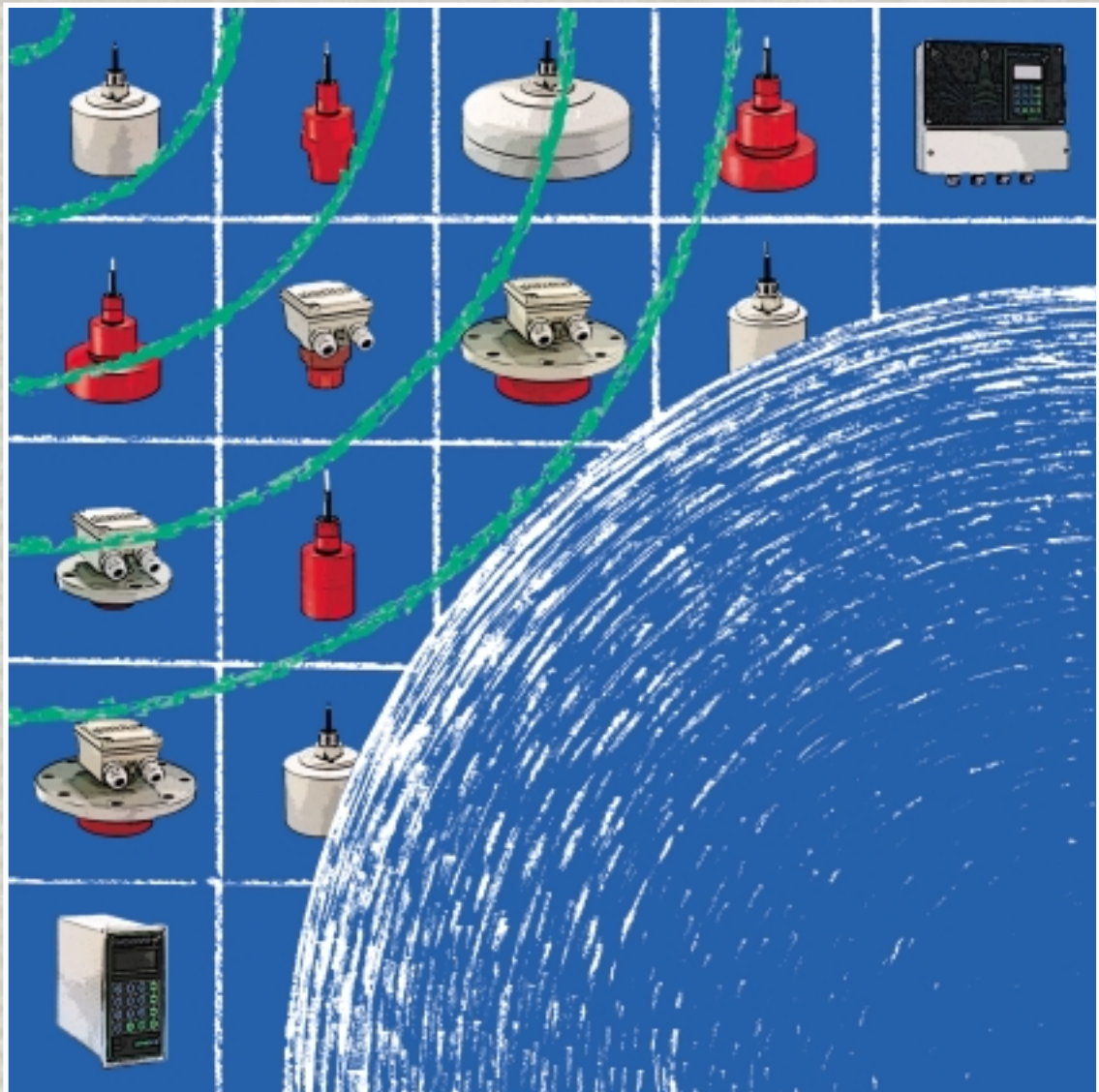# SENSONAR
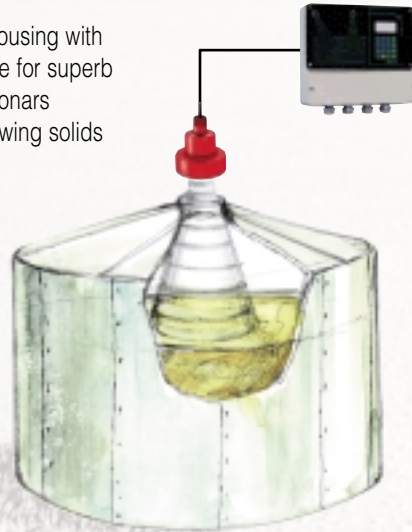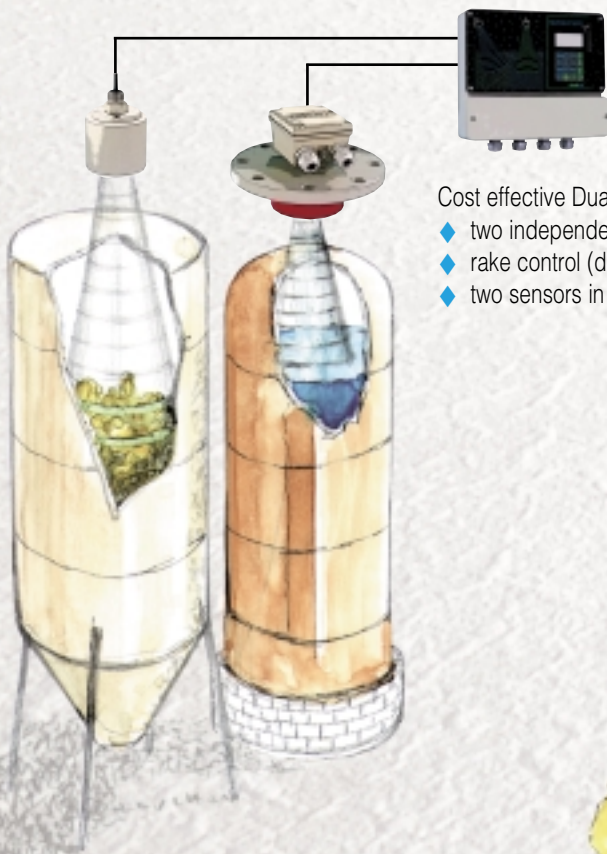## ULTRASONIC LEVEL METERING SYSTEM
NIVOSONAR

