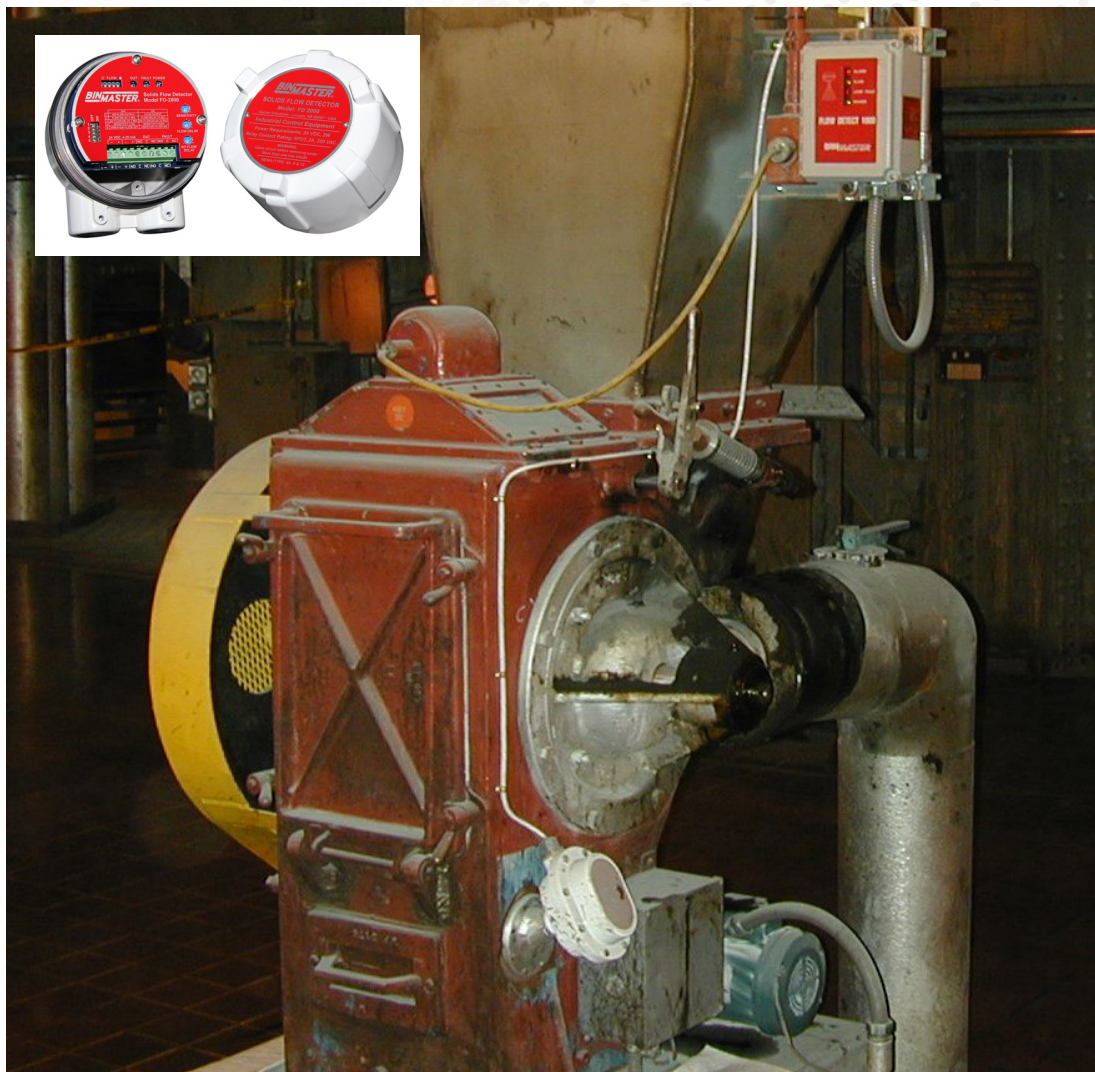


# TINY FLOW TRICKLES DETECTED

From PowderBulk.com

**Prevent Contamination or comply with FMSA**

Many powder and bulks solids are known to be erratic in storage. Sometimes they flow freely, sometimes not. Slide gates, at times, are supposed to be closed, but are not, allowing material to escape. Feeders and conveyors should deliver material into a process, but how do you know for sure? Flow or no flow indicators can help.



## PREVENT CONTAMINATION, COMPLY WITH FSMA

Many powder and bulk solids are known to be erratic in storage. Sometimes they flow freely, sometimes not. Slide gates, at times, are supposed to be closed, but are not, allowing material to escape. Feeders and conveyors should deliver material into a process, but how do you know for sure?

Flow or no flow indicators can help.

The BinMaster single-piece Flow Detect 2000 is a flow/no flow detector that houses the sensing element, power and output connections, and user adjustment controls in a single NEMA 4X enclosure.

This compact sensor helps prevent contamination ensuring flow has stopped before a new material is introduced into the flow stream. It's ideal for detecting flow conditions of solids and powders in gravity chutes, feeders, pipelines, conveyor belts, or bucket elevators. It prevents downtime caused by blockages, conveyors running empty, no material flow to-and-from a process, or loose slide gates that can cause production loss and equipment failure.

