"...for the bulk materials handling professional"

Vol. 13 - No. 536 September 12, 2011 ISSN: 1526-9051 Copyright 1998-2011

In the News

Olds Elevator: MnO2 Powder Handling for Brick Maker



Hudson, NH -- Olds Elevator LLC, a manufacturer of bulk material elevators, recently helped a major U.S. brick maker solve a Manganese Dioxide handling problem at one of their plants.

A leading U.S. brick maker sought to replace an existing bulk material elevator used to refill a Loss in Weight (LIW) feeder with Manganese Dioxide (MnO2), a fine-grained (200 mesh) powder. Many similar fine grained materials like lime, cement, fly ash and gypsum are susceptible to excessive aeration and a dramatic reduction from normal bulk density to a much lighter apparent bulk density.

When this happens materials can flow like water and interfere with flow dependent processing. In the case of the brick maker their existing aero-mechanical conveyor caused excessive aeration of the MnO2 which interfered with the operation of the LIW feeder. The MnO2 leaked out of the LIW hopper compromising gravimetric flow rate control. The customer required a minimum flow rate equivalent to 28,000 lbs/hr of MnO2 to a height of 15 feet. The elevator would be used only for short duration runs while refilling the LIW feeder.

Olds Elevator tested samples of the customer's MnO2 in the Olds lab and designed and built a 10-inch diameter, rotating casing-static screw to gently lift the powder without aeration. The elevator was installed and put into service. The problem with aeration was eliminated and the LIW feeder is refilled with 200 lbs of MnO2 in 10 seconds (a rate of 72,000 lbs/hr). The customer's LIW feeder is now working according to its original design criteria.

About Olds Elevator

The patented Olds elevator was invented as an alternative to complex bucket elevators and expensive pneumatic conveyors. It is manufactured in the USA and overseas and is used in a wide range of powder and bilk material applications. It utilizes a static screw and a rotating casing to elevate a broad range of bulk granular and powdered materials at 90c. Intake scoops at the base of the rotating casing feed material into the elevator where it is gently elevated by the action of the rotating casing. Olds elevators operate in fully-flooded mode preventing the formation of dust during elevation. They also are accurate volumetric feeders and can deliver material at any rotational speed above zero RPM.

Source: http://www.oldsusa.com/

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From the editor

Hi Everyone,

For those of you who noticed, please accept our apologies for our web site being down part of last week. The floods in Pennsylvania caused by Tropical Storm Lee took down the network facility that houses our server "cloud". Service was out for 3 days and only came back online last Saturday.

With over 10,000+ subscribers, our goal is to provide information to improve your business by using the resources available on the Internet.

Very Truly Yours, Joe Taylor, Editor jtaylor@powderandbulk.com

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