

B. W. SINCLAIR INFORMATION UPDATE

STAINLESS STEEL BAR-FLIGHT DRAG CONVEYORS FEED DEWATERED SLUDGE

An international chemicals manufacturer recently acquired four industrial filter cake-handling systems from SINCLAIR for one of their domestic plants. The conveyors handling a corrosive, adhesive sludge cake that drops from a series of large plate-and-frame filter presses.

The cakes fall sequentially as the vacuum is released from the frames, and the slabs, 4" thick x 4'-0" square, cascade onto the deck of the drag conveyors.



Each unit is fitted with integral splash panels to shroud the area between the conveyor deck and the overhead press. The panels and the conveyor trough pan are fabricated from AISI-316LSS to combat corrosion and promote material release.

The conveyor flights are manufactured from 1" thick UHMW-PE for abrasion and corrosion resistance, and they are attached with stainless brackets and stiffeners to twin strands of heavy-duty welded and heat-treated engineering class conveying chain. The top or return strand of flights is supported on formed stainless slide rails full length. Bolted access and cleanout panels line the trough pan to allow inspection and maintenance.

The sludge cakes fall through the return strand of flights and onto the bottom of the trough pan, where the carrying strand sweeps the product to the discharge spout.

The material is then transferred through UHMW-PE-lined chutes to inclined belt conveyors (also furnished by SINCLAIR but not shown in these photos) that stockpile the material for later processing.



Hip-roof peaked lids cover the portions of the conveyors not beneath the presses. This provides a total enclosure that also sheds rain and snow. Such an enclosure was critical to the customer to insure operator safety and product integrity.

A 20 HP slow-speed drive module powers each conveyor through Reliance Electric™ premium-efficiency motors and Falk FZ™ helical concentric shaft gear reduction units. All shaft support bearings are tapered or spherical roller units.



Industrial sludge handling ... another area of applications expertise for B. W. SINCLAIR.

B. W. SINCLAIR, INC.

P. O. Box 1111 Wichita Falls TX 76307-1111 USA

www.bwsinclair.com 940-766-2556 voice 940-766-0430 fax sales@bwsinclair.com