nivelco ®

OUR PROFESSION IS YOUR LEVEL

Coated aluminium housing with closed cell foam face for superb sensitivity with SenSonars designed for free flowing solids
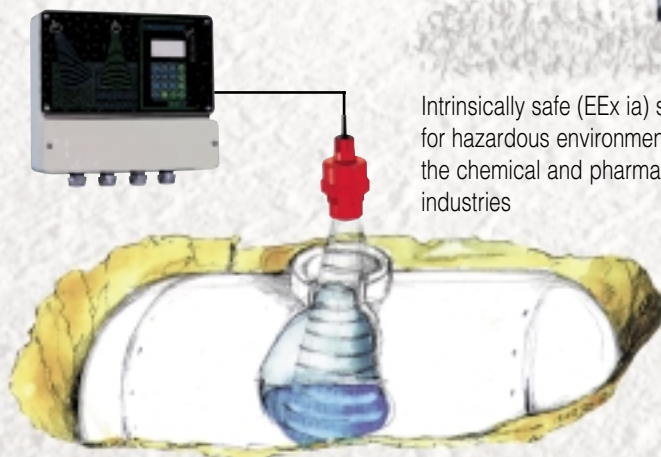
The QUEST+™ Software makes metering of heavily fuming liquids a routine task

Cost effective Dual Channel System for
♦ two independent measuring tasks
♦ rake control (differential level)
♦ two sensors in one silo (average computing)

