

# UPFLOW / CONTACT CLARIFIER

## Blanket Level Control with BinMinder 9300™

### ELIMINATE

Accidental Solids Discharge

### AUTOMATE

Sludge "Blow Down" Cycle

### OPTIMIZE

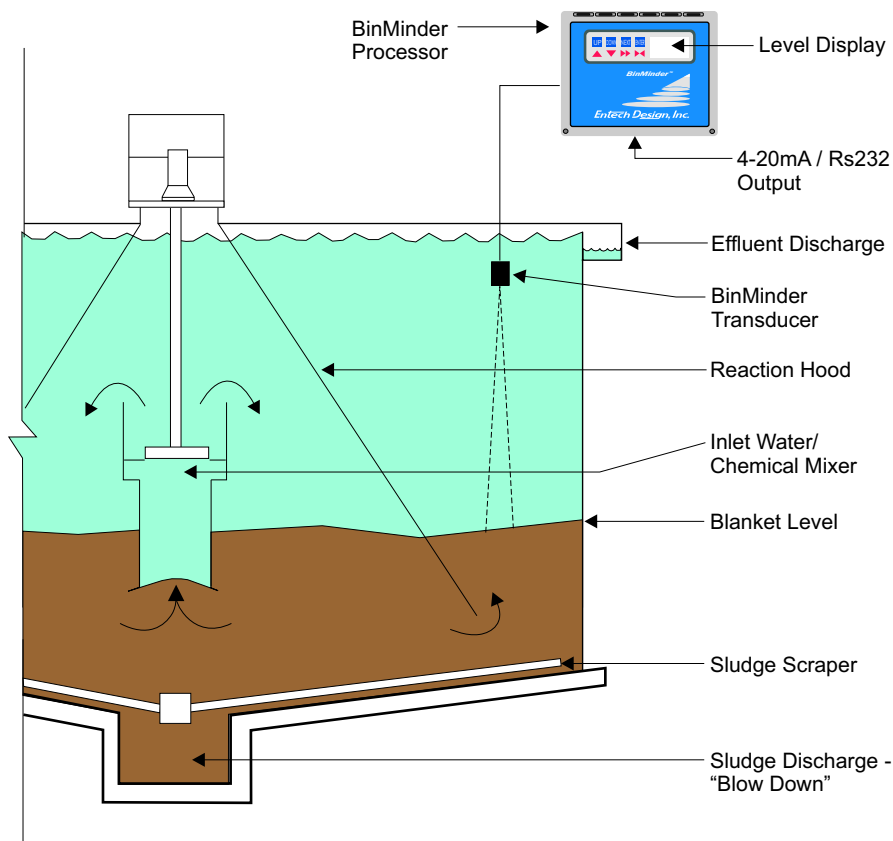
Clarifier Efficiency

### REDUCE

Chemical Usage

### PROTECT

Rakes & Pumps



#### Application

Many industrial plants secure water from a local ground water source and send it through a reactor clarifier prior to introduction into their process. Flocculates and polymers are introduced to promote settling of solids and combine with solids to form a filtration blanket.

#### Process Control

Clarifier efficiency is affected by blanket level. If the blanket recedes below the bottom of the reactor hood, intake is not filtered through the blanket. If the blanket is allowed to rise unabated, solids are discharged as effluent. There may also be implications with regard to determining optimal dosages of chemicals to be applied. Additionally, weather and other environmental conditions that disturb the surface water source may result in an upset condition and loss of process control. As a result, operators monitor levels regularly to assess clarifier functioning and determine "blow-down" requirements. Blow down is the process of rapidly discharging settled solids to return the blanket to the desired level.

#### Common Measurement Technique

Historically, dependable and cost-effective instrumentation designed to provide continuous control point data has not been available. Operators have relied on visual inspection or the use of relatively crude sampling devices to secure intermittent approximations of blanket levels.

#### BinMinder 9300

BinMinder 9300 employs sophisticated industrial sonar instrumentation and state of the art signal processing and tracking software to provide dependable monitoring of blanket levels in upflow / contact clarifiers.

Standard 4-20mA, contact relay and RS232/485 serial signals offer the advantage of convenient, continuous and reliable blanket level monitoring at remote locations and may be used for integration with existing plant control systems. Backlit LCD on touchscreen panel is included for local monitoring and complete system operation.

**Entech Design, Inc.**

...visit our website at <http://www.sludgelevel.com>

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