McLanahan.

Compass Minerals Meets Production Goals with McLanahan Apron Feeders, DDC-Sizers



Dirk Bleazard Compass Minerals Compass Minerals produces salt, magnesium chloride, sulfate of potash and other plant nutrition products to serve a variety of agricultural, industrial and commercial applications. They operate 21 production and packaging facilities throughout North America, Brazil and the United Kingdom, and is the largest producer of sulfate of potash in the Western Hemisphere and the only U.S. producer of magnesium chloride in North America.

Compass Minerals uses mining, solar evaporation and mechanical evaporation to produce their minerals. Specifically at their site in Ogden, Utah, which Compass Minerals acquired in 1993, they have 55,000 acres of solar evaporation ponds. They draw on the saline waters from the Great Salt Lake to produce salt, sulfate of potash and magnesium chloride.

Challenge

Seeking to replace failing vibratory feeders and sizers with new equipment to process their raw sulfate of potash material at their Ogden site, Compass Minerals required that the new equipment fit into an existing underground structure.

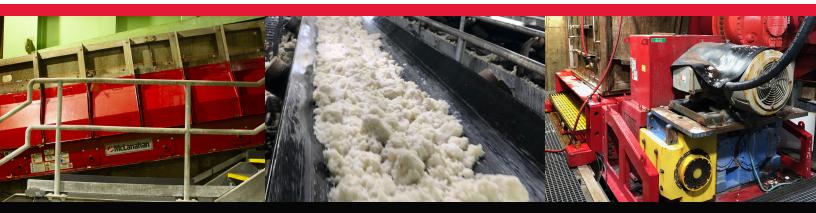
"The equipment had to fit in a very, very small area," said Dirk Bleazard, Maintenance and Reliability Manager at Compass Minerals.

Not only was it imperative that the new equipment fit into Compass Minerals' existing structure, but it had to be reliable so that Compass Minerals could meet their production goals. The equipment had to withstand the wet, corrosive properties of the feed material, as well as highly variable conditions.

"One hundred percent of the feed going into the plant must go through this equipment, so reliability is key to keeping the plant rate at the levels we need to meet our production goals," Bleazard explained.

Solution

McLanahan offered a solution that would meet Compass Minerals' site specifications, production goals and reliability requirements. They installed two Apron Feeders that accept run of pond material from a



hopper and meter it to individual DDC-Sizers, which break the material down in preparation for processing in other parts of Compass Minerals' plant.

The Apron Feeders and DDC-Sizers fit perfectly into Compass Minerals' existing structure and provide continuous reliability to the rest of the plant.

"McLanahan has done a great job in partnering with us in designing this system," said Bleazard. "They worked with third parties to identify complementary equipment that fit into the existing structure and also has the same level of reliability as the rest of the package. All those components came together nicely, and the system really came online with very, very little problems from the inception."

Prior to commissioning, McLanahan technicians held equipment training sessions with Compass Minerals' maintenance and operations personnel to assist them with the pre-commissioning process and provide them with operational knowledge of the machines.

"The training we received on the McLanahan equipment gave us a firm understanding of how it operated and how, if needed, we'd have to work to repair it," explained Todd Patterson, Commissioning Manager at Compass Minerals.

Results

With the McLanahan Apron Feeders and DDC-Sizers, Compass Minerals has been able to meet their production goals.

"Since we've started them up, they've been extremely reliable," said Senior Process Engineer Brady Montgomery. "We haven't run into a situation in which they've prevented us from producing. They've only needed the general maintenance, and we've been able to do that during our scheduled downtimes."

Besides being reliable, low-maintenance machines, the McLanahan Apron Feeders and DDC-Sizers and associated equipment operate cleaner than the feeders and sizers Compass Minerals had in the past.

"It's been very well designed and assembled in the entire package and has created a system that has allowed us to dramatically diminish the amount of cleanup and housekeeping required to keep the equipment in operation," Bleazard added.

Compass Minerals has also benefited from the continued relationship with McLanahan, who offers service and support for the lifetime of their equipment.

"We've had an ongoing relationship with our McLanahan salesman. He checks in with us every few months to make sure the equipment is still operating as desired," said Patterson. "With the ongoing relationship, we know that help to repair the equipment or deal with issues is a phone call away."

SCAN TO SEE VIDEO