Intrinsically safe (EEx ia) systems for hazardous environments in the chemical and pharmaceutical industries
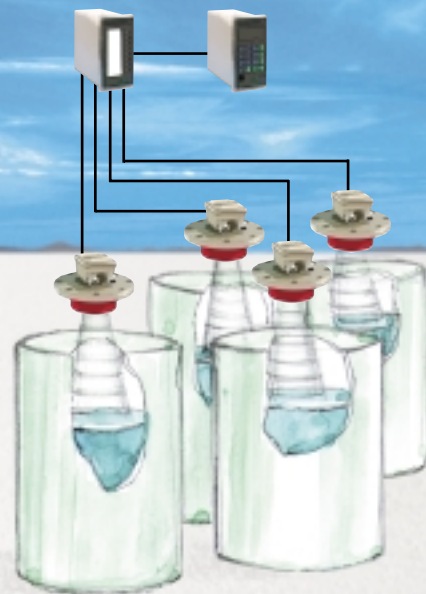
A re you looking for a suitable non-contact level meter? If your accuracy requirements are reasonable, your process temperature and pressure not too high and in addition, you need a high performance/low cost level meter, your most likely choice will be ultrasonics, which offer solutions for the majority of the level metering applications in liquids and solids.

O ffering obvious advantages over contact level metering, today's ultrasonic level meters suit straight forward applications. However, only a few can cope, with the harshness of the real process world. This is where Nivelco excels! If your aim is to own a level meter performing seven days a week over many years, with low maintenance and down time, you should consider the new generation of ultrasonic level metering systems from Nivelco.
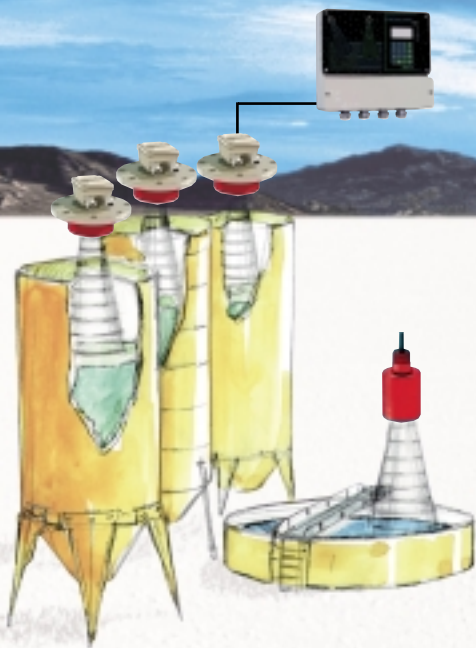
Improved economy in tankfarm applications where up to 8 levels are monitored
- ◆ 1 Controller
- ◆ 1 Scanner and up to
- ◆ 8 Sensors

The 5° total beam angle standard on the SenSonar 300 series, contributes to the accuracy of our ultrasonic level metering systems

The QUEST+™ Software masters difficulties of the most problematic nature like
- ◆ acoustic and electrical noise
- ◆ heavy dusting during filling
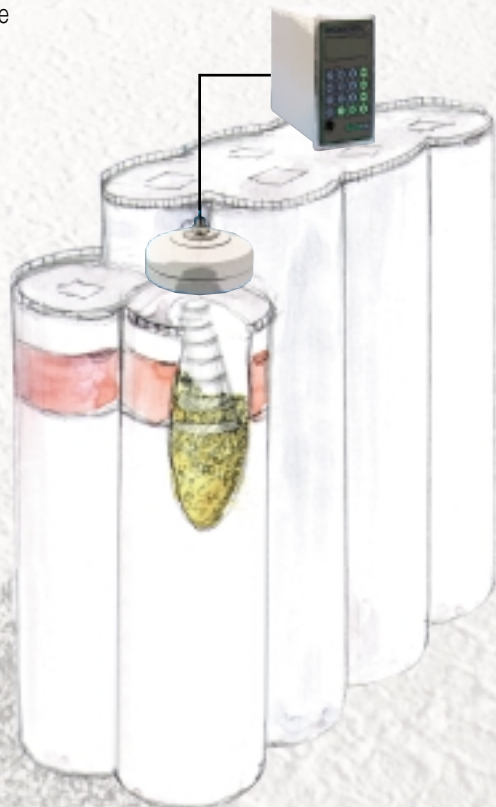
Open channel flow metering systems for water/waste water plants featuring
- ◆ flow package
- ◆ pump control package
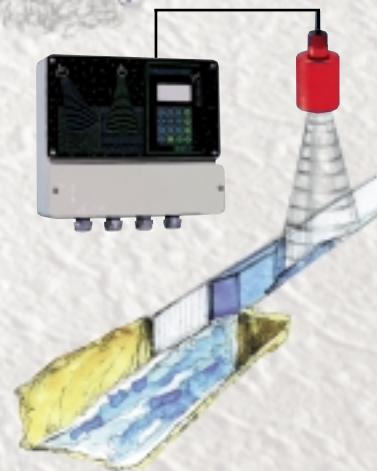
This new system comprising SenSonar 300 sensor and NIVOSONAR 300 remote control unit offers highest performance combined with total reliability and low maintenance. Tens of thousands of installations equipped with NIVOSONARS world-wide have established a base of satisfied customers who will buy NIVELCO again and again. Why not join them? . . . and share these benefits:

– *Two decades of experience in ultrasonic level metering*
– *Ultrasonics for every application - a comprehensive product range*
– *Sophisticated and reliable sensors for all environments*
– *Easy to program controller incorporating the latest QUEST+™software*
– *Excellent service provided by 50 distributors world-wide*

NIVOSONAR 300 REMOTE CONTROL UNITS

SMM and SMZ

- ◆ 6 digit LCD display with special symbols
- ◆ 4...20 mA and RS485, galvanically isolated
- ◆ Accuracy: 0.25 % of range, resolution 1 mm
- ◆ Open channel flow metering package
- ◆ Pump control package
- ◆ QUEST+™: improved echo evaluation software
- ◆ Selectable engineering units: metric and US
- ◆ 32-point calibration
- ◆ Power supply: 230, 110, 24 VAC and 24 VDC
- ◆ [EEx ia] certified

SMW, SMC, SMD and SMH

- ◆ Panel mounting, single channel
- ◆ Relay outputs: up to 3 (NO/NC)
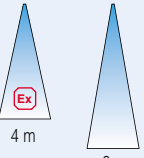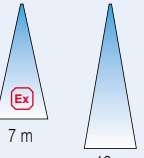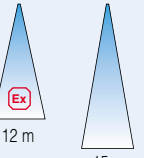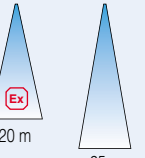- ◆ Multiplexing up to 8 sensors with scanner
- ◆ Mechanical protection IP 40

- ◆ Wall mounting, single or dual channel
- ◆ Relay outputs: up to 8 (NO/NC)
- ◆ Differential level metering
- ◆ Mechanical protection IP 54 or IP 65

SENSONAR 300 ULTRASONIC SENSORS

FOR LIQUIDS				Data sheet No.: SLI3A
SI Series (Standard) IP 68, Temp.: −30°C...+80°C	SI 38	SI 36	SI 34	SI 32
SS Series (Full feature) IP 65, Temp.: −30°C...+90°C	SS 38	SS 36	SS 34	SS 32
Total beam angle	5°	5°	5°	6°
Range	Ex 4 m / 6 m	Ex 7 m / 10 m	Ex 12 m / 15 m	Ex 20 m / 25 m

PP or PVDF transducers, max. 6 bar, full temperature compensation, secondary lightning protection. Certificate: EEx ia IIB T6

FOR FREE FLOWING SOLIDS				Data sheet No.: SSO3A
SID Series IP 65, Temp.: −30°C...+75°C	SID 34	SID 33	SID 31	SID 31H
Total beam angle	5°	5°	5°	5°
Range	15 m	30 m	60 m	70 m

Paint coated Alu-housing, polystyrene facing, max. 3 bar, full temperature compensation, secondary lightning protection, Certificate: Dust Ex Zone 10

Technical specification may be changed without notice.

NIVELCO PROCESS CONTROL CO.

H-1043 BUDAPEST, DUGONICS U. 11.

TEL.: (36-1) 369-7575 ◆ FAX: (36-1) 369-8585

E-mail: sales@nivelco.hu http://www.nivelco.com