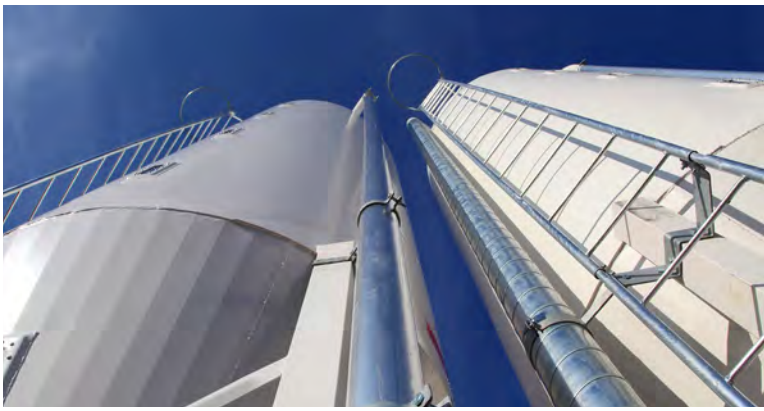
Ingeniously simple and reliable
level measurement

UWT
LEVEL CONTROL



UWT - Your Solutions Partner

RTS SOLUTIONS

Our Products

“With heart and soul – and smooth co-operation”

When we started, over 40 years ago, with the development of our ingenious products, no one could have foreseen the unparalleled success story that followed. UWT has become one of the leading suppliers of measurement technology on the world market today for the level detection in silos and material manufacturing processes. Names of e.g. Rotonivo®, Vibranivo® and Nivobob® represent quality, flexibility and reliability in over 70 countries across the world. Having successfully solved over a million applications within the bulk solids sector, we will in 2018 expand further into the liquids market by introducing our new and innovative product range to deliver reliable solutions for applications in this area.

The development, production and sales departments are located at our headquarters in Germany, with a further production site in Malta. UWT has also established successful sales offices in the USA, UK, China, India and most recently Russia. With this global orientation, we are able to serve and support our customers with complete competence and flexibility. From development through production to final assembly and comprehensive technical advice, we can offer a complete service from a single source. Focus is placed on delivering the highest quality products, technical expertise and a good working relationship with customers, suppliers and partners. The strongly held belief by CEO Uwe Niekrawietz is for the welfare of over 140 employees world-wide: “Healthy and happy employees can make the unbelievable happen”.

Every year, our product portfolio evolves, develops and brings about solutions for a variety of industries. As well as providing level measurement we also offer monitoring and visualisation systems, together with complete project planning. Renowned plant manufacturers and end users around the world appreciate our ability to deliver customised solutions for their applications, as well as the ease of use and durability of the UWT sensors. Our strategy in the consistent monitoring of our own steady and sustainable growth allows us to provide the best value solutions for our customers.

GREAT PLACE TO WORK® 2017 Beste Arbeitgeber™ Allgäu

GREAT PLACE TO WORK® 2017 Beste Arbeitgeber™ Bayern

GREAT PLACE TO WORK® 2017 Beste Arbeitgeber™ Deutschland

Headquarters in Betzigau, Germany

DEUTSCHER UNTERNEHMENSPREIS GESUNDHEIT

Awarded for innovative industrial solutions

INDUSTRIE PREIS 2018 BEST OF

INDUSTRIE PREIS 2017 BEST OF

INDUSTRIE PREIS 2016 BEST OF

INDUSTRIE PREIS 2015 BEST OF

SOLUTIONS

Our mission

We are guided by our company characteristics: responsibility, enterprising as well as challenging and stimulating. Our company values: quality, reliability, flexibility form our strategic direction and guide us when dealing with colleagues, customers or business partners alike.

UWT Mission

Quality:	Product performance 99.8 %
Reliability:	Competent employees and long-lasting products
Flexibility:	Customer orientation and satisfaction

Your team for innovative measurement technology

Over the years, as a German small/medium-sized enterprise (SME) and family-run business, we have become the world‘s competent partner for level measurement technology. A company reaches such a position only if the following key elements interact: Sound management, good understanding of the needs of the markets, innovative product solutions, skillful investment and above all, committed and dedicated employees.

ADM
Anheuser-Busch
AZO
Baosteel Group
BASF
BAYER
Baxter
Beck`s
BMW
Bridgestone
Camfil APC
Cargill
Colabeton
Colgate-Palmolive
Coperion
Evonik
Derichs GmbH
Dr. Oetker
Dynamic Air
Lafarge
Heidelberger Zement
Heinz
Italcementi
Liebherr
Manes
Protec
maxit-Group
MOTAN
m-tec
MVV Umwelt O&M
Nestlé
Owens Corning
Pirelli
Reimelt
Schenck Process
Siemens
Starbucks
Unilever
Veka
VW
Zeppelin

Our core industries


Building & Cement


Chemicals


Food


Rubber

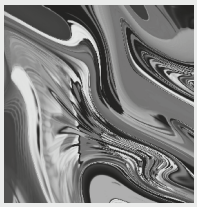

Environment & Recycling


Power


Synthetics


Wood


Animal Feed


Metal


Glass


Others

Approvals world-wide

Quality Certificates

Our products

Rotonivo®

Rotary Paddle Level Switch for SOLIDS

A motor driven shaft causes a vane to rotate. Once the material level reaches the vane, thereby preventing further rotation, switches are activated which result in an output signal and the motor stops. When the vane is free again from material, the output signal is reset and the motor driven shaft rotates again.

