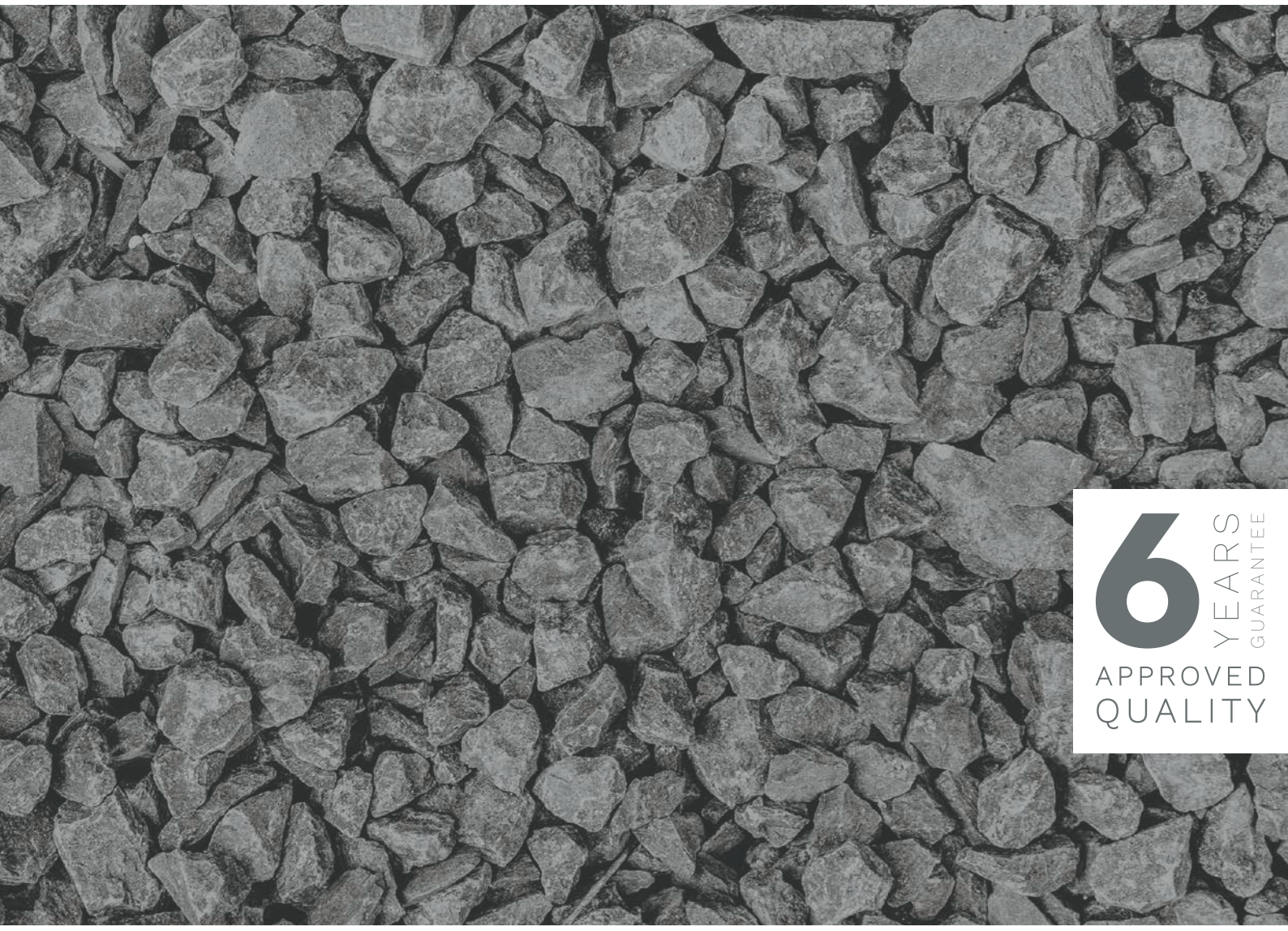
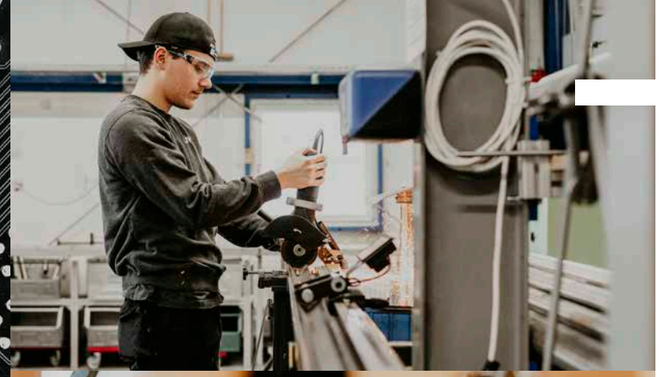
UWT

LEVEL. UP TO THE MAX.



