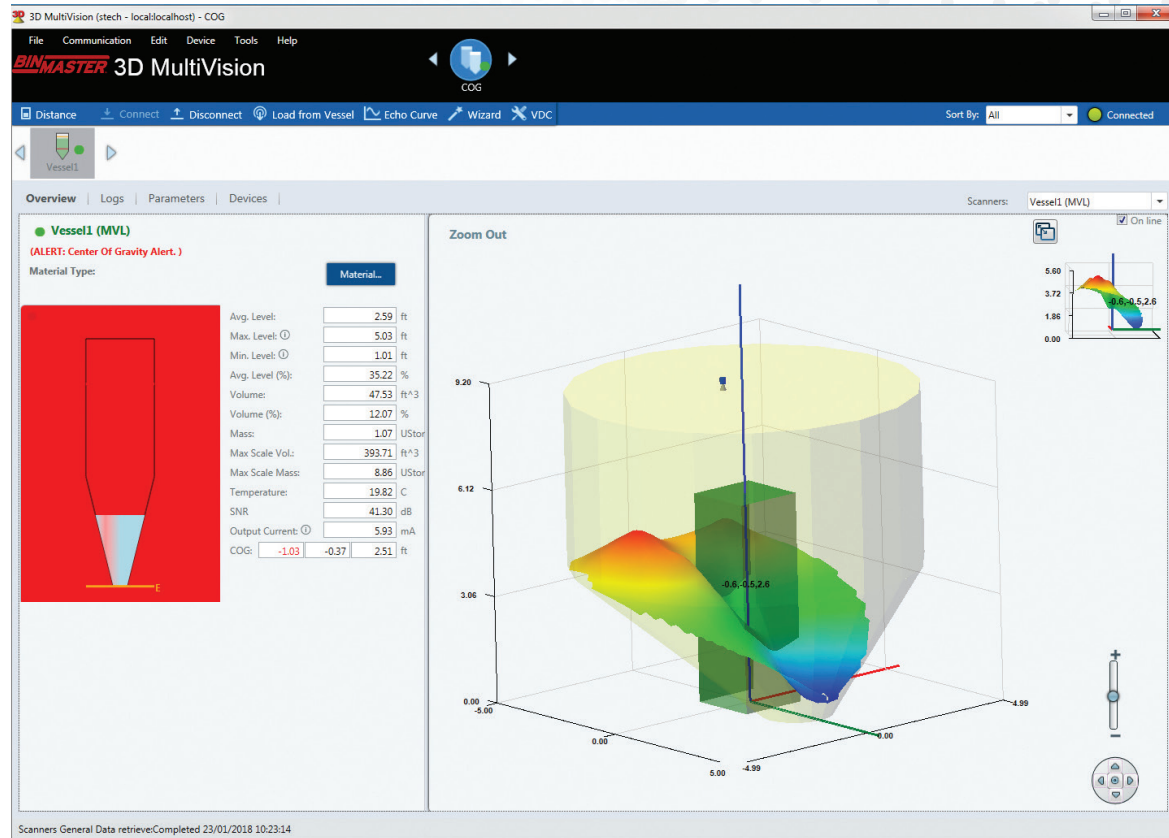
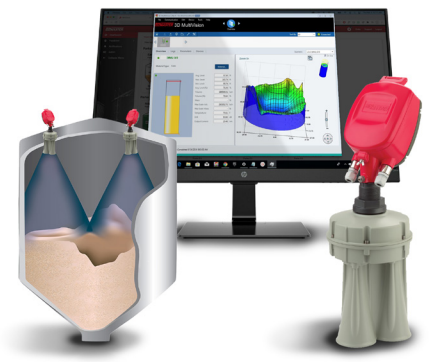




3D LEVELSENSORS FOR FOOD PROCESSING

The only sensor to measure and map the material surface, BinMaster's 3DLevelScanner sends pulses in a 70° beam angle, taking multiple level measurements and accounting for uneven surface topography in bins, tanks, and silos when calculating volume. Each sensor comes with 3DVision software that reports the lowest and highest points detected and the average level based upon a weighted average of all measurements in the bin.



3DLEVELSENSORS FOR FOOD PROCESSING

For more than a decade, 3DLevelScanners have been providing highly accurate level and volume measurement in challenging materials contained in bins, tanks, and silos. The only sensor to measure and map the material surface, it sends pulses in a 70° beam angle, taking multiple level measurements and accounting for uneven surface topography when calculating volume. 3DVision software takes sensor data and reports the level of material detected and reports on the average levels over time. For the MV and the MVL models, a colorful graphical representation indicates where high and low spots exist in the silo.

3D scanners keep pushing the boundaries – and addressing the concerns of increasingly complex food operations. This article shares a few of the newest innovations.