RN 3000

RN 4000

RN 6000

RN 3002 Pipe

RN 3002 Rope

Our Solutions for:

- Strong caking
- Dusty environments
- Abrasive materials
- Extreme process temperature
- Over pressure and low pressure environments
- Heavy mechanical loading
- Electrostatic charging
- Variable parameters
- Explosive environments
- EHEDG applications

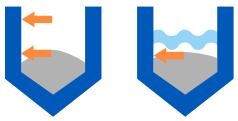
Special Features:

- Universal voltage electronics
- Adjustable sensitivity (>15g/l)
- Rotation principle unaffected by caking
- Robust aluminium die cast housing
- Protected motor (friction clutch & double bearing)
- Modular design
- Pipe and metal rope extension
- Temperature range from -40°C to +1,100°C
- High quality grade stainless steel (process)
- Long lifespan (brushless synchronised motor)
- RN 6000 is world's first rotating level limit switch compliant to **SIL 2**

Vibranivo®

Vibrating Level Switch for SOLIDS

Electronically stimulated piezos cause the fork to vibrate. As soon as the sensor is covered with material, the vibration is dampened and the resulting electrical current change causes the output signal to switch. Once the material level falls below the sensor it is free to vibrate again and the output signal is reset.



VN 1000

VN 2000

VN 4000

VN 5000

VN 6000

Our Solutions for:

- Extremely light product density
- Pneumatic filling
- Process overpressure
- Limited space
- Vibration within the vessel
- High reliability requirements
- High hygienic requirements
- Explosive environments
- Sediment levels in liquids

Special Features:

- 2-wire instrument
- Very high sensitivity (< 5g/l - Vibrasil®)
- Surface roughness of 0.75µm
- High quality material in the process (SS 316L)
- Cable and pipe (screwed) extension
- Suitable for overpressure up to 16bar
- Temperature range from -40°C to +150°C
- Extremely robust short version
- PFA and Teflon coating
- NAMUR Standard
- Level control of sediments in liquids

Mononivo®

Vibrating Level Switch for SOLIDS

Electronically stimulated piezos cause the single rod probe to vibrate. When the material covers the sensor, this causes the vibration to stop and a voltage change is caused within the piezo elements. This is electronically registered and causes the output signal to switch.

MN 4020

MN 4030 Pipe

MN 4040 Pipe screwed

Our Solutions for:

- Light products from 20g/l
- Powdery material with strong caking properties
- Coarse-grained granulate
- Pneumatic filling
- Process overpressure
- Limited space
- Overfill detection within pipes and shafts
- Vibration within the vessel
- High safety standard
- High hygienic requirements
- Explosive environments

Special Features:

- Compact limit switch with threads from 1"
- Sensitivity adjustable in 4 settings
- High surface quality
- High quality material in the process (SS 316L)
- Heavy mechanical loading
- Robust version for overpressure up to 16bar
- Temperature range from -40°C to +150°C
- Pipe extension (screwed)

RFnivo®

Capacitance Level Switch for SOLIDS

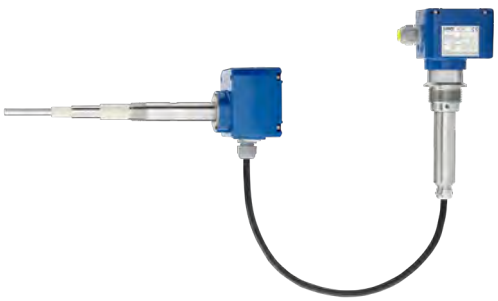
The capacitive level limit switch is automatically calibrated to a reference capacitance of an empty vessel. If the probe is covered by the product, the measured capacitance changes through the dielectric and a switching signal is activated. The integrated “Active Shield” technology ensures high reliability even for products that cause caking.

RF 3100

RF 3200

RF 3300 Temp.

Remote Version



Our Solutions for:

- Heavy materials
- Dusty environments
- Abrasive and aggressive media
- Extreme process temperatures
- Positive and negative pressure
- Caking material
- Vibration in the vessel
- Hazardous areas
- EHEDG applications

Special Features:

- Very high sensitivity (DK >1.5)
- High mechanical load
- Simple to install and set up
- High quality process materials (SS 316L, ceramics, PPS)
- High hygiene requirements
- Rod and metal rope extension
- Robust version for overpressure up to 25bar
- Temperature range from -40°C up to +500°C
- RF 3100 PROTECTION PLUS version with anti-corrosive coating (PFA Teflon®)

RFnivo®

Inverse Frequency Shift Technology

Capacitance Level Switch for LIQUIDS

The capacitive measuring limit switch responds to the change in capacitance at the probe, which is detected by the change in the oscillating frequency. The integrated “Active Shield” technology ensures high reliability even for products that cause caking.

RF 8100 Rod

RF 8200 Temp. Rod

RF 8100 Rope

RF 8200 Temp. Rope

Our Solutions for:

- All types of liquids
- Very strong caking
- Process overpressure
- Vibrations within the process
- Corrosion resistance in aggressive materials
- High process temperatures
- High safety standard
- Hygiene versions
- Explosive environments
- Interface measurement