SOLUTIONS FOR THE BUILDING / CEMENT INDUSTRY



SUCCESSFUL

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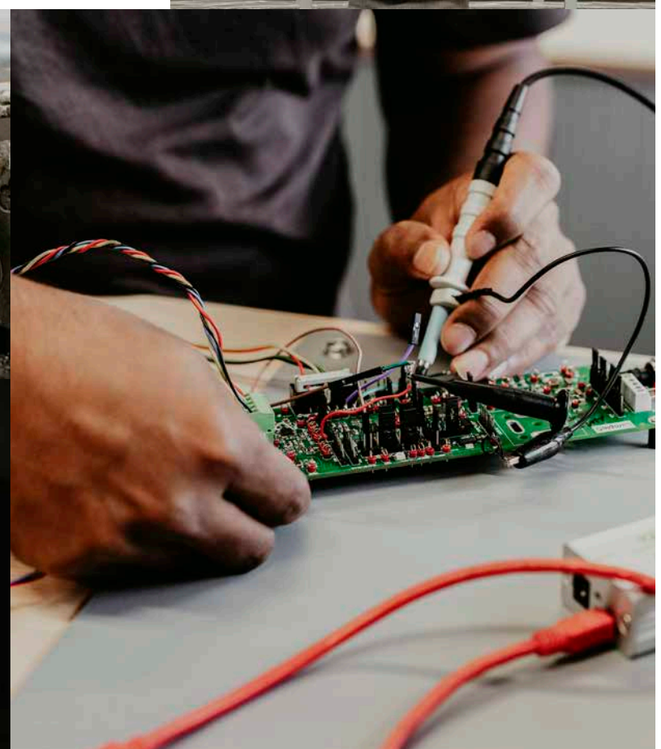
TOGETHER



LEVEL. UP TO THE MAX.

As an owner-managed, medium-sized company, with an international sales network in over 90 countries and personal contacts available locally, UWT stands for a sustainable partnership at eye level - globally and regionally.

The core competence of UWT lies in level, point, and interface measurement. We measure bulk solids, from the finest powder to coarse, abrasive materials, as well as all types of liquids, including high-viscosity pastes and foams.

In the field of point level measurement for bulk materials, UWT has achieved a special position and set new standards with the rotary paddle switch.

INNOVATIVE SOLUTIONS AND DIGITALISATION

Modern, high-quality technologies ensure a continuous process flow. UWT sensors are designed with maximum process compatibility, allowing seamless integration into systems and providing optimal support. Additionally, comprehensive digitalisation is offered: cutting-edge eTools enable easy product selection, configuration, and commissioning. Intuitive operation and innovative device communication ensure smooth operation.

CUSTOM PRODUCT CONCEPTS AND MAINTENANCE-FREE SOLUTIONS

According to the high standards of various industries, UWT's team provides extensive support for individual requirements. Customer-oriented planning enables the development of tailored solutions that are efficiently and successfully implemented.

Thanks to in-house production and a modern machine park, customised solutions and specific device adaptations can be realised.

UWT sensors are completely maintenance-free and operate on the "install and forget" principle. They are highly configurable and add value to applications.

TOP QUALITY MEANS LONG LIFESPAN

UWT offers guaranteed "Made in Germany" quality. The high reliability of the products ensures high system availability without downtime. Continuous improvement processes and extensive testing guarantee a high level of safety. Long-lasting, maintenance-free products with a 6-year guarantee also save time and resources.

QUALITY CERTIFICATES

GLOBAL APPROVALS

BUILDING MATERIALS AND CEMENT INDUSTRY

Traditional craftsmanship meets innovation in the building materials and cement sector. In a modern world that increasingly focuses on sustainable construction and resource conservation, cement and other building materials play a crucial role. From residential buildings to large-scale projects and infrastructure – building materials shape the construction industry and offer innovative solutions to meet the demands of a resource-efficient and climate-friendly future.

