MudMax™
Bed-Level Monitoring System
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The patented MudMax bed-level monitoring instrument uses advanced technology to bring thickener control within reach. Industry has been looking for a suitable solution to the control issue, and WesTech experts have engineered it.

Maintaining the proper bed level is a critical element of control. When the bed level is too high, solids spill over into the launder. Low bed levels can result in significant water loss after only a few days of operation.

Controlling your system at a steady state dramatically improves thickener operation, producing consistent underflow density and allowing for optimized flocculant dosage.

Benefits

- Continuous monitoring and reliability
  - Predictable operations
- Cost savings
  - Water recovery
  - Lower flocculent usage
  - Fewer labor hours
- Automated operation
  - Convenient
  - No human error

Applications

- Retrofits
- Thickeners
- CCD circuits
- Clarifiers
- Water treatment

An Advancement in Thickener Control

MudMax directly measures the bed level with sensors located in the operating zone of the thickener sludge bed. MudMax is attached to the thickener rake arm and provides full 360-degree measurement of the bed by measuring the drag of the compacting solids as the rake moves around. Bed level is then calculated, accurately identifying the mud level. With WesTech’s advanced design, the bed is tracked over a wide range of operating conditions and levels.
MudMax Operation

1. With the MudMax mounted to the thickener arm, data is collected as sensors move through the sludge bed.

2. Data is transmitted to a receiver mounted on the thickener bridge.

3. Data is correlated to accurately determine bed depth and transmitted to the customer’s distributed control system (DCS), which can then provide automated control based on accurate, reliable data.

4. The MudMax can relay real-time data to a variety of platforms and systems, depending on plant needs.

Features

- **Retrofit on any thickener**: offers a variety of models and may be customized to retrofit on nearly all types of tanks
- **Direct measurement**: measures the bed level through direct contact with the settled solids
- **Continuous monitoring**: takes readings continuously and converts them into a bed level, providing a real-time view of the bed level height
- **Low maintenance**: requires only yearly maintenance to check sensors and change the battery
- **Full 360-degree bed measurement**: secures instrument to a rake arm so readings are taken as it revolves around the tank
- **Accurate measurements**: uses multiple sensors to extrapolate an accurate measurement of the bed level
- **Automated tank operation**: supplies a 4–20 milliamp output signal corresponding to the bed level; discharge rates can be automated for worry-free operation

The WesTech Advantage: For more than 45 years, WesTech Engineering has been helping mines and processing plants thicken concentrates, recover water, and prepare tailings for disposal. WesTech prides itself on a complete dedication to customer service that is backed by knowledgeable experts and years of experience.

We are process experts providing innovative and customized solutions for the minerals market.