

Anderson Columbia Benefits from Reliability and Versatility of McLanahan Feeders and Impact Crushers



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Daniel Barrs
Plant Manager

Anderson Columbia was founded in 1958 by Joe Anderson as a construction-based company in Dixie County, Florida, and has since grown to one of the largest vertically integrated highway construction firms in the southeastern United States. They operate multiple aggregate and asphalt plants in Florida and Texas, and then construct roads, bridges and airport runways with their high-quality material.

Challenge

Anderson Columbia expanded to the New Braunfels, Texas, area in 2016 to help meet the infrastructure demands for the rapidly growing corridor between San Antonio and Austin. They started at a greenfield site mining limestone with a portable processing plant but soon found it wasn't going to be able to meet the demands for the booming area.

An additional challenge facing Anderson Columbia was the amount of heavy clays in the Balcones Fault in which they were mining. Clay can wreak havoc on processing equipment, so they needed a solution that could handle this material without too much wear and tear and without slowing down production.

Solution

Anderson Columbia reached out to ROMCO, McLanahan's dry processing dealer in Texas, and McLanahan to see what equipment would best help them deal with the heavy clays while also allowing them to follow the veins throughout the quarry until they can get to a more stationary location.

After a material analysis from McLanahan's in-house lab and working closely with the McLanahan and ROMCO teams, Anderson Columbia installed a McLanahan Portable MaxCap 600 Primary Impact Crusher for their primary crushing plant.

“We've got quite a bit of places that we want to get into here, so we went with a portable primary at the moment so we can follow the face as we progress into the mine itself,” explained Daniel Barrs, Plant Manager of the Tejas Quarry in New Braunfels. “Being such a new mine site, it gives us more flexibility and doesn't choke us down to one individual spot.”



To feed the MaxCap and round out the portable primary plant, Anderson Columbia installed a unique configuration of an Apron Feeder, referred to as a Texas-style apron, and a Wobbler Feeder. The Apron Feeder accepts bucketloads of quarry shot material and conveys it to a Wobbler Feeder. The Wobbler Feeder is able to scalp out some of the clay before it enters the MaxCap Impact Crusher.

The MaxCap and Wobbler Feeder were installed on a five-axle chassis and the Apron Feeder was installed on a separate quad-axle chassis for ease of movement around the site.

For their secondary crushing plant, Anderson Columbia installed two McLanahan Universal NGS Secondary Impact Crushers. Both impactors were optioned with a third curtain to provide additional material size reduction and to eliminate the need for a tertiary crushing circuit.

Results

Since startup, the McLanahan crushers and feeders have been an asset to Anderson Columbia's limestone production at the Tejas Quarry. On the primary side, Barrs said the McLanahan Wobbler Feeder was a good choice.

"You have a wide variety of options you can do with a Wobbler Feeder, especially with the clay," Barrs said. "Your buildup is minimal and you're able to keep a good continuous run on average."

He added that maintenance on the Wobbler Feeder has been minimal.

"Everything has been really sufficient in keeping our production rate at what we need it at," said Barrs.

Anderson Columbia has also been pleased with the MaxCap Primary Impactor.

"The MaxCap has been pretty bulletproof throughout this whole process," Barrs shared. "From the longevity standpoint, especially in the geology we're in right now, it's been a key asset."

On the secondary side, Barrs said they've been really impressed with the McLanahan NGS Impactors.

"It helped take the place of a VSI or cone or something like that to get the actual sizing and cubicity that we need for a lot of our HMA and ASTM products," Barrs said. "By having that third curtain, and the availability to move it back and forth and get it dialed in the way we want it, we're able to get a lot more longevity out of the secondary process with a lot less maintenance involved."

"With the third curtain, it allows you more options to change your final product size, so you're going with two crushers versus a tertiary circuit, so you have less equipment involved in the whole process, which keeps your bottom line where it needs to be," said Barrs.

The ability to fine-tune the McLanahan crushers and feeders to meet their needs and the reliability of the machines in general are two of the things Barrs likes most about the McLanahan equipment.

"My favorite part about the McLanahan system is going to be the longevity and versatility of their products," said Barrs. "We've had tremendous success on the wear life of blow bars. The bearings have held up excellently. Also, parts have been really easy to find, or on the shelf at ROMCO or McLanahan themselves being able to keep everything in stock for us. Especially right now in the climate we're in, it's been a huge advantage."