CHALLENGES

In light of global environmental demands and the growing expectations for sustainable construction, the building materials and cement sector faces a range of challenges. One of the most pressing issues is reducing CO_2 emissions during the production of cement and other building materials. At the same time, there is an increasing focus on the careful use of natural resources and the adoption of alternative materials.

The industry must also navigate a growing number of regulatory requirements, which call for adjustments and new solutions. Furthermore, the shift towards climate-friendly construction methods necessitates the development of long-term, sustainable products and processes that meet the demands of modern building concepts.

MATERIALS AND SUSTAINABILITY

The foundation of cement and other building materials consists of natural raw materials such as limestone, chalk, clay, sand, and gravel. These are supplemented by additives like gypsum, which is specifically used to control material properties such as setting time.

Alternative raw materials, including by-products from other industries such as fly ash or blast furnace slag, make a significant contribution to reducing CO_2 emissions and conserving resources.

In addition, innovative concepts such as the use of recycled concrete and novel aggregates are gaining importance, as they promote sustainable construction and further reduce the ecological footprint.

LEVEL MEASUREMENT IN THE BUILDING MATERIALS AND CEMENT INDUSTRY

Precise level measurement is essential in building materials and cement production to ensure plant availability, prevent production downtime, and maintain efficient and safe processes.

Level measurement takes place under often extreme conditions and is used in silos, conveyor systems, and mills for raw materials such as limestone, clay, and sand. It is also crucial for monitoring material stock in containers holding finished products such as clinker.

In processing plants, level measurement ensures that the required material quantities are always available for grinding and mixing processes, securing the consistency and quality of the final product.

Dust, high temperatures, and abrasive materials pose significant challenges for measurement systems. Robust and reliable solutions guarantee efficiency, accuracy, and durability while meeting the demanding conditions of the industry.

LEVEL AND POINT LEVEL MEASUREMENT ON A BULK MATERIAL STOCKPILE

Limestone, clay, and sand are key raw materials for cement production. Limestone is extracted through mining and then crushed to produce limestone aggregate. Clay is sourced from specialised mines, while sand is typically obtained from sand pits or other natural deposits.

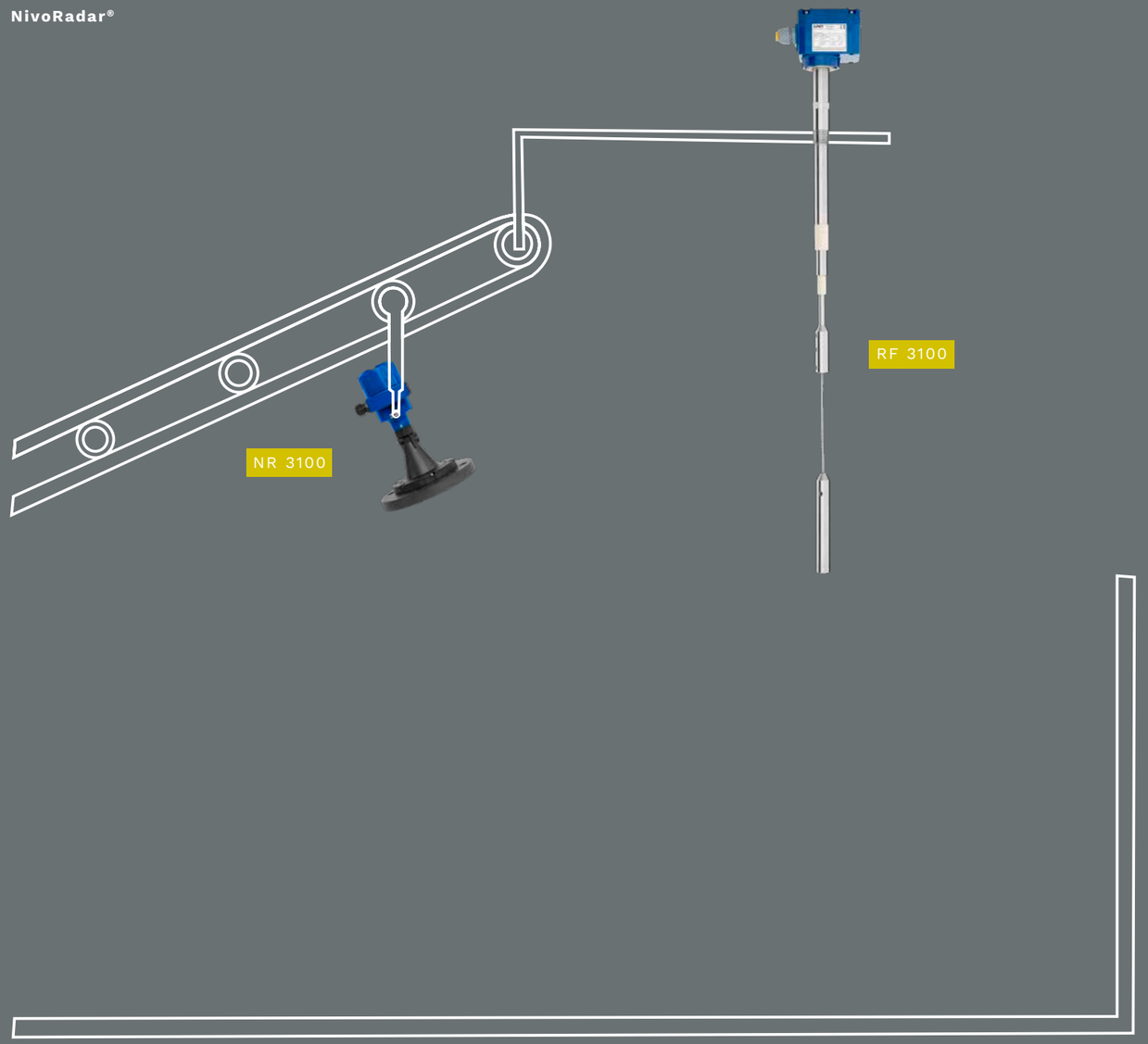
OUR PRODUCT RECOMMENDATION:

