Sludge Conveyor Systems



Sludge conveyor control panels operate lifting, horizontal and transverse conveyors to lift and transport de-watered sludge to sludge hoppers, haulers, or solar drying beds. Our PLC based controls fill the hoppers evenly from front to back using pneumatic gates and ultrasonic level transducers. Operators use the HMI touch screen to select hopper / hauler truck size, level to fill to and which bay truck is located. Operator can also select "solar" and the sludge will be conveyed to the drying beds where dried by the sun's rays.

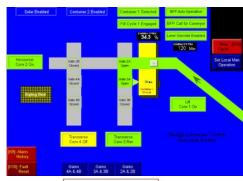
Sludge Conveyor in Operation



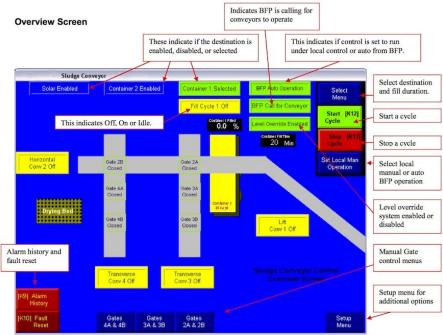
This control panel is designed to transfer sludge from the Belt Filter Press BFP to either one of two containers or to the outside drying bed. Sludge is lifted to the horizontal conveyor by Lift Conveyor 1. The Horizontal Conveyor 2 transfers the sludge to either Transverse Conveyor 3 or Transverse Conveyor 4 or outside to the solar drying bed. Gates control the location the sludge is dropped. Manual control of the gates

is provided through the touch screen.

The operator selects a destination, either Container 1, Container 2 or Solar. The operator can also select the size of the container (20 cu yd or 32 cu yd). Once destination is selected the operator selects a filling time (not applicable for Solar) and presses the cycle start button. The conveyors will then start whenever the BFP is operating.



To the left is a descriptive view of the complete system. Various pop-up screens allow the operator to make changes to the operation. The alarm screen will pop up when any alarm occurs and provides a history of the previous alarm conditions. This screen provides information for the complete system. Conveyor condition (On, Off, Forward, Reverse, Faulted) gate condition (Opened, Closed, Faulted), material flow, containers selected, fill time, pile height, condition of BFP, cycle status, and alarms.



Conveyor and Container Loading area view



Outside view of Conveyor Exit to the Drying Bed

