

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.

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 with 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.

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.

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.



Download the complete white paper **here**.

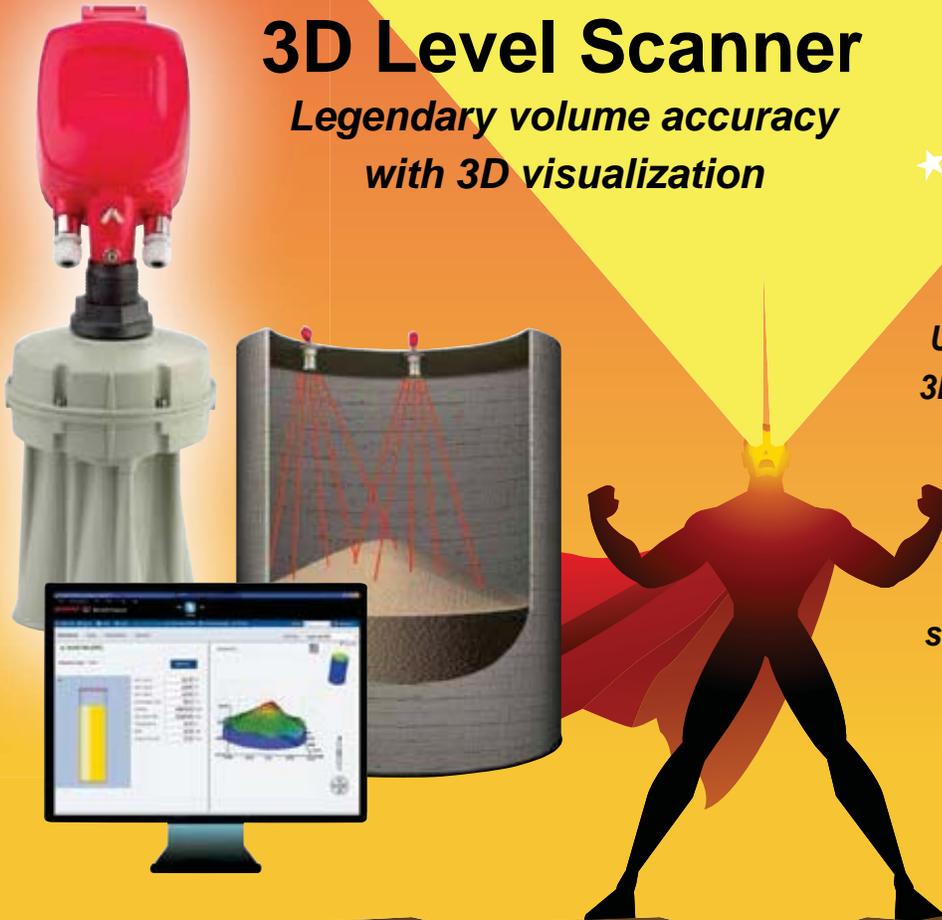
Level Sensors *with* Super Powers

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.

BINMASTER.

www.binmaster.com
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Your Sensor
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