Product datasheet

Intelliplate™

Our IntelliPlate system automatically senses and locates any solids breach in your filter in-plate cloth. Operators can now increase their productivity by improving their solid/liquid separation systems with our advanced in-plate technology.

Key benefits

**Improved plate life**
IntelliPlate senses, locates, and alerts the operator of a solids breach in the filter media before damage to the filter plate can occur, effectively increasing your plate life. As solids pass through holes in the filter media, high liquid and air velocities can occur resulting in plate erosion and premature plate failure. IntelliPlate alerts the operator to holes in the filter media and identifies which plates, thus maximizing plate life.

**Reduced unplanned downtime**
Filter media life is finite. Current best practice is to replace the filter cloth well below the threshold of maximum life in order to prevent failures prior to planned maintenance. The IntelliPlate system provides the ability to operate filter media to the full life of each cloth while reducing the risk of unplanned maintenance. IntelliPlate also mitigates downtime by pinpointing cloth failure with an indicator light.
Intelliplate™ - Turbidity-detecting plate alarm system

Advantages
- Reduced unplanned downtime and improved availability
- Longer plate and filter cloth life
- Powerful tool for analytics – diagnose and predict cloth life
- Retrofittable on existing FLS filters
- Sensor, wireless communication, and LED alarm – self-contained, independently powered and plate-mounted
- Unit is self-calibrating with onboard processor and custom algorithm

How it works
A sensor is located in the filtrate port of each filter plate. As the operating filter progresses through the cycle, IntelliPlate continually maps filtrate turbidity.

We establish a tuned algorithm for your normal operational parameters, with upper and lower limits adjusted per filter cycle. If a filter cloth develops a hole or leak that allows solids to enter the liquid filtrate, the solids will pass the port with the mounted sensor. If the solids ratio exceeds the established threshold an alarm will trigger, and the operator can quickly identify the specific filter plate with the failed filter media.

Applications
- Tailings
- Base metal concentrates
- Coal

Models
- AFP – M1500, M2020, M2040, M3050
- AFP LC – M1500, M2020
- Shriver – M1500, M2015, M2020

Sensor and indicator of the IntelliPlate system

Filtration cycle

Close filter press Filtration Core blow/ wash Air blow Open filter press/ media wash Start next cycle

Normal operation signal
Breached operation signal
Failure detection limit
Sensor detects a failure and indicator unit flashes red

Sensor

Indicator unit

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