

Gorman-Rupp Pumps Up Efficiency at Oconee County Quarry



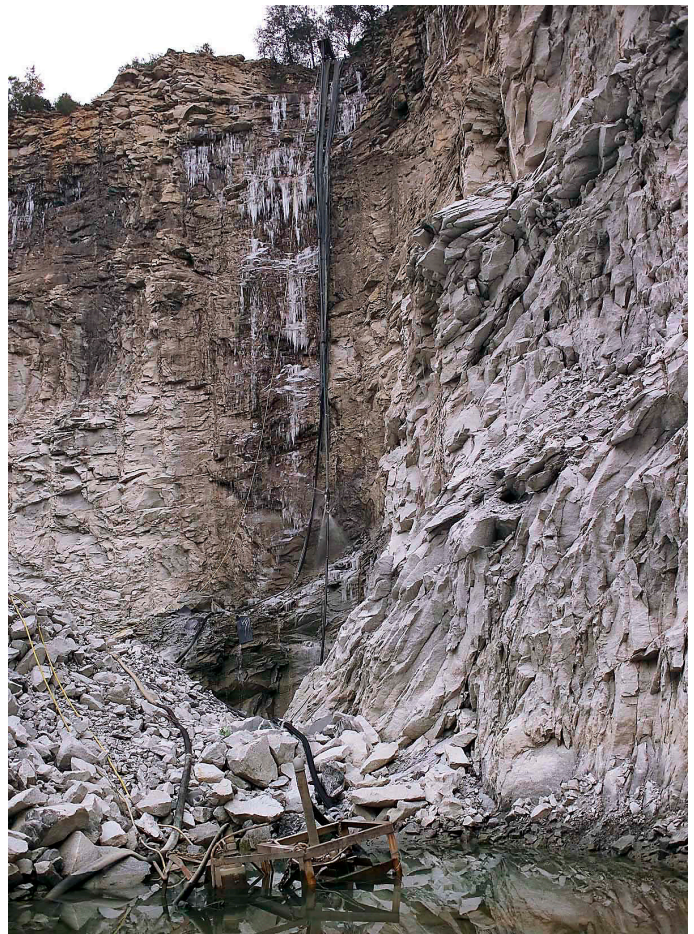
The Pump People®

Oconee County Quarry, outside of Walhalla, South Carolina, is a county-owned rock quarry, providing more than 2,500 tons of a variety of crushed rock daily for county needs as well as for contractors and the general public. If rainwater and runoff from nearby springs are allowed to collect in the quarry, operations slow down or even stop, making water removal a constant necessity.

Since digging began in 1979, Oconee County had relied on a single S4D1 10 HP electric submersible pump to keep the water out the bottom of the quarry. In periods of heavy rains, the quarry utilized two side-by-side pumps to keep the water at a manageable level and the digging operation ongoing.

At the time, the pumps were initially placed at the quarry's lowest point, a natural gathering area for water. The walls were 75' high and a 10 HP pump was adequate to drive water out of the site. Water was pumped up the side of the quarry through a 4" line and sent another 50' to a retaining pond on county grounds. As the quarry grew deeper, the walls climbed higher. The two 10 HP pumps were still strong tools, but the distance was affecting efficiency of the water withdrawal and subsequently, level of water in the quarry.

Oconee County Quarry Foreman Mickey Kerr found



The new 65 HP submersible pumps can more efficiently move water up the 200' cliff and another 100' to the retaining pond.

that the pumps were straining to pump water the additional distance. "The older pumps were still working well, but the effectiveness of pumping the water up the steeper walls was not as strong

as it had been in the past due to the added vertical distance,” said Kerr. Technicians at Oconee County Quarry were pleased with the performance of the original Gorman-Rupp 10 HP pump, so they turned to Gorman-Rupp to provide a solution for their ever-deepening rock quarry. Through their experience with the existing pump, and after additional research, Kerr knew he could count on Gorman-Rupp pumps to hold up to the rigors of a dusty, demanding and constantly changing quarry.

“As we went deeper into this quarry, we had to step up our pump size to get the task accomplished,” said Kerr. “To get the job done right, we decided on a pair of Gorman-Rupp’s 65 HP electric submersible pumps to replace the two 10 HP pumps.” The pumps, located in the customer’s pit in a sump hole at the base of now a 200’ high wall, are both attached to float switches that power up the pumps when the water reaches a certain level. The 65 HP S Series pumps easily transmit water the 300 total feet, with more than 200’ being straight up the wall. Furthermore, bigger pumps have benefited the county by pumping more water out of the quarry, lowering the customer’s overall operating costs and allowing them to dig deeper without having to invest in additional pumps in the near future.



Gorman-Rupp S Series Widebase submersible pumps offer high-volume operation, heads up to 600’ and stand up to the most demanding conditions.

Kerr selected electric pumps to allow water to be pumped anytime of the day or night, and to reallocate a worker who would be responsible for refueling diesel engines. “Being a county-owned entity, we had to stay within a budget, while also finding the most effective manner in which to keep the water at a low level. The electric pumps best suited our needs. More water is now pumped faster than ever before.

The majority of the water is sent to a retaining pond on county property, but Kerr also utilizes the water for several applications throughout the quarry. “In a mining situation, having a water truck is a must. We fill the truck with water daily and continually spray water on the roads leading into and out of the quarry to keep the dust to a minimum. We are also in the process of filtering the water in order to use it to cool the oil pumps that are used in our rock crushing operation.”

Additionally, Kerr understood that by choosing Gorman-Rupp pumps, uptime would be maximized. Today, 18 Oconee County employees are involved in the quarry operation to handle any problems and keep this county enterprise efficient. “Another reason we chose these pumps is the service we’ve gotten from our distributor, Interstate Equipment,” Kerr said. “Interstate has helped us get more than 15 years of operation from our first 10 HP pump and they are very attentive when it comes to getting parts or service for all of the pumps used here at the quarry. Interstate also helped train our staff to obtain the most out of the new 65 HP pumps for years to come.”

About The Gorman-Rupp Company

The Gorman-Rupp Company is a leading manufacturer of pumps and pumping systems for the municipal, water, wastewater, sewage, industrial, construction, petroleum and OEM markets. The company’s Engineered Systems operation also manufactures a full line of water pressure booster stations including pumps, motors, valves and controls – all housed in weather-proof fiberglass enclosures – meeting about any municipal water supply need.

Ultimately, Gorman-Rupp prides itself on manufacturing and delivering the right pump for the job.



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