

Aggregate operations require equipment that can perform well during high-volume production and also withstand dirt, dust and corrosive conditions.

That is certainly the situation at Edwards Sand & Stone where the sixdecade-old company produces construction aggregate for customers in its market area near its main quarry in South Sterling, Pa.

Moving crushed sandstone out of the quarry's surge tunnel requires the use of two Eriez Model 75B vibratory feeders that are positioned over a belt conveyor feeding the secondary plant. The units function as surge pile discharge feeders and meter minus 2 ¾-in. stone to an inline belt conveyor. The 75B vibratory feeder has a feeding capacity of up to 350 tons (315 mt) per hour, 20 percent greater feeding capacity than previous Eriez models.

According to Eriez, with its precise control of this feed rate it is ideal for use in proportioning aggregates and other materials. Fine or coarse, large or small bulk materials are fed equally well. Capacity is based on 30×48 -in. $(762 \times 1219$ -mm) tray properly installed with skirtboards.

Other specs include:

Power Supply: 115V, 230V, 460V

- or 575V; 50-60 Cycles, Single Phase.
- Full Load Power Input: 15 Amp at 230V
- Weight: 1,575 lb. (714 kg)

The Edwards sandstone quarry sits on 238 acres and has been in operation for about 25 years, according to President George Edwards Jr., the son of the company's founder. "My dad started the company back in the 1950s and we now have 30 employees," he said. "We have developed a strong customer base and attribute our 65-year success to a quality product and superior service."

The South Sterling sandstone quarry,



which produces 750,000 tpy, has about 80 years left in reserves, according to Edwards.

The Pennsylvania Department of Transportation, along with county and local municipalities, are prime users of Edwards' aggregate products. Material produced at the quarry also provides aggregate for Edwards Concrete, a subsidiary company producing ready-mix concrete.

Feeders Run Continuously

"We have one 20-year-old Eriez feeder and another feeder that was installed just recently," Edwards said. "The feeders run five days a week, about eight to nine hours per day, both feeding onto the same conveyor belt with the crushed stone. We can crush stone at the rate of 500 tph and run the feeders at 300 tph. We have the ability to regulate how many tons per hour we can run on the belt."

Benefits of the 75B vibratory feeders include their low profile and the lack of space they take up in the tunnel, giving employees more room to work, according to Edwards. The heavy duty 75B vibratory feeders work well in the tunnel's harsh environment because of their electro-permanent magnet drive design.

The feeders have no rotating parts such as shafts, cams or bearings, thus eliminating the need for lubrication. The advanced AC feeders can be wired to any AC line and do not require a control to operate.





The units function as surge pile discharge feeders and meter minus 2 \(\frac{3}{4} - in. \) stone to an inline belt conveyor.

75B Series standard units operate at temperatures up to 135 F (57 C). The high-temperature units are available for temperatures up to 300 F (150 C).

Relying on Past Knowledge

Edwards explains that he re-engaged with Eriez representative Tom Brittain of PennQuip in Muncy, Pa., when the time was right to purchase the new feeder.

"I've been around this business since 1968 and you build confidence in the people you deal with. They know your needs and know the industry," he said. "We bought an Eriez feeder from them many years ago and purchased the new feeder based on their direction. They have always treated us right." *