RF

RFnivo®

NR

NivoRadar®



CHALLENGE:

- Environmental influences
- Changing material properties
- Movement of the conveyor belt
- Continuous material flow

SOLUTION:

- Weather-independent (rain, snow, wind)
- High sensitivity, individually adjustable
- Robust and durable design
- Precise measurement, unaffected by passing material

Measurement Task
LEVEL & POINT LEVEL MEASUREMENT

Medium
QUARRIED ROCK

Measuring Range
> 10 M | 33 FT

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

BULK MATERIAL STOCKPILE

LEVEL MEASUREMENT AND POINT LEVEL DETECTION IN THE CRUSHER

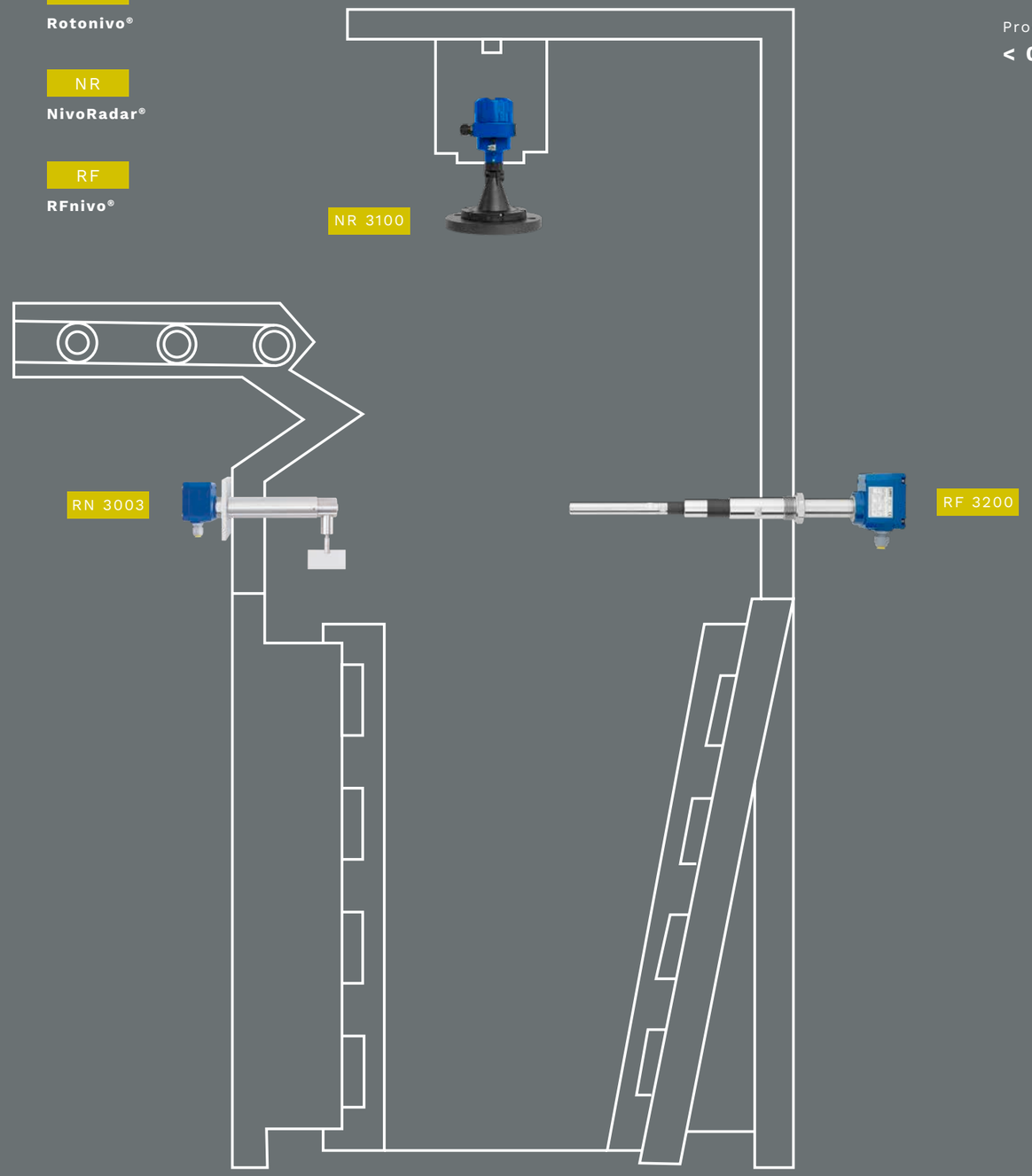
Through blasting, large boulders are extracted from solid rock and then crushed into gravel, chippings, or sand using jaw and roller crushers. Reliable level measurement and point level detection are crucial for optimising material flow, minimising crusher wear, and ensuring efficient operations.

OUR PRODUCT RECOMMENDATION:

RN
Rotonivo®

NR
NivoRadar®

RF
RFnivo®



CHALLENGE:

- Large and heavy rock boulders
- Varying rock sizes
- Ensuring a continuous material flow

SOLUTION:

- Robust and durable design
- Non-contact level measurement technology
- Measurement principle independent of rock sizes

