## Solid Applied Technologies

# Solutions for Chemicals

The chemical industry demands non contact level measurement solution due to the aggressive nature of the measured materials.

The non contact measurement is required for this industry since it includes aggressive acids and highly corrosive materials, such as hydrochloric acid (HCl), Sulphuric acid (H<sub>2</sub>SO<sub>4</sub>), Caustic Soda (NaOH), different types of Solvents and alcohols.

Non contact ultrasonic technology has been successfully applied on some of the chemical storage tanks, where the speed of sound in the measured material is similar to the speed of sound in the air and where the temperature, pressure, vapors and steams are less demanding, hence do not affect the speed of sound.

Another consideration should be given to the chemical compatibility of the sensor's material. Polypropylene (PP) can cope with some of the chemical materials, however in some cases PVDF housing should be used.





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## Product Suitability

The SolidScan family automatically adapts to virtually all environments, and is targeted, through a broad choice of affordable models, at an outstanding range of applications.

SolidScan ultrasonic continuous level measurement offers reliable and accurate solution for the chemical industry.

### SmartScan 25

SmartScan 25 is a family of ultrasonic continuous level measurement instruments that directly address the most pressing challenges in the field. Attempts to compensate for changing temperature variations with tanks have not been successful. Sound waves remain inconsistent, and signal transmission and reception are unsynchronized. Even sophisticated and expensive devices do not achieve the repeatability and linearity vital for accurate measurement.

#### Advantages

Installation in high process tanks, large storage vessels, and extended range applications

Self-adjustment to virtually all types of conditions

Full compensation in virtually all environments: vapors, gases and temperature variations.

Providing highest accuracy under harsh conditions

0.25% accuracy of measured range

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

Benefits

5 SPDT relays (independent On/Off programming) Interface: 4-20mA, RS232, RS485. Calculates volume and Kg. Options of Stainless Steel or Teflon coated Aluminum sensor Option of PP or PVDF housing Single sensor version or Multi sensor version

Solutions for chemical industry

Standard-range

SmartŠcan 25 L: 0.25% accuracy at 0.6-25m (2-82 ft) SmartScan 25 S: 0.25% accuracy at 0.6-20m (2-66 ft) Mid-range

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

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













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