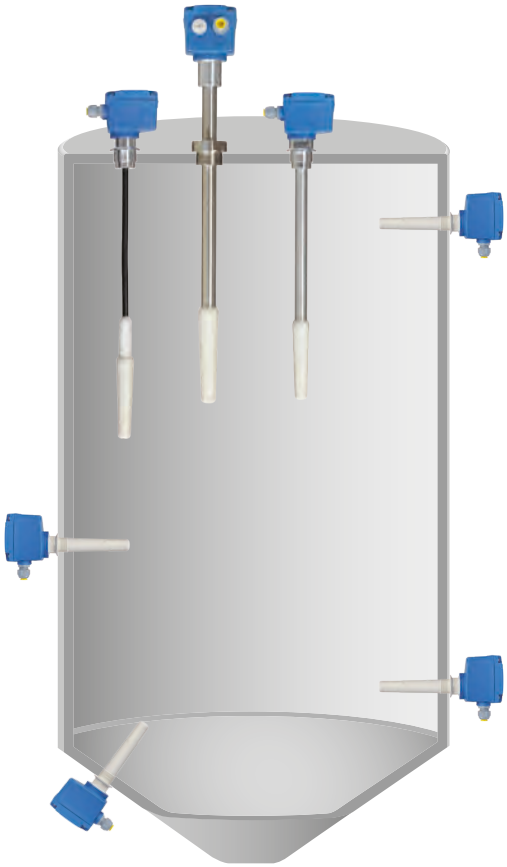
Special Features:

- Potted electronics
- Very high sensitivity (DK ≥ 1,5)
- Functionality independent of silo wall
- Digital electronics with Profibus PA, integrated display and operating menu
- Programmable electronics
- Rod and metal rope extension (up to 25m)
- Robust version for overpressure up to 35bar
- Temperature range from -40°C up to +400°C
- ESD protected probe
- WHG certification
- Certification accord. Lloyd's Register

Capanivo®

Capacitance Level Switch for SOLIDS

The electrodes in the sensor form a capacitor. If the product comes into contact with the sensor, the capacitance changes and the electronics converts it into a switching signal. The integrated “Active Shield” technology allows this system to be used in particularly adhesive materials.



CN 4020

CN 4020 Temp.

CN 4030 Pipe

CN 4050 Cable

Our Solutions for:

- Light materials
- Dusty environments
- Pneumatic filling
- Overpressure
- Very strong caking
- Corrosion resistance for aggressive material
- High process temperature
- High standard of safety requirement
- Explosive environments

Special Features:

- Very high sensitivity (DK ≥ 1.6)
- Functionality independent of silo wall
- Range of process connections
- Adjustable switching delay
- Variety of mechanical versions
- Pipe and cable extension
- Overpressure up to 25bar
- Temperature range from -40°C to +180°C
- Food compliant version

SOLUTIONS

Capanivo®

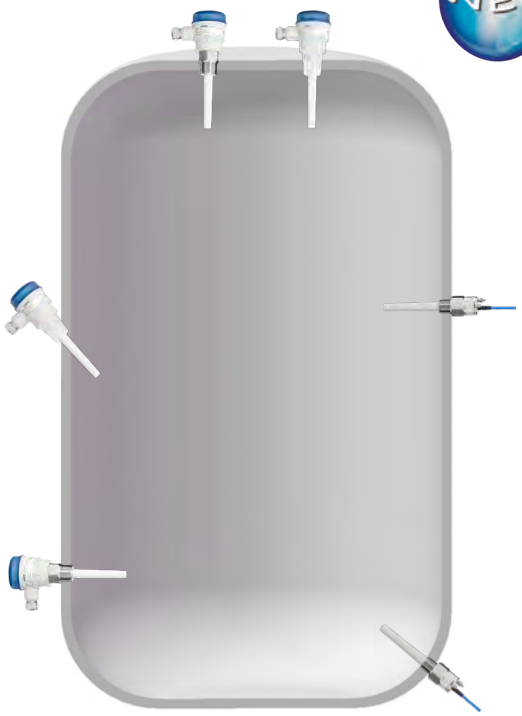
Inverse Frequency Shift Technology

NEW

Capacitance Level Switch for LIQUIDS

The electrodes in the sensor form a capacitor. If the product comes into contact with the sensor, the capacitance changes and the electronics converts it into a switching signal. Available as integrated cable or enclosure version.

The integrated “Tip Sensitivity” technology guarantees a high level of functional reliability even for products that cause caking.



CN 7100 Enclosure Version

CN 7100 Synthetic Version

CN 7100 Integrated Cable Version

Our Solutions for:

- All types of liquids
- Strong caking
- Limited space
- Corrosion resistance in aggressive materials
- High safety standard
- Hygiene versions
- Explosive environments
- Variable parameters
- Interface measurement

Special Features:

- For use in non-metallic containers
- 2-wire instrument
- Very high sensitivity (DK ≥ 1,5)
- Functionality independent of silo wall
- Optional PVDF probe
- SensGuard cover
- Enclosure or integral cable version
- Synthetic version available
- Robust version for overpressure up to 10bar
- Temperature range from -30°C up to +100°C
- WHG certification
- Certification accord. Lloyd's Register

Capanivo®

Inverse Frequency Shift Technology

NEW

Capacitance Level Switch for LIQUIDS

The electrodes in the sensor form a capacitor. If the product comes into contact with the sensor, the capacitance changes and the electronics converts it into a switching signal.

The integrated “Tip Sensitivity” technology guarantees a high level of functional reliability even for products that cause caking.

CN 8100

CN 8100 Pipe

CN 8100 Cable

Remote Version

Our Solutions for:

- All types of liquids
- Strong caking
- Process overpressure
- Vibrations within the process
- Corrosion resistance in aggressive materials
- High safety standard
- Hygiene versions
- Explosive environments
- Interface measurement

Special Features:

- For use in non-metallic containers
- Potted electronics
- Very high sensitivity (DK ≥ 1,5)
- Functionality independent of silo wall
- Digital electronics with Profibus PA, integrated display and operating menu
- Range of process connections
- Variety of mechanical versions
- Rod and cable extension (up to 30m)
- Robust version for overpressure up to 25bar
- Temperature range from -40°C up to +125°C
- SensGuard cover
- WHG certification
- Certification accord. Lloyd's Register

SOLUTIONS

NivoCapa®

Inverse Frequency Shift Technology

Capacitance Level Transmitter for LIQUIDS

The sensor measures the electrical capacity of the level in the tank. The integrated “Active Shield” technology allows this system to be used in particularly adhesive materials.