Measurement Task
LEVEL & POINT LEVEL MEASUREMENT

Medium
QUARRIED ROCK

Measuring Range
< 10 M | 33 FT

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

CRUSHER

STORAGE SILO FOR GROUND RAW AND AGGREGATE MATERIALS

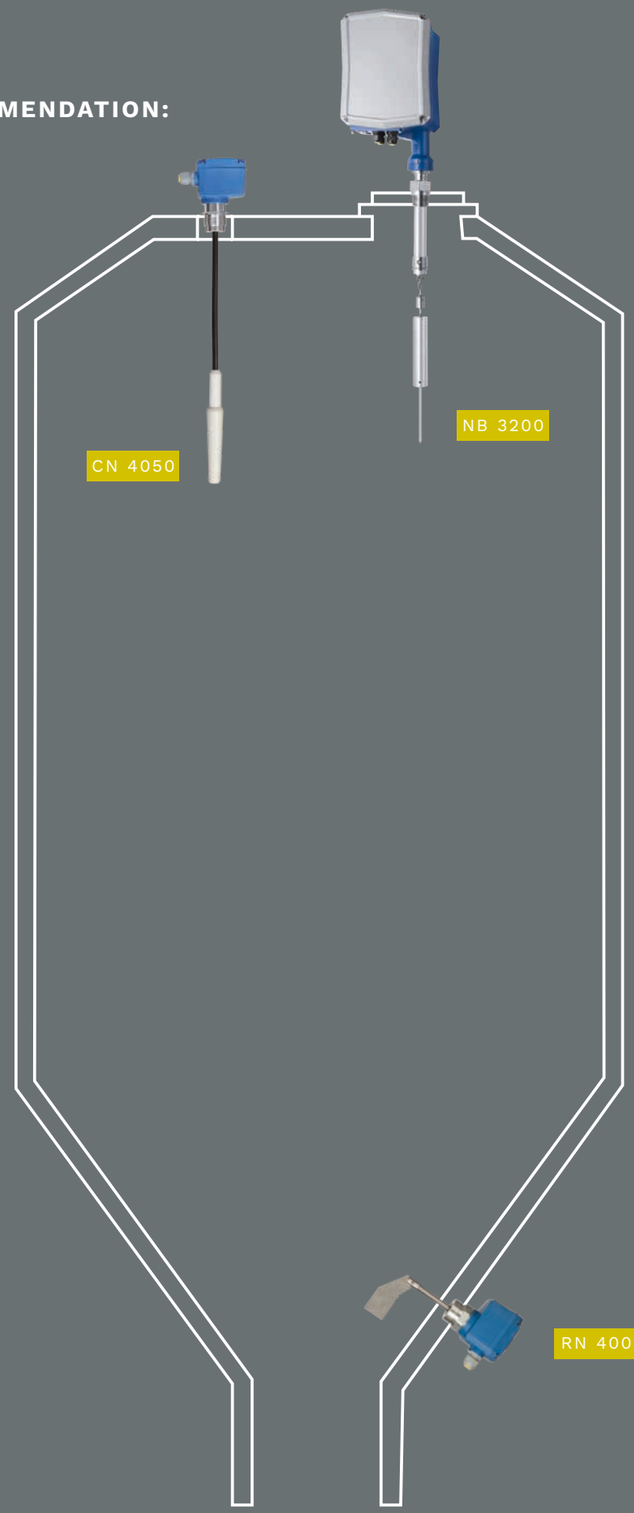
Extracted raw and aggregate materials such as limestone, sandstone, clay, fly ash, soot, or coal dust are stored as powder in storage silos. To achieve the optimal material composition, precise dosing is carried out. Level sensors ensure reliable and accurate monitoring of silo contents.

OUR PRODUCT RECOMMENDATION:

RN
Rotonivo®

CN
Capanivo®

NB
NivoBob®



CHALLENGE:

- Dusty atmosphere
- Abrasion from fine particles
- Adhering material (due to static charge, varying moisture)
- Increased explosion risk

SOLUTION:

- Robust sensors with a dustproof design
- Wear-resistant materials
- Measurement technology unaffected by build-up
- Ex-certified devices

Measurement Task
LEVEL & POINT LEVEL MEASUREMENT

Medium
RAW AND AGGREGATE MATERIALS

Measuring Range
> 10 M | 33 FT

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

STORAGE SILO

LEVEL AND POINT LEVEL MEASUREMENT AT THE CONVEYOR TRANSFER POINT

In production plants, coarse and fine bulk materials are usually transported via conveyor belts. Transfer points with buffer silos ensure a continuous material flow within the conveying system and compensate for fluctuations in quantity. To prevent overfilling and efficiently control the material flow, reliable level and point level monitoring is essential.

OUR PRODUCT RECOMMENDATION:

