

FIVE STEPS TO SIMPLIFY SILO INVENTORY MONITORING

It takes just five basic components to design an inventory system for managing solids, powders, or liquids stored in bins, tanks, silos, and other storage vessels.

1

Select the right sensor type for your materials and processing environment.

What are the most common technologies?

- Non-Contact Radar
- 3D Level Scanners
- SmartBob
- Guided Wave Radar
- Ultrasonic
- Laser

2

Connect and network sensors to a control system or software.

Sensors must be able to communicate via a wired or wireless communication network. Wireless systems reduce the cost and complexity of installation using over-the-air communications.

Daisy chain: A wiring scheme that allows multiple sensors to be wired together in a sequence to reduce the amount of wiring needed.

Gateways: Sensors send level data to a gateway that uses LoRa (long range) communications to transmit data to a website application or software.

Wireless Systems: Wireless radios, bridges, and repeaters are used to span long distances without the use of expensive wiring.

3

Determine how you want to access your inventory data.

Consider the type of device you want to use, such as a phone, tablet, or PC. The locations and number of sites and vessels monitored. Whether employees are working at the plant or remotely.

- Directly into a PLC or HMI
- BinView® or FeedView®: Logging into website application
- Binventory™: Installing software on a local network
- Facilitate Vendor Managed Inventory

5

Use point level sensors to alert to high and low levels.

Eliminate material outages and prevent overfills using sensors that alert when vessels are almost empty or full. Get uninterrupted processing, improved margins, and increased outputs.

Select from these affordable sensors:

- Rotary
- Vibrating Rod
- Capacitance Probe
- Tilt Switch
- Diaphragm Switch

4

Provide convenient inventory access in real-time for plant personnel.

Save people time to make them more productive. Inventory at plants is often at a centralized location, such as a control room. Make real-time data easily accessible via a walk or drive up push-button console.

Digital Panel Meters

Compatible with all types of sensor outputs such as 4-20 mA or Modbus RTU. Large, ultrabright displays are readable in smoke, fog, or bright sunlight.

Control Consoles

Monitor up to 120 vessels with a single console. Display options for height of product, headroom, percentage full, and weight.

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