eagle Iron Works equipment.

Featured Equipment



Two 10' x 40' Classifying Tanks

- Remove excess water from feed material
- Smooth out feed fluctuations
- Produce a consistent, reliable in-spec product
- Can produce secondary and tertiary products



Two Double Screw Fine Material Washers

- Remove deleterious coatings
- Liberate fine material from the feed
- Dewater for a drier final product