NR

NivoRadar®

RN

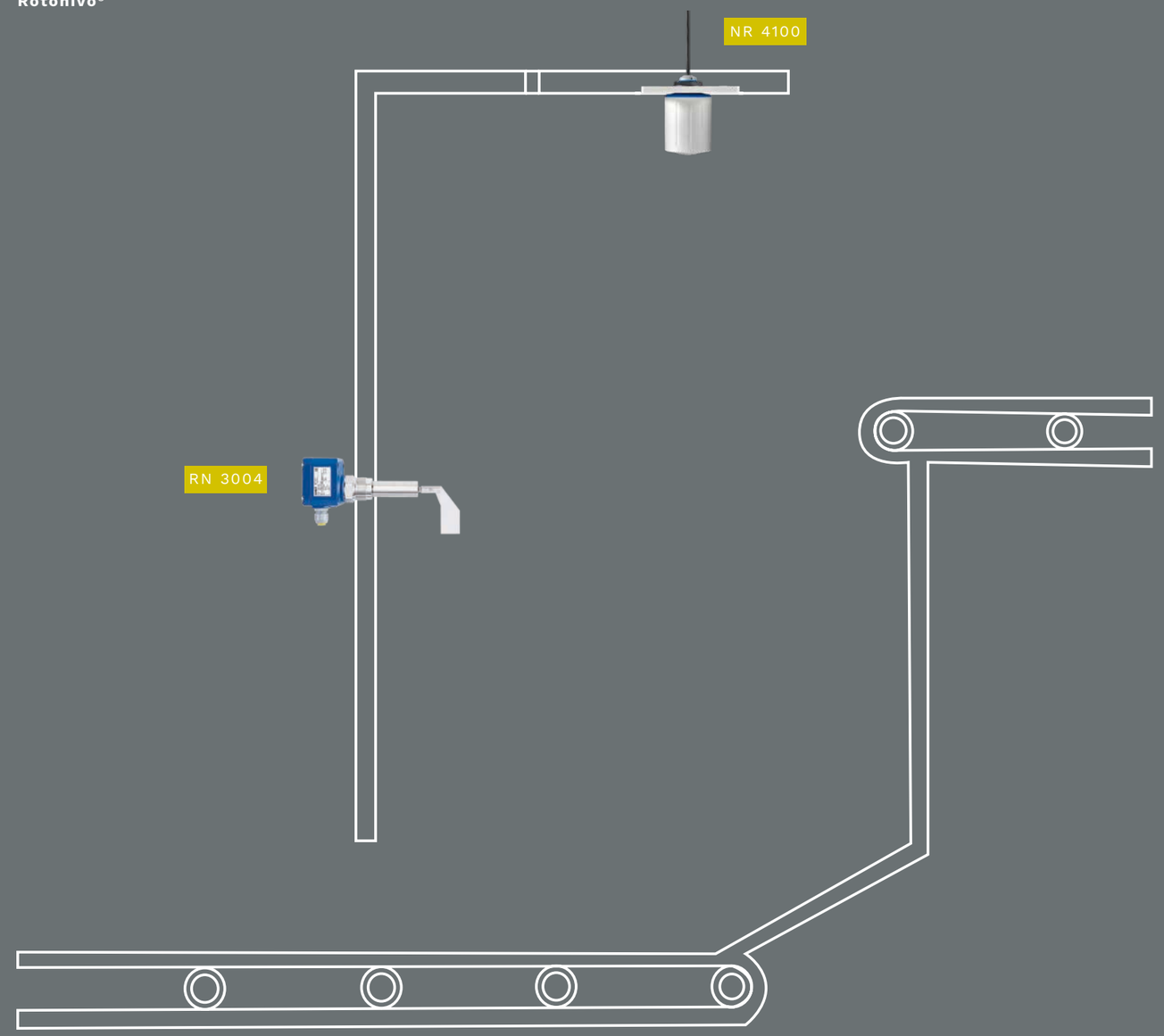
Rotonivo®

CHALLENGE:

- Mechanical load on the measurement technology
- Continuous material flow
- Abrasion and wear from coarse material
- High dust exposure
- Shocks and vibrations

SOLUTION:

- Robust sensors with a dustproof design
- Abrasion-resistant construction and materials
- Non-contact and reliable level measurement
- Vibration resistance