Flow Detect 2000 works for feed, grain, milling, food, cement, mining, powder and plastics.. It's appropriate for solids granules, pellets, meals, and powdered materials.

The Flow Detect 2000 can help prevent potentially dangerous and expensive FSMA, USDA or FDA compliance issues at facilities producing food for human or animal consumption. Optional North American Class II, Division I Groups E, F, & G, and ATEX Zone 21 hazardous location approvals are available for operations requiring optional protection from explosive dust.

This flow/no flow device is very popular with livestock feed manufacturers who want to ensure that only specific feed additives are added to certain blends of commercial feeds. Additives that are safe for one species are not necessarily beneficial or could potentially be dangerous to another species.

If a mistake is made, it could be harmful to animals and could result in USDA fines. The Flow Detect 2000 serves as a preventive control to reduce the risk of cross contamination and ensure the wrong ingredient is not entering the production process.



The Flow Detect 2000 installs easily through a 1-1/4" NPT opening. It is completely non-intrusive and does not come into contact with the flow stream. It uses microwave Doppler technology for highly sensitive motion detection which is able to pass through non-metallic materials.

This provides the device with the ability to see through a plastic pipe, a glass process seal, or the wall of a wooden chute to detect the material inside the encasement. It includes a switchable filter to reduce the effect of vibration and ensure the detection of moderate and fast-flowing materials. A single analog relay output communicates flow or no flow status to a PLC and has the option of using both normally open (NO) and normally closed (NC) contacts. LED indicator lights inform the end-user of the device's status.

### Know the Flow

- Be sure the ingredients intended for one process don't end up in another.
- Ensure that flow has stopped completely before beginning a dangerous and expensive FSMA, USDA or FDA new process
- Comply with regulations preventing cross contamination of ingredients.



Industry	Bulk Material	Sensors	Software	Applications
 Agriculture Farming Livestock	Grain Flour Beans Fertilizer Seed Liquids  Bins, silos, tanks, piles, domes	Rotary level indicator Capacitance probe Vibrating rods Diaphragm switch Tilt switch Radar SmartBob 3D sensors Ultrasonic Flow detector	BinCloud BinView AgriView Binventory FeedView 3D Multivision	Prevent overflows Process control Inventory management Remote monitoring Monitor piles Flow detection Bin aeration Dust detection Aeration Ag Chemical Storage
 Bioenergy	Corn DDG Biomass Wood pellets Wood fiber Forest residue  Bins, silos, tanks, piles, domes	Rotary level indicator Capacitance probe Vibrating rods Diaphragm switch Tilt switch Radar SmartBob 3D level scanner Ultrasonic Flow detector	BinCloud BinView Binventory 3D Multivision ResinView	Prevent overflows and outages Process control Inventory management Remote monitoring Flow detection Slurry tank detection Measure DDGS
 Cement	Sand Gravel Clinker Rock Powder  Bins, clinker silos, tanks, piles, domes, chutes, crushers	Rotary level indicator Capacitance probe Vibrating rods Diaphragm switch Tilt switch Radar SmartBob 3D level scanner Ultrasonic sensor Flow detector Plugged chute detector Airbrator Diffuser air pad	BinCloud BinView Binventory 3D Multivision CementView	Prevent overflows and outages Process control Inventory management Remote monitoring Monitor piles and bunkers Inventory domes Plugged chutes Measure crusher levels ESPs or clinker silos Prevent conveyor overloads Silo aeration
 Food processing	Brewing Foodstuffs Solids Slurries So much more...  Silos, mixers, batching tanks, conveyors, pipelines	Rotary level indicator Capacitance probe Vibrating rods Diaphragm switch Tilt switch Radar SmartBob 3D level scanner Ultrasonic sensor Flow detector Airbrator Diffuser air pad	BinCloud BinView AgriView Binventory 3D Multivision	Prevent overflows Inventory management Remote monitoring and VMI Process control Sanitary level measurement Detect levels in mix or slurry tank Detect levels on conveyors Flow detection Silo aeration
 Mining	Lump coal Ores Aggregates Fine alumina powder  Silos, crushers, conveyors, domes	Rotary level indicator Capacitance probe Vibrating rods Diaphragm switch Tilt switch Radar SmartBob 3D level scanner Ultrasonic sensor Flow detector Airbrator Diffuser air pad	BinCloud BinView Binventory 3D Multivision CementView	Inventory management Monitor piles Prevent overfills or outages Detecting plugged chutes Measuring inventory in domes Level measure in crushers or bins Prevent overloading Process tanks Remote monitoring Silo aeration Dust detection
 Plastics	Resins Flakes Powders Granules Regrind  Silos, bins, containers, hoppers, tanks	Rotary level indicator Capacitance probe Vibrating rods Diaphragm switch Tilt switch Radar SmartBob 3D level scanner Ultrasonic sensor Flow detector Airbrator Diffuser air pad	BinCloud BinView ResinView Binventory 3D Multivision	Prevent silo overflow Eliminate outages Inventory management Remote monitoring Vendor managed inventory Flow detection Bin Aeration Dust Detection