VIEW MULTIPLE SILOS ON A SINGLE SCREEN

[MultiVision software for inventory visibility across an organization](#)

Inventory management affects multiple departments across a food processing organization. Plant personnel need adequate inventory for production, purchasing needs to know what to order and when, and finance needs accurate valuation for financial statements. To provide corporate-wide visibility, the optional 3D MultiVision software enables users to view data for multiple bins in a single window. And since it is Windows-based, it can be configured for 24/7 access via an organization's Local Area Network (LAN)

MultiVision software can be used with all versions of the non-contact, dust penetrating 3DLevelScanner including the RL, S, M, MV and MVL models. By clicking on a single bin, users can zoom in on detailed information for the bin including minimum, maximum, and average levels. For the MV and MVL models, they can also see the 3D visualization of bin contents. The software allows multiple users at multiple locations to view bin level and volume data on a permissions basis.

3D MultiVision software makes it easy to share real-time bin data across the entire organization (or sending reports to vendors using VMI) to improve purchasing, logistics, operational decisions, and financial management. With user-friendly setup and intuitive operation, each user can customize their screen to view all bins or a group of bins and color-code bins by material type. Users can set high and low-level alerts to be notified when bins reach critical levels. Because the software is installed on the LAN, there are no third-party applications or data access fees.

DETECT AND ALERT TO CENTER OF GRAVITY DANGER

[Prevent silo collapse or damage using 3DLevelScanners](#)

Many powdered and solid substances used in food processing tend to clump, pile unevenly, and flow unpredictably from storage vessels. Not only does this make monitoring the volume of material inside the vessel challenging; uneven disbursement of material can also take its toll on the storage vessel itself.

SEGMENTED SILOS MEASURING AVAILABLE

[3DLevelScanner measures volume in wedge or pie-shaped silos](#)

Operations burdened with managing inventory in pie-shaped segments of silos can get accurate volume data—thanks to special firmware for the 3DLevelScanner acoustic sensor. The scanner measures and models the topography of material contained in these unusually-shaped wedges. The newest firmware then applies the measured distances to a 3D model of vessel dimensions and converts it to a highly accurate volume measurement.

RETURN ON INVESTMENT

Accurate data about dollar value of material on hand helps reduce safety stocks, increase inventory turns, and pay for itself by freeing up cash that could be tied up in inventory. Additionally, buildup on the outer perimeter of the silo or along on the walls can be detected, accounted for in inventory, and addressed by maintenance if needed. The same 3DLevel Scanner can be used for either segmented or round silos, making it a versatile choice over its long sensor life.



Using 3D Level Sensors to Solve the Toughest Food Storage Challenges

By BinMaster

For almost a decade, 3DLevelScanners have been providing highly accurate level and volume measurement in challenging materials contained in bins, tanks, and silos. The only sensor to measure and map the material surface, it sends pulses in a 70° beam angle, taking multiple level measurements and accounting for uneven surface topography when calculating volume. Each sensor comes with 3DVision software that reports the lowest and highest points detected and the average level based upon a weighted average of all measurements in the bin. For the MV and the MVL models, a colorful graphical representation indicates where high and low spots exist in the silo.

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TEFLON-COATED SENSOR FOR CLINGY MATERIALS

Reduces maintenance in powders and sticky granules

For materials that want to cling to the sensor, a Teflon-coated transducer can be a great option. The Teflon coating resists buildup of dust, ensuring the scanner

performs optimally in challenging materials such as powders or solids that generate excessive dust when the bin is filling or active. This special finish also extends the maintenance cycle by significantly reducing the need to clean the device after prolonged periods of use.

Some common applications for the Teflon-coated transducer include meals, sugar, starches, brans, and other similar materials that are prone to cling to surfaces. It is especially appropriate for food processors in industries such as baking, pasta, and candy where non-contact technology is a requirement for food safety. Grain millers will also find measuring ground soybeans, wheat, rice, or corn less troublesome when using the Teflon-coated model of the 3DLevelScanner.

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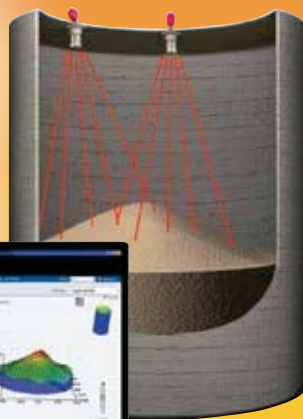
Download the complete white paper **here**.

Level Sensors with **Super Powers**



3D Level Scanner

*Legendary volume accuracy
with 3D visualization*



WOW!

Unmask the power of the 3D Level Scanner, the only sensor to measure and map multiple points across the material surface. Powerful 3D sensors see through dust for amazingly accurate inventory, even in the largest bins.






Marvel at powerfully precise inventory data. Non-contact crusaders with x-ray vision overcome the densest dust with uncanny exactness.

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Your Sensor
Superhero

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 Re grind 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