Measurement Task
LEVEL & POINT LEVEL MEASUREMENT

Medium
RAW AND AGGREGATE MATERIALS

Measuring Range
< 2 M | 6.6 FT

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

CONVEYOR TRANSFER POINT

LEVEL AND POINT LEVEL DETECTION IN CLINKER PRODUCTION

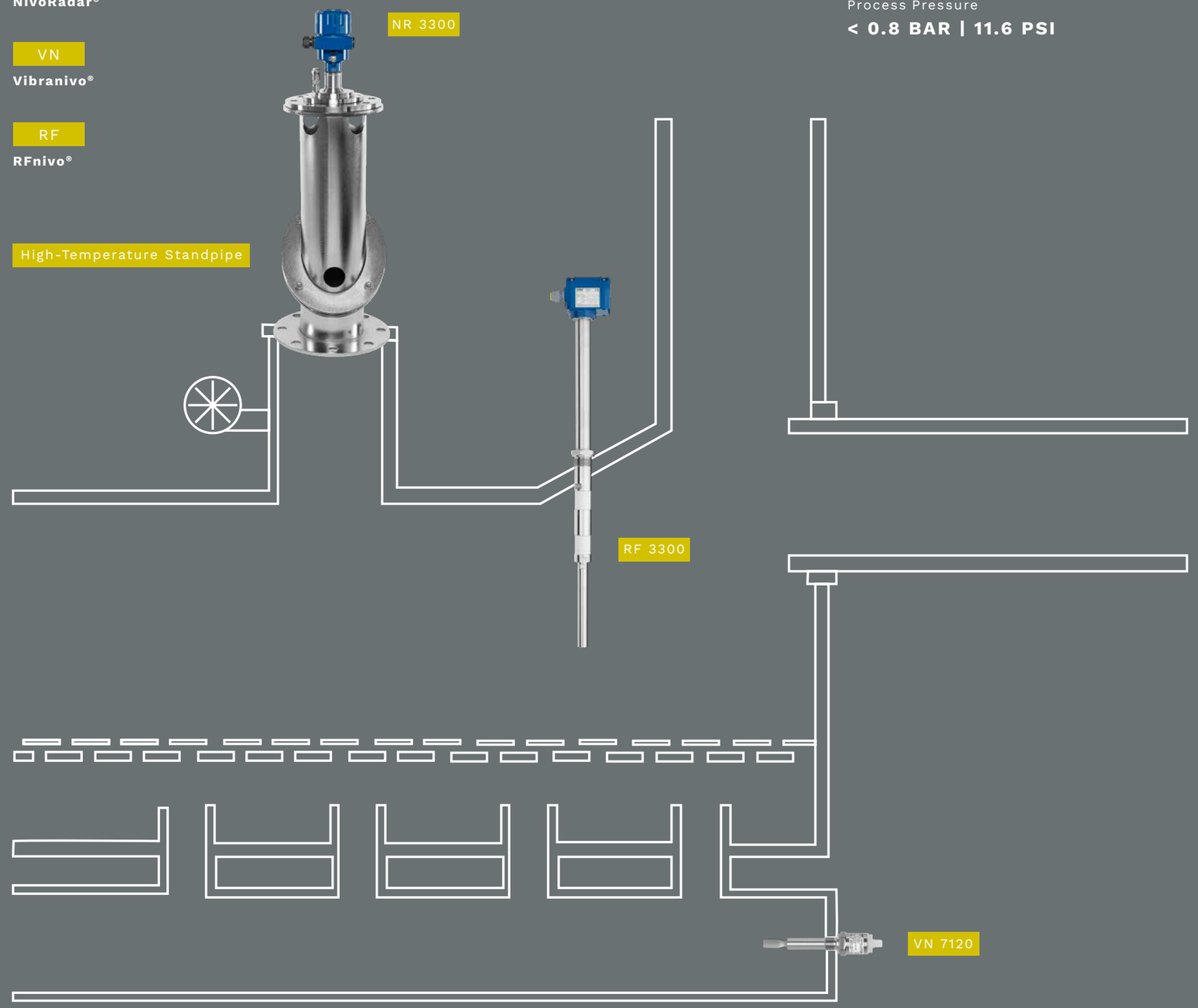
The blended raw material is fired in a rotary kiln at extremely high temperatures of up to 1200 °C / 2192 °F. This process, known as clinker production, creates a coarse-grained substance called clinker. Reliable point level detection plays a crucial role in ensuring a safe and efficient production process.

OUR PRODUCT RECOMMENDATION:

NR
NivoRadar®

VN
Vibranivo®

RF
RFnivo®



CHALLENGE:

- Extremely high temperatures
- Process dynamics due to fluctuating material quantities and uneven material flow
- Confined installation spaces

SOLUTION:

- High-temperature design
- Non-contact level measurement technology
- Reliable process integration (UWT LevelApp)
- Compact measurement technology design

Measurement Task
LEVEL & POINT LEVEL MEASUREMENT

Medium
CLINKER

Measuring Range
< 10 M | 33 FT

Process Temperature
> 600 °C | 1112 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

CLINKER COOLER

STORAGE TANK FOR LIQUIDS OR LIQUID FUELS

Clinker production in the rotary kiln requires significant amounts of energy, often using alternative fuels such as waste oils or solvents. Given the high energy costs, precise level and point level measurement in storage tanks is essential to ensure a reliable supply and optimise the efficiency of the process.

OUR PRODUCT RECOMMENDATION:

CN
Capanivo®

NR
NivoRadar®

