



Solutions for Food industry

Non contact ultrasonic level measurement gauges have been used in the food industry for many years. This industry presents a variety of applications to level measurement: liquid, powder, grain, solid and paste.

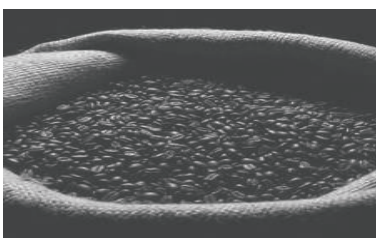
The more challenging applications present high temperatures, dusty environment and uneven surfaces. The level measurement is an important requirement during a process, where the products generate noise, dust and air movement, which can result in loss of signal.

In order to overcome these obstacles, the sensor should be highly sensitive to low echoes and should include a built-in temperature sensor in order to compensate for temperature variations.

The non contact level measurement gauge would be the ideal solution, since the instrument has no moving parts which will reduce maintenance and promote long-term performance and reliability.

Hygiene considerations are another reason for choosing non contact level measurement technology. In order to meet Hygiene requirements, the wet end of the sensor should be made of suitable materials, which are smooth and easy to clean. The sensor needs to withstand cleaning in place (CIP) at temperatures up to 121°C (250°F), therefore it should be designed to meet IP67 and withstand high temperatures during the cleaning cycle.

To meet these objectives, Solid Applied Technologies is offering a selection of suitable ultrasonic level gauging devices, according to the application specifications.



Products Suitability

SolidScan ultrasonic continuous level measurement gauges offer reliable and accurate solution for the food and beverage industries, through a full range of products:

MonoScan

The MonoScan family of Loop-powered, 2-wire, is an ideal solution for simple, direct installations where automatic compensation for temperature variations is required.

Solutions for food and beverage:

MonoScan L standard for liquid: 0.6 -15m (2-49 ft)

MonoScan S standard for solid: 0.6-8.5m (2-28 ft)

MonoScan L Short Range for liquid: 0.2-5m (0.6-16.5 ft)

MonoScan S Short Range for solid:0.2-5m (0.6-16.5 ft)

Benefits:

Preprogrammed default settings.

Interface: 4-20mA, for 2-wire model, RS485 for 4-wire model.

Suitable for liquid and solid applications.

Modes: High dynamic and low dynamic.



SmartScan 50

SmartScan 50 is a family of ultrasonic continuous level measurement instruments that directly address the most pressing challenges in the field.

Benefits:

Interfaces: 4-20mA, RS232, RS485.

Calculates volume and Kg.

5 SPDT relays (independent On/Off programming).

IP67 housing and sensor.

Operating temperature: up to 100C (212F).

Solutions for food and beverage:

SmartScan 50 L for liquid:

0.2% accuracy at 0.4-12m (1.3-39 ft) range

SmartScan 50 S for solid:

0.25% accuracy at 0.4-8.5m (1.3-28 ft) range



SmartScan 25

SmartScan 25 is a family of ultrasonic continuous level measurement instruments that directly address the most pressing challenges in the field.

Benefits:

5 SPDT relays (independent On/Off programming).

Interface: 4-20mA, RS232, RS485.

Calculates volume and Kg.

For ranges of up to 40 meters (131 ft).

Resolution: 1 mm (0.04 inch).

Variety of sensors for each application.

No calibration or maintenance required.

Options of Stainless Steel or Teflon coated Aluminum sensor.

Options of PP or PVDF housing.

Solutions for the food and beverage industry:

SmartScan 25 L standard: 0.25% accuracy at 0.6-25m (2-82 ft)

SmartScan 25 S standard: 0.25% accuracy at 0.6-20m (2-66 ft)

SmartScan 25 L/S Mid-range: 0.25% accuracy at 0.6-30m (2-98 ft)

SmartScan 25 L/S Long range: 0.25% accuracy at 0.6-40m (2-131 ft)

