SCREENING RED GRANULAR POTASH



Design Requirements

Product Type: Red Granular Potash

Capacity: 1,000 Metric tons per hour

Duty: Continous

Model: 8' W x 10' L, 10-Deck, P/QC

Customer Challenge

A current customer, who is one of the worlds largest potash producers, contacted Triple/S Dynamics looking for a vibrating screen to be installed in a new tower to screen 1,000 metric tons of potash per hour to perform a final load out screen prior to shipping the final product. The new vibrating screen would be installed beside their existing Texas Shaker screen with a current capacity of 750 tons per hour, as they both would work in parallel with the chute of a feeding belt conveyor dispatching the product to a splitter which will distribute the product to both screens based on their capacities.

Triple/S Solution

Triple/S Dynamics Engineering team and Product Manager for Screening and Separating Equipment went to work to develop a solution for our customer and designed one of the first Texas Shakers of this size and capacity, Model P/QC, 8'x 10', 10-deck, with a Feeder Spreader module that allows the product to spread the complete width of the screens prior to screening, maximizing the efficiency of the screens and a grizzly to scalp off any larger material. The grizzly is after the spreader feeder and before the 10 parallel screens and creates an 11th deck. The majority of the potash will go across one of the ten 2mm screens that are working in parallel.

The Texas Shaker Screeners space-saving multi-deck flexibility is a powerful advantage in its productivity both per unit of volume occupied, and installed cost per ton-hour of throughput. This quick-change (QC) model, utilizes a lift off-discharge module for easy access to all ten individual screen decks for inspection, maintenance or changing. All screen decks are self-cleaning, equipped with polyurethane balls for deblinding. Screen cloth, mounted on 4' x 5' steel frames, is stainless steel. Triple/S Dynamics also utilized AR steel for all wear surfaces to increase the longevity of those sufaces that experience corrosion. All Texas Shaker models are fully dust enclosed, with integral feed inlet boxes and discharge spouts.

Triple/S and the Customer

This potash producer has a total of four Texas Shakers with their first unit purchased in 2004. The latest Texas Shaker Screener for this customer is one of the largest built to date, weighing in at over 50,000 pounds, standing over 22 feet tall, with capacity rates of 1,000 metric tons per hour. With the addition of this Texas Shaker, our customers capacity rates now total 3, 250 metric tons per hour.

