# Ingeniously simple and reliable level measurement technology



Solutions for

## Biogas plants





#### Versatile solutions for diverse processes

UWT has developed reliable measurement technologies for the measurement tasks in biogas plants that meet diverse demanding conditions.

#### Rotary paddle switch Rotonivo® RN 3000/6000



Point level measurement and overfill protection in solids

#### Main features

- Measurement during filling
- Universal voltage electronics
- Adjustable sensitivity





Rotonivo® RN 3000 / RN 6000 flameproof

#### Radar Sensor NivoRadar®

Contactless continuous level monitoring through storage membrane foil

#### **Main features**

- Measuring range up to 100 m
- 78 GHz & 4° beam
- Integrated lens cleaner





NivoRadar® NR 3000 / aiming flange

#### **Capacitance Sensor** Capanivo® CN 7000/8000

Point level measurement, overfill protection leakage detection in liquids

#### **Main features**

- Use in metallic and non-metallic containers
- Compact design
- With / without media contact



Continuous, point level & interface measurement in processes in biogas plants

In biogas plants the demands on the level sensors are very high as they are usually enriched with aggressive media such as sulfur oxides and heavy metals or acids. Level limit devices that are used to prevent overfill or as protection against emptying, as well as continuous level sensors, must have a robust design for a long service life.

If the quality of the level sensors installed in these processes does not meet the required standards and thus the devices fail, then the costs for maintenance and/or replacement of these sensors can be unnecessarily high.

UWT offers a variety of high quality sensors for point level detection and continuous level monitoring as well as interface measurement for typical industry applications in biogas plants. The reliable measurement technology is certified in accordance with the standard for international approvals for gas and dust explosion hazard areas.

#### Typical processes in biogas plants with UWT recommended measurement solutions:

Substrate mixer Point level measurement Full detection





**Bioreactor / Fermenter** 



Post-fermenter





Digestate storage, separation Point level measurement Interface measurement



Stone trap Point level measurement Empty detection









Interface measurement for precise detection of solids in liquid

#### Main features

Resistant stainless

steel probes

**Capacitance RF Sensor** 

High chemical resistance

• Insensitive to adhesion

Digital version with LCD

Point level measurement and overfill

RFnivo® RF 8000

protection in liquids

**Main features** 

Robust design

- Adjustable sensitivity
- Robust design
- Anti-adhesion high surface quality



RFnivo® RF 8000 / rope extension with flange

nverse Frequency Shift Technolo

Vibranivo® VN 1000 / VN 5000

### **Vibrating Rod**

Mononivo® MN 4000

Point level measurement and emptying protection in solids

#### **Main features**

- Coarse-grained granules
- 1" connection thread
- Adjustable 4 level sensitivity
- Pressure-resistant up to 16 bar

Mononivo® MN 4000 / tube extension

#### **Visualization & Monitoring** NivoTec® system solutions



Web server-based visualization solution for effective silo management

#### **Main features**

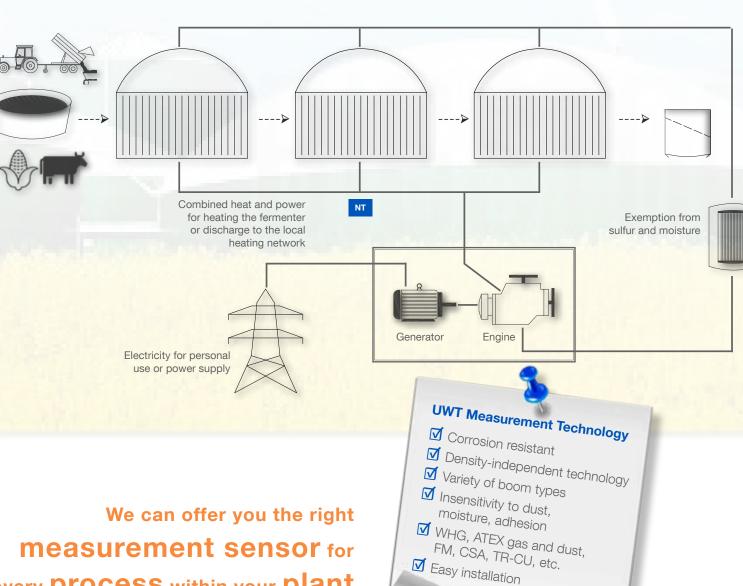
- Complete systems for level and trend display
- Data storage
- Continuous remote fill-level quen



NivoTec® NT 4600 touch panel



We can offer you the right measurement sensor for every **Process** within your **plant** 



**Experts** in innovative measuring technology since 1977. We design reliable **SOlutions** and long-lasting products, tailor-made according to the **needs** of our customers.

### **UWT** - Your global partner for the future



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