



NORTH AMERICAN QUARRY NEWS

INDUSTRIES SERVED — QUARRIES • SAND & GRAVEL • MINING

Volume 22

No. 2

Aug. - Sept. 2016

***Supreme Clamshell
Dredge offers added
mining capabilities***

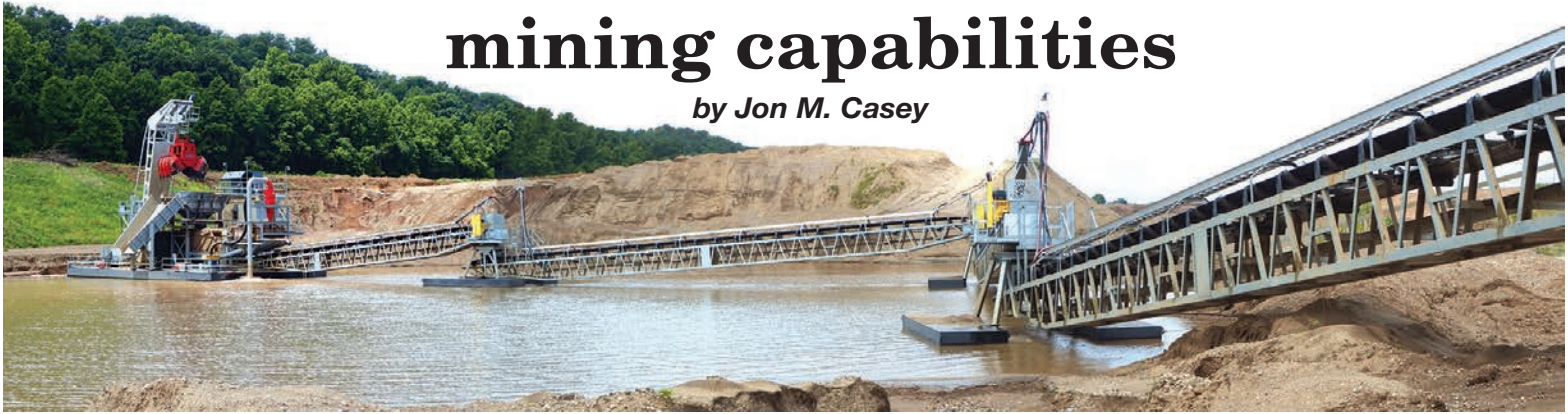


***2016 Buyers Guide / Drones
Drilling / Blasting***

PRSR1 STD
US POSTAGE PAID
UTICA, NY
PERMIT #55

Supreme clamshell dredge offers added mining capabilities

by Jon M. Casey



Jaymar's Supreme dredging installation included the dredge and the floating conveyors that bring material to the main land conveyor out of sight to the right.

For operations at the Jaymar, Inc. Reedsville Plant near Reedsville, Ohio, the decision to acquire a Supreme Manufacturing 8-cubic-yard clamshell dredge, gave daily production a significant boost to the company's sand and gravel mining operation. The new dredge provided an additional source of production to compliment the ongoing high bank surface mining operations that have been in place for nearly twenty years.

According to Bryan Hall, plant supervisor, Jaymar, Inc. started with Bryan's uncle, Jay Hall, Jr., as a business enterprise in the coal mining industry in Vinton County, Ohio. Over time, Mr. Hall acquired properties along the Ohio River like the Reedsville site, to help expand his coal mining and barge loading operations. With the advent of the sand and gravel mining operation and barge loading facility in Reedsville, Hall's focus shifted from coal to sand and gravel and in 1994, the Reedsville plant began to take shape in the planning stages.

Production came online in 1999. Today, the facility is able to load material at the rate of approximately 1600 tons per hour, giving it the capability to load just under one barge per hour. "Last week, we loaded 11 barges in 12 hours," said Bryan as we began a tour of the expansive 300 plus/minus acre production site.

Bryan, who has been a part of the business since graduating from high school in 1993, is a third generation family member (cousin) in the operation. Bryan said that during his time at Jaymar, he has seen the company grow to become a major supplier of concrete and masonry sand as well as assorted aggregates for the Shelly Company, a subsidiary of Oldcastle Materials.

