



Now food processors can get silo levels in 3D.

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Turn up the volume

It seems for the past decade everything has been going 3D – 3D movies, 3D printers, and 3D video games. Even a level sensor now can see in 3D. What do all these 3D advances have in common? They enhance the user experience, make life more exciting, and in the case of 3D level sensors – your inventory far more accurate.

Can't touch this!

● Sensor trends point toward non-contact technologies. Something that can't cause contamination, break off, get tangled up, or become corroded. 3D scanners use acoustic technology at very low frequencies to perform very accurately and reliably, with nothing but sound waves coming into contact with the material.

Yes, 3D scanners are proven in even the tough stuff like flour, sugar, distiller's rice, oilseeds, and cocoa. There are different models to best address a particular vessel size and the desired inventory accuracy. The big difference between 3D scanners and other non-contact technologies, such as radar or laser, is that it takes into account surface variations, which brings us to ...



Multiple points speak volumes

● 3D scanners do something different than any other sensor. They measure and map multiple points, unlike other sensors that take only a single measurement. When these measurements are married up with the volumetric dimensions of the silo in the software, very high volume accuracy of 1% to 3% of vessel capacity is possible.

Materials that tend to pile unevenly, don't flow freely, or are prone to buildup are especially good candidates for 3D sensors. The size of the vessel also matters. Very large or wide silos will tend to have irregular topography. Multiple filling and emptying points also impact how material is distributed in a silo. Even with free flowing materials there will be cone up and down conditions that impact volume calculations.

Leave other sensors in the dust

● Who wants to scale a silo and go inside one to clean a sensor? No one. 3D scanners don't only perform consistently in high dust; by design they also resist dust in the first place. The acoustics of the sensors generate just enough vibration to keep the sensor horns clean.

For really sticky stuff, there is a Teflon-coated antenna option for especially problematic materials. Flour, dry milk, and powdered sugar are good candidates for the Teflon option. It's also suitable for soybean meal, which tends to be very sticky and can build up on a standard antenna, especially under humid conditions.

Maximum performance, minimal maintenance

● 3D scanners don't require an air purge to keep them clean. This saves money and reduces complexity of the initial installation. Plus, there are no compressed air costs over time and it can be a challenge to find dry air.

Need Volume Accuracy?

START SEEING RED.



3DLevelScanner

Works in High Dust

Measures & maps entire material surface for unsurpassed accuracy

Non-Contact Safety

For all types of granules, pellets & powders to comply with FSMA

Multiple Scanner System

MVL multi-scanner system is accurate in bins 45' or more in diameter

Low Maintenance

Resists buildup, simple annual maintenance, no air purge required

Real-Time Inventory

MultiVision software tracks volume across entire operation



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