

of Eagle Trek Tank and Screw Plant

Ideal Ready Mix Company, Inc. has been Iowa's premier ready mix concrete provider since 1947. Comprised of Ideal Sand and Ideal Masonry Products, the company operates three sand plants and 40 ready mix plants throughout Iowa, northern Missouri and west central Illinois. Ideal Ready Mix makes concrete, stone, sand and masonry products for use in roads, commercial buildings, bridges, schools, trails, parking lots, power plants and more.

Background

In 2017, Ideal started production at their Coppock, Iowa site after core samples revealed the product they needed for making state certified sand was located under the cornfields there. They obtained the necessary permits, built the pond for dredging the sand and set up the site for a portable classifying plant, which would allow them to remove the unwanted sand sizes to ensure their product was in spec.

Ideal operates portable crushing plants at their rock quarries, and they wanted a similar setup for their washing plant that would allow them to move around to their different locations.

"The intent was to have a portable plant so we could take it around to our other facilities," said Ted Pallister, Plant Manager at the Coppock location. "Ideal wanted to go with the portable plant because they could take this plant from Coppock, lowa to Wayland, Missouri and fill it up, and then come back here."

"The Eagle equipment is nice. It's heavy built, durable and it lasts." Ted Pallister Plant Manager

Approach

Through Eagle Iron Works' Iowa dealer, JW Bell, Ideal purchased all new EIW equipment for their new site, including an Eagle Trek TSP and a Classic Single-Shaft Fine Material Washer.

The Eagle Trek TSP is a portable wash plant that features an EIW Classifying Tank and a twin Fine Material Washer on a Department of Transportation approved chassis. This allows the plant to be moved quickly and easily between sites or to different locations on the same site. "With portable equipment, it's easier to hook onto it and move it than a stationary unit because stationary means it's positioned there to stay," explained Chip Allen, Sales and Product Support Representative at JW Bell. "With portable, you pour a pad, you can move it to the different location easily and see faster setup time to start operating, dredging and getting product on the ground."

Impact

The Eagle Trek TSP allows Ideal to create two primary products, which are separated in the sand tank. Following their separation, one product is discharged to the twin sand screw underneath that is part of the Eagle Trek TSP, and a secondary product that is dewatered by the single-shaft screw that was added to the system. This secondary product can be stockpiled for sale instead of sent back to the pond.

Both the single screw and twin screw are driven by ElW's robust gear reducers, which are known for their longevity.

"They appear to be built pretty strong because if we can't tear them up here, they can't be torn up," Pallister said of the gear reducers.

While Ideal initially installed a Mark VI control system from Eagle Iron Works to operate their sand tank, they recently updated it to EIW's new Mark X control system to increase the efficiency of their Classifying Tank.

"Our pond is so widely varied that we've got to have something computerized to try to keep it in spec," Pallister explained. "We switched from the Mark VI to the Mark X because it was a more efficient system and to get our product to be more efficient and cost-effective for us."

Pallister estimates they could be making sand at the Coppock site for 20 years. In five or six years, they'll have to move the plant to access the reserves underneath the plant. This is where the portability of the Eagle Trek TSP will be a benefit.

"Hopefully, we can get it up and running quicker than a standard plant, which would take us longer to get up and running," explained Pallister.

Throughout the lifetime of the plant, both EIW and JW Bell will continue to provide Ideal with service and support. Pallister said the people he's worked with at EIW have been friendly, easy to work with and helpful, and having a local EIW representative like JW Bell ensures that Ideal's needs for parts and service are met and surpassed. "JW Bell has worked well with us," Pallister shared. "Our salesman will deliver parts. If I order something, normally I've got them the next day or within an hour."

As for the equipment itself, Pallister is impressed with the quality of the Eagle Trek TSP and Classic Fine Material Washer.

"The Eagle equipment is nice," Pallister said. "It's heavy built, durable, and it lasts."

Featured Equipment



Eagle Trek Portable Tank Screw Plant (TSP)

- Moves quickly and easily from site to site
- Features an EIW Classifying Tank and twin Fine Material Washer
- Creates two primary products and one secondary product