"All of the sand and gravel materials produced at the Reedsville plant are distributed through the Shelly Company to various companies up and down the Ohio River. "Much of what we produce is loaded onto barges and distributed to customers in Ohio, Pennsylvania and West Virginia," says Hall.

Plant Growth

Hall explained that the surface mining operation of the plant on the west side of the highway that splits the total 1100 acre site, has extended to the limits of the permitted boundaries for mining above the water table. Its benches stand at about 45-feet around the perimeter of the main pit area. As a result of the need to mine deeper, he began to shop for a dredge to compliment his mining efforts. He spent several months investigating the various options for dredging equipment and finally chose a Supreme Manufacturing 8-yard, computer controlled, floating clamshell dredge. Among his reasons for choosing this brand was that the Supreme dredge is manufactured in the USA.

"The addition of the dredge has given us two options for mining the materials, which is extremely important when it comes to being able to supply material to our customers throughout the year. By knowing that if for some reason, the loader is not able to operate for a time, or the dredge is not operating because of maintenance or repair, at least one equipment option is still available for production until both units are back in operation. We have found that this is the perfect combination."

Hall said that the facility remains in operation year round unless the outside temperature drops to around 22 degrees F. When it is that cold, his crew works on regularly scheduled maintenance items un-



Jaymar, Inc's Supreme Dredge provides a second mining area within the confines of the quarry pit.

til the weather warms up. Even with huge stockpiles in place, it doesn't take long to deplete the inventory when filling a number of empty barges.

Dredging Operation

"The dredging operation began in 2015," said Hall as we watched operator Nick Watson, put the machine through its paces. "The dredge is a one man operation. Nick has been doing an excellent job operating the unit."

Hall said they are currently mining from a depth of about 40-feet and they are able to produce approximately 500 tons of material per hour. As material is lifted from the bottom of the pit and dumped onto the 6-foot x 16-foot Deister two deck primary screen, the dewatering process begins. Aggregates and sand from the two decks goes onto the discharge conveyor, and the fines pass through a McLanahan cyclone before going onto the dredge's 7-foot x 12-foot Deister Fine Sand Recovery Screen. The screen sand is also discharged onto the main conveyor, then on to the floating conveyors that take it to the main land based conveyor.

Material Handling and loading

Once the material has been conveyed over land to the screen plant, it passes over a three deck Deister screen where it sizes 4's, 8's, 57's and overs. The 57's pass through an allmineral™ Jig to float off any coal that is present in the product stream and the sand is pumped to a CFS plant so coal can be floated out. "We do have some slight coal deposits in with the sand, so the jig and the CFS plant are very important for the



The screen plant provides six products including concrete and masonry sand as well as four classifications of aggregate.

Jaymar From 3

production of concrete,” he said.

From the screen plant, overs are crushed in a Stedman Impact Crusher while the sand is moved on to an Eagle Iron Works classifying plant outfitted with two EIW sand screws that produce concrete and masonry sand. In all, the plant produces five stockpiles that serve as “surge piles” for loading the barges.

“The operator of the loading facility controls the hoppers beneath the stockpiles of sand and aggregate,” said Hall. “He can open and close the gates beneath the material that needs to go into the barge he is filling. That is all done remotely for each of the five stockpiles. We are scheduled to load 12 barges next week.”

Hall said he is looking forward to opening up a new section across the highway that splits the Jaymar property. He said he has a fondness for operating the company’s dragline crane since he used that equipment to begin the initial mining back when he first started with the company. “I’m looking forward to doing that,” he said. “I enjoy being a part of this business and I have from my very first day on the job. I’m a blessed man.”

For more information about Jaymar, Inc., contact them at 740-992-6637. For information on Supreme Manufacturing, visit their website at www.supremefg.net or give them a call at 724-376-4110.



An operator loads material from an area of the quarry face where recent rains have created a washout area.



Material passes through the CFS tower where the Eagle Iron Works sand screws finish the dewatering job.



Jaymar’s dredging operation from atop the pit. The top of the screen plant can be seen in the distance over the far berm, just to the left of the abandoned farm structure and tree.



The dredge is outfitted with a 6-foot x 16-foot double deck Deister primary screen, a McLanahan Cyclone and a 7-foot x 12-foot Deister fine recovery screen.



This new section of the pit will begin to be mined with this dragline, later this summer. Photos courtesy of Jon M. Casey