NC 8100 Rod

NC 8100 Rope

Our Solutions for:

- All types of liquids
- Very strong caking
- Corrosion resistance in aggressive materials
- Large measurement distances
- High safety standard
- Hygiene versions
- Explosive environments
- Variable parameters

Special Features:

- 2-wire instrument
- Very high sensitivity (DK ≥ 1,5)
- High chemical resistance
- Rod and metal rope extension (up to 25m)
- Robust version for overpressure up to 35bar
- Temperature range from -40°C up to +200°C
- ESD protected probe
- PFA Teflon® coating
- Programmable electronics
- Fully adjustable range:
  Level, damping, diagnosis etc.
- Certification accord. Lloyd's Register

Nivobob®

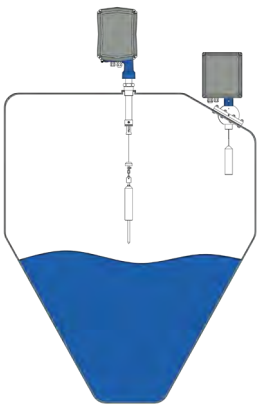
Electro-mechanical Plumb Bob for SOLIDS

A sensor weight attached to either a metal tape or rope is electromechanically lowered into the vessel. Once the sensor weight rests on the material, the winding direction of the motor changes and the sensor weight is rewound to the upper stop position. As the weight is lowered, the distance is electronically measured.

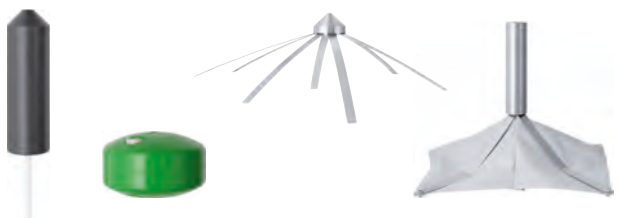
Microprocessors convert the measured distance together with the programmed silo geometry into a volumetric output signal. This signal is updated each time the sensor weight is lowered.

NB 3000

NB 4000 Aiming flange



Sensor weights



Our Solutions for:

- Strong caking
- Material with changing temperature and humidity
- Electrostatic charging
- Heavy material as well as light solids
- Limited space
- Low dielectric constant
- High process temperatures
- Large measurement distances
- Explosive environments

Special Features:

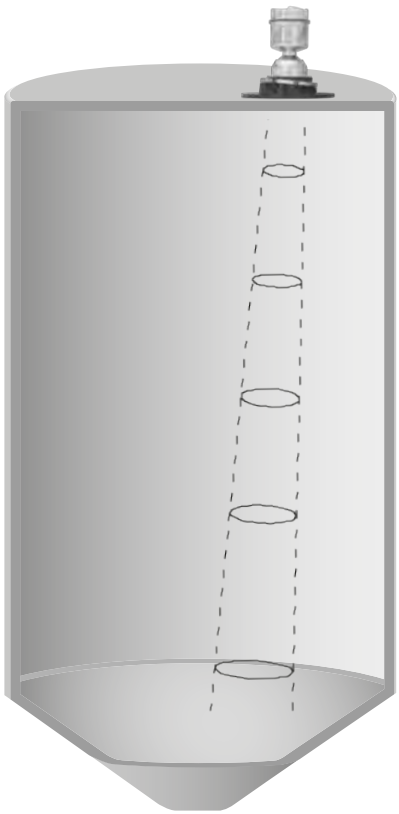
- High sensitivity (>20 g/l) dep. on sensor weight
- Rope and tape version
- Measurement range of up to 50m
- Overpressure version up to 1.7bar
- Temperature range from -40°C to +250°C
- Service life up to 500,000 cycles of tape version
- Integrated tape cleaner
- Diagnostics function
- Simple installation and set up
- Comm. via Modbus RTU or Profibus DP

SOLUTIONS

NivoRadar®

Radar Sensor for SOLIDS

A high frequency signal is transmitted with a very small beam angle with a two-wire technology. It is reflected by the bulk material and received back to the sensor. The frequency difference, which is directly proportional to the distance, is then further processed and output as the level signal. The small beam angle makes the use in tall narrow silos possible and facilitates the installation and alignment of the sensor.



NR 3000 Flange versions

Flat flange

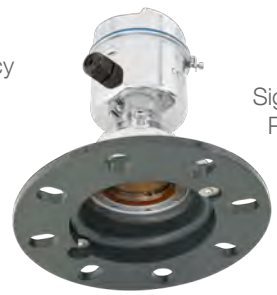
Aiming flange

Functions

Electronics with 78GHz frequency

Integrated lens cleaner

Aiming flange up to max. 10°



Signal processing with Process-Intelligence-Software

Lens antenna with 4° beam angle

Programming module

Plug-on-display:

Programming

Input starting parameters

Display level and diagnostic data

Our Solutions for:

- Very light material
- Various application industries
- Dusty environment
- Measurement range of up to 100m
- Use within tall, narrow silos
- Optimum reflection of the bulk solids material
- Corrosion resistance for aggressive material
- High process temperature
- Perfect positioning
- Explosive environments

Special Features:

- ✔ Signal processing with Process-Intelligence-Software
- ✔ 2-wire instrument
- ✔ High sensitivity (DK ≥ 1.6)
- ✔ 78 GHz technology
- ✔ 4° beam angle
- ✔ Lens antenna and mounting flange are flush
- ✔ Integrated lens cleaner
- ✔ Robust stainless steel housing IP68
- ✔ Aiming flange model
- ✔ Temperature solution up to +200°C
- ✔ Plug-on-display
- ✔ Quick Start Wizard
- ✔ Simple, six-step commissioning

NEW

NivoGuide®

Customisable extensions

Guided Wave Radar Sensor for SOLIDS

High-frequency microwave pulses are coupled to a cable or rod and guided along the probe. The emitted pulse is reflected by the product surface. The time difference between the transmitted and reflected pulse is converted to a level.

NG 3100 Rod

NG 3100 Rope

Integrated display and adjustment module

Lid with viewing window

Pluggable display and adjustment module

- Comprehensive diagnostic functions
- Display of latest measured values, operating parameters and diagnostic data
- Parameters entered can be transfered to other devices (optional)

Our Solutions for:

- Bulk materials with strong withdrawal forces
- Strong caking
- Dusty environment
- Condensation generation
- Corrosion resistance in aggressive materials
- Use within tall, narrow silos
- Large measurement distances
- High safety standard
- Hygiene versions
- Explosive environments

Special Features:

- Potted electronics
- Very high sensitivity (DK ≥ 1,5)
- Rod and rope extension (up to 75m)
- Customisable rod and rope extension
- Temperature range from -40°C up to +200°C
- Robust version for overpressure up to 40bar
- Intelligent Software
- Integrated display and adjustment module
- Comprehensive diagnostic functions
- Display unit can be removed after programming

SOLUTIONS

NivoGuide®

Customisable extensions

Guided Wave Radar Sensor for LIQUIDS

High-frequency microwave pulses are coupled to a cable or rod and guided along the probe. The emitted pulse is reflected by the product surface. The time difference between the transmitted and reflected pulse is converted to a level.

NG 8100 Rod

NG 8100 Rope

Integrated display and adjustment module

Lid with viewing window

Pluggable display and adjustment module

- Comprehensive diagnostic functions
- Display of latest measured values, operating parameters and diagnostic data
- Parameters entered can be transfered to other devices (optional)

Our Solutions for:

- Liquids with moving surface
- Strong caking
- Condensation and foam generation
- Steam
- Use within tall, narrow tanks and pipes
- Large measurement distances
- High safety standard
- Hygiene versions
- Explosive environments
- Interface measurement

Special Features:

- ✔ Potted electronics
- ✔ Very high sensitivity (DK ≥ 1,5)
- ✔ Rod and rope extension (up to 75m)
- ✔ Customisable rod and rope extension
- ✔ Temperature range from -40°C up to +200°C
- ✔ Coaxial version
- ✔ Robust version for overpressure up to 40bar
- ✔ Intelligent Software
- ✔ Integrated display and adjustment module
- ✔ Comprehensive diagnostic functions
- ✔ Display unit can be removed after programming
- ✔ Second line of defence (optional)

Nivotec®

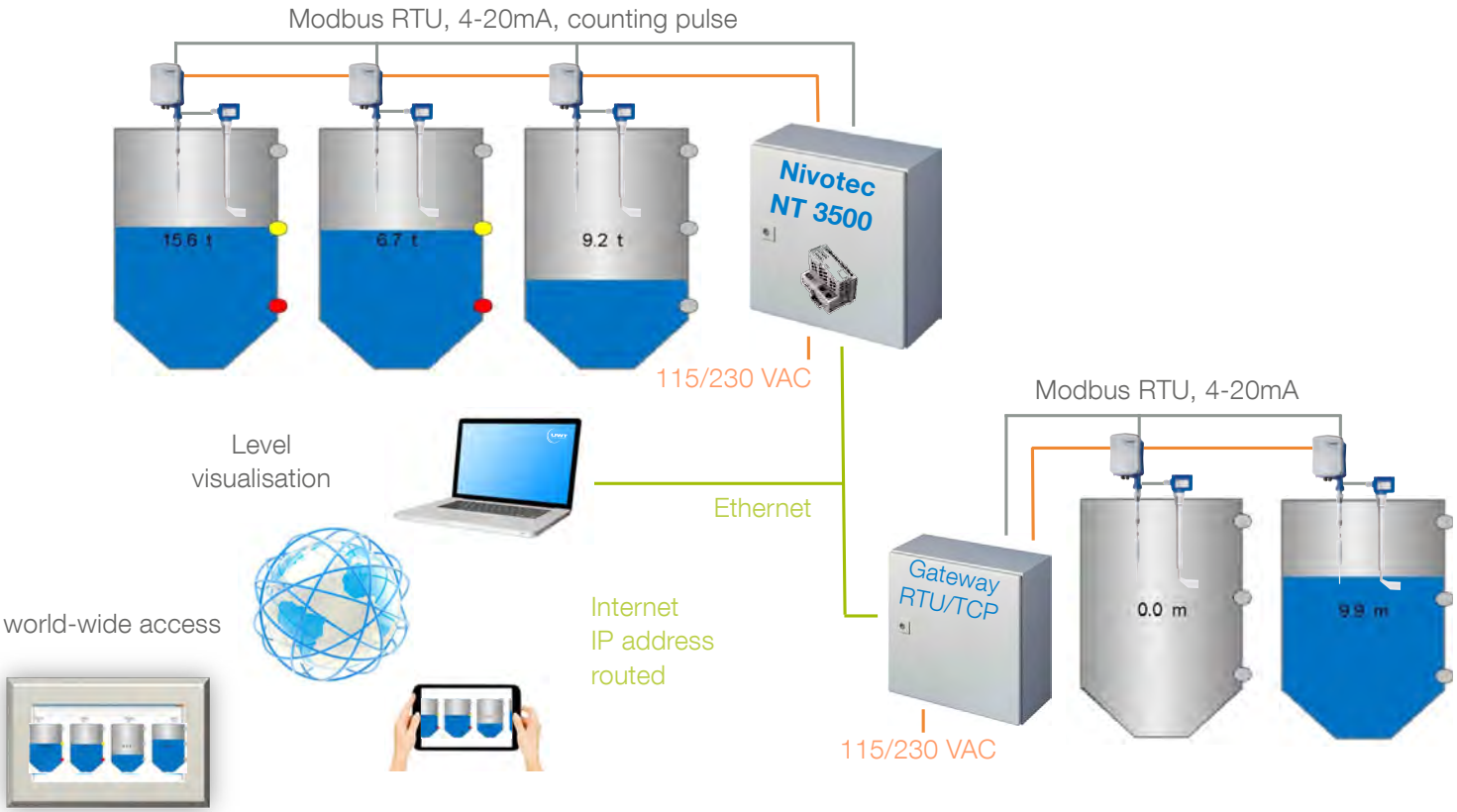
Level monitoring and visualisation

NT 2000 Level indication integrated within a control cabinet

- Indication of level in weight, height, percentage or volume via LED display
- For evaluating the output signal from any level sensors with analog signal 4-20 mA
- Fill control by silo full detectors
- Truck module for tanker trucks to prevent overfilling of silos
- Clear and easy management of the different indicators
- Complete system with project specific electrical plans

NT 3500 Level visualisation from a PC via webserver

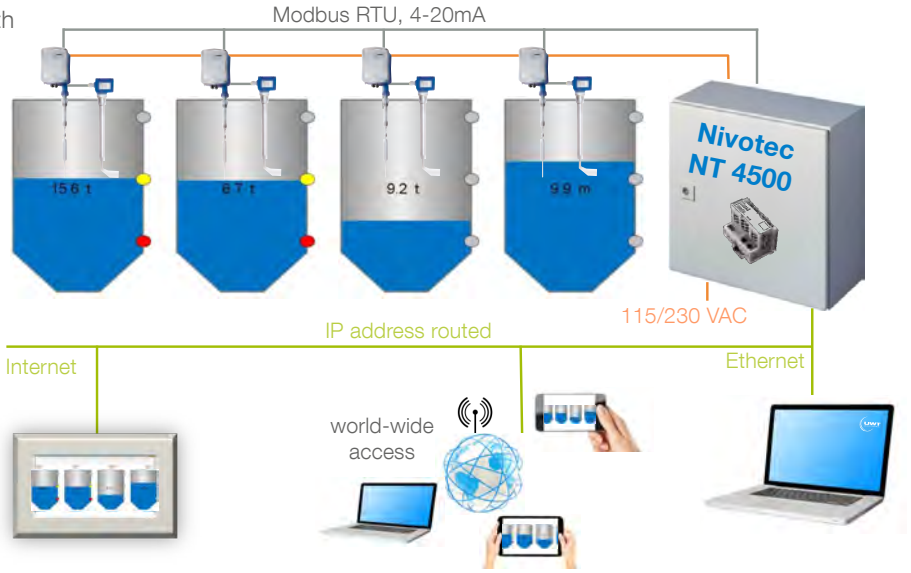
- Level visualisation via webserver
- Password-protected for various use levels with standard browser software on the Ethernet
- For data storage and downloads, trend data and evaluation
- World-wide remote access to the visualisation software
- Fill control by alarm full detection, pinch valve control within filling tubes and recognition of tanker coupling
- For integration of truck operating modules at filling station stage
- Level- and alarm-message via e-mail
- Interfaces for level sensors, 4-20mA, Modbus RTU, Ethernet TCP, counter signal, relay
- Complete system with project specific electrical plans
- Individual project planning



Example of a complete visualisation system for NT 3500

NT 4500 Level visualisation from a PC via webserver

- Standardised, cost effective level visualisation via webserver
- Password-protected for various use levels with standard browser software on the Ethernet
- For data storage and downloads, trend data and evaluation
- Fill control by alarm full detection
- Level- and alarm-message via e-mail
- Interfaces for level sensors, 4-20mA, Modbus RTU
- Complete system with electrical plans



Example of a complete visualisation system for NT 4500

NT 4600 Level visualisation via 7" touch panel

- Visualisation and operation via 7" touch panel
- Data in percentage, height, volume or weight
- Trend display, data storage
- Evaluation of the analogue 4-20mA signals of any sensors, as well as Modbus RTU of the UWT-systems
- Fully wired whether mounted or within control cabinet

NT 4700 Level indicator with digital display

- Digital display hardwired into the terminal box
- Evaluation of level signal 4-20mA of any sensors
- Level indication via 4-digit LED display in weight, height, percentage or volume
- Version for suitable for Nivobob® with “Start measurement” button and LED for “sensing weight in the upper end position”

NT 4900 Level indicator with digital display

- Built-in digital display module
- Level indication in weight, height, percentage or volume
- Yellow LED-Display, 4-digit, 7 segment
- Easy to use button operation on face of unit
- Interface 4-20mA

Service & Support

High-class service for high-tech products

The competent UWT sales and service teams help our clients in consulting and engineering, with professional installation, precise parameterization and a universal service support. Our products are designed individually according to the needs of our customers. Particular service package features can be selected as well as a fixed price, universal service support arrangement.

However, with any service support provided by UWT, our specialists are not satisfied until our customers are.

Project

- Our experts offer individual advice for tailored measurement technology for your system
- We will support you throughout the whole project and are always there for you, to support you with technical questions
- At UWT you get complete packages from a single source – simply, professionally and efficiently

Installation and Set-up

- Our experienced specialists will install all matched components professionally and ensure you a smooth start
- For the wiring, it goes without saying we only use high-quality materials, e.g. outdoor cables are UV protected
- At the commissioning stage, UWT service technicians leave nothing to chance and thus prevent any incorrect set up from the start

Operator training

- Operator instructions and user training ensure effective implementation and trouble-free operating
- After commissioning we will continue to support your plant

Tailor-made Solutions

Experienced Solutions Partner

We have the know-how to find the perfect solution for you, even under difficult application or extreme process conditions or when high specifications regarding international certifications are required.

Interface measurement of sediments in liquids

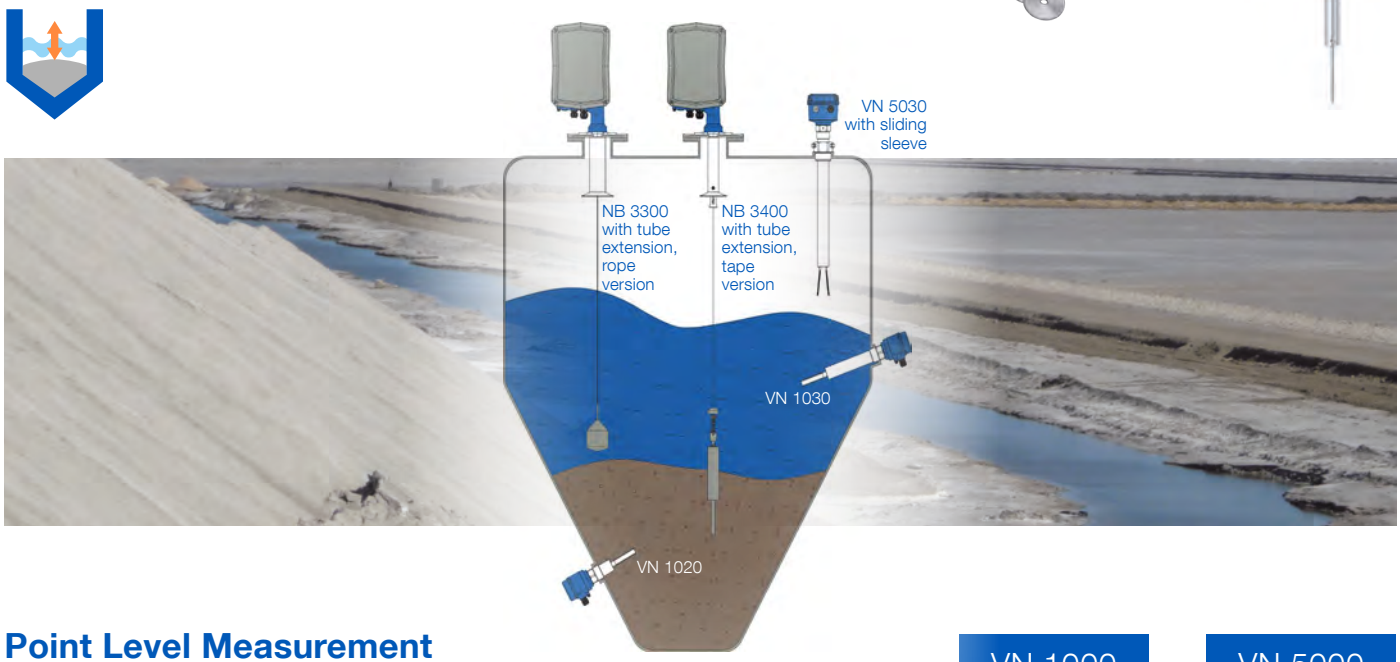
Continuous Measurement

Principles of function: Nivobob®

The electromechanical lot sensors Nivobob® NB 3300/3400 detect the level of sludges and solids in liquids, e.g. stones, sand, salt, slag, etc. - precisely, even within aggressive liquids. There are several industries where the level detection of sludge or solids within liquids is required. For example within sediment tanks/containers, filters or lamella separators within the metal industry, chemical plants, in limestone or gravel plants and within the wastewater industry. Applications range from sludge level measurement within lime and gravel plants to interface measurement in salt water as well as applications on dredging boats.

NB 3300

NB 3400



Point Level Measurement

Principles of function: Vibranivo®

The vibrating fork Vibranivo® VN 1000/5000 series are used for level limit measurement of sludges and solids in liquids. All wetted components are made of stainless steel. Via the electronics setting the sensitivity of the control can be adjusted according to the interface layer.

VN 1000

VN 5000

UWT sensors provide solutions for the most challenging conditions

Benefit from our experience and you will find a suitable product for all types of application

Product Matrix Solids		Level Limit Measurement					Continuous Measurement			
Product		**Rotonivo®** RN 3/4/6	**Vibranivo®** VN 1/2/4/5/6	**Mononivo®** MN 4	**RFnivo®** RF 3	**Capanivo®** CN 4	**Nivobob®** NB 3	**Nivobob®** NB 4	**NivoRadar®** NR 3	**NivoGuide®** NG 3
Measuring principle		Rotation	Vibration	Vibration	Capacitive	Capacitive	Lot System	Lot System	Radar	Guided Radar TDR
Material properties	Granulate / powder	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Solids in liquid	-	✓	-	-	-	✓	-	-	-
	Material prone to caking	✓	-	-	✓	●	✓	✓	●	✓
	Abrasive Material	✓	✓	✓	●	-	✓	✓	✓	-
Process conditions	Sensitivity (bulk density/DK)	≥ 15 g/l	< 5 g/l	≥ 20 g/l	DK ≥ 1,5	DK ≥ 1,6	≥ 20 g/l	≥ 20 g/l	DK ≥ 1,6	DK ≥ 1,5
	Process temperature	-40..1100°C	-40..150°C	-40..150°C	-40..500°C	-40..180°C	-40..250°C	-40..80°C	-40..200°C	-40..200°C
	Process pressure	10 bar	16 bar	16 bar	25 bar	25 bar	1,7 bar	0,2 bar	3 bar	40 bar
	High mechanical load	✓	●	●	✓	-	●	●	●	●
	High humidity	✓	-	-	✓	✓	✓	✓	●	●
	Vibration in process	●	✓	●	✓	●	●	●	✓	-
Certification*	EHEDG	✓	-	-	✓	-	-	-	-	-
	SIL	✓	-	-	-	-	-	-	-	-
	EX certification	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Sensor Material	316L	316L	316L	316L/PPS	PPS	304/303/316	Al/303/316	316L/PEEK	316L/PPS

Product matrix Liquids		Level Limit Measurement			Continuous Measurement		
Product		**Capanivo®** CN 7	**Capanivo®** CN 8	**RFnivo®** RF 8	**Nivobob®** NB 3	**NivoCapa®** NC 8	**NivoGuide®** NG 8
Measuring principle		Capacitive	Capacitive	Capacitive	Lot System	Capacitive	Guided Radar TDR
Material properties	Waterbased	✔	✔	✔	✔	✔	✔
	Oil / viscose Media	✔	✔	-	✔	✔	✔
	Foam	✔	✔	-	-	✔	✔
	Material prone to caking	✔	✔	-	✔	✔	✔
Process conditions	Sensitivity (DK)	DK > 1,5	DK > 1,5	DK > 1,5	N/A	DK > 1,5	DK > 1,6
	Process temperature	-30..100°C	-40..125°C	-60..400°C	-40..80°C	-40..200°C	-40..200°C
	Process pressure	10 bar	25 bar	35 bar	1,7 bar	35 bar	40 bar
	High mechanical load	●	●	●	●	●	●
	Immersion length (max.)	0,1 m	30 m	25 m	50 m	25 m	75 m
	Vibration in process	✔	●	●	✔	●	●
	Moving surface (e.g. wave)	-	✔	✔	✔	✔	✔
Certification*	EHEDG	-	-	-	-	-	-
	SIL	-	✔	-	-	-	-
	Lloyd's Register	✔	✔	✔	-	✔	-
	EX certification	✔	✔	✔	✔	✔	✔
	Wetted parts	316L/PPS/PVDF	316L/PPS/PVDF	316L/PFA/PEEK/ Ceramic	301/303/PA/PP	316L/PFA/PEEK	316L/PEEK

* further certificates available on request

The information in the catalogue is subject to modifications or amendments.
Please note that our general terms and conditions apply (www.uwt.de).

✔ perfect choice
● can be used (details to be clarified)
- not recommended

Application data sheet

Date:

Contact: Company:

Address: Phone:

Zip/Town: E-Mail:

Measurement O Point level O Content O Interface

Electronic

Power supply:

O 230VAC _____ Hz O 24VAC _____ Hz

O 115VAC _____ Hz O 24VDC _____

O 48VAC _____ Hz O Other _____

For AC, please specify additionally mains frequency!

Signal output/Communication:

O DPDT Relay O HART

O SPDT Relay O Profibus DP

O PNP O Modbus RTU

O NPN O IO-Link

O 4-20 mA O Andere _____

O 20-4 mA

Material conditions

Material being measured: _____

Material max temperature: _____ °C / _____ F

Density: _____ g/l

Particle size: _____ mm

Viscosity: _____ Pa.s

Conductivity: _____ S/m

Dielectric constant: _____

Conditions:	O powder	O granular	O slurry/liquid
Flowability:	O normal	O viscous	O subject to bridging
Humidity (solids):	O none	O light	O strong
Build-up:	O none	O light	O strong
Dust:	O none	O light	O strong
Steam:	O none	O light	O strong
Abrasive:	O yes	O none	
Corrosive:	O yes	O none	

Other characteristics of the material: _____

Application details tank/container

Material:	_____		
Use/Installation:	O process	O storage	O conveying
Installation position sensor:	O from the top	O from the bottom	O from the side
Profile:	O rectangular	O conical	O round
	O cylindrical standing	O cylindrical horizontal	O other (drawing)
Bottom:	O flat	O conical	O domed
Top:	O flat	O conical	O domed
Dimensions:			
Container:	height:	_____ mm (without bottom & top)	
	width:	_____ mm	
	length:	_____ mm	
Bottom:	height:	_____ mm	
Top:	height:	_____ mm	
Process connection:	flange:	_____	
	thread:	_____	
	height nozzle:	_____	
	height socket:	_____	
	other:	_____	
Agitator:	O yes	O none	*If yes, please provide drawing*
Equipment:	O yes	O none	*If yes, please provide drawing*
Filling (solids):	O pressure conveying	O vacuum conveying	
	O conveyor belt conveyor screw	O chain conveyor	
Filling:	maximum height	_____ m	

The process in detail

Process pressure:	_____ bar		
Process temperature:	_____ °C		
Ambient process temperature outside:	_____ °C		
Vibrations:	**O** none	**O** light	**O** strong

Certificates

O DustEx **O** GasEx **O** other

Required approval: _____

Preferred measuring principle: _____

Special features of the application: _____

For quick processing, we ask you to submit two drawings / sketches with dimensions. This should indicate the position of the fill / drain line, position of the sensor, internals (such as stirrer) and other special features. Please submit drawings / sketches in side and top view.

Please provide here the application drawing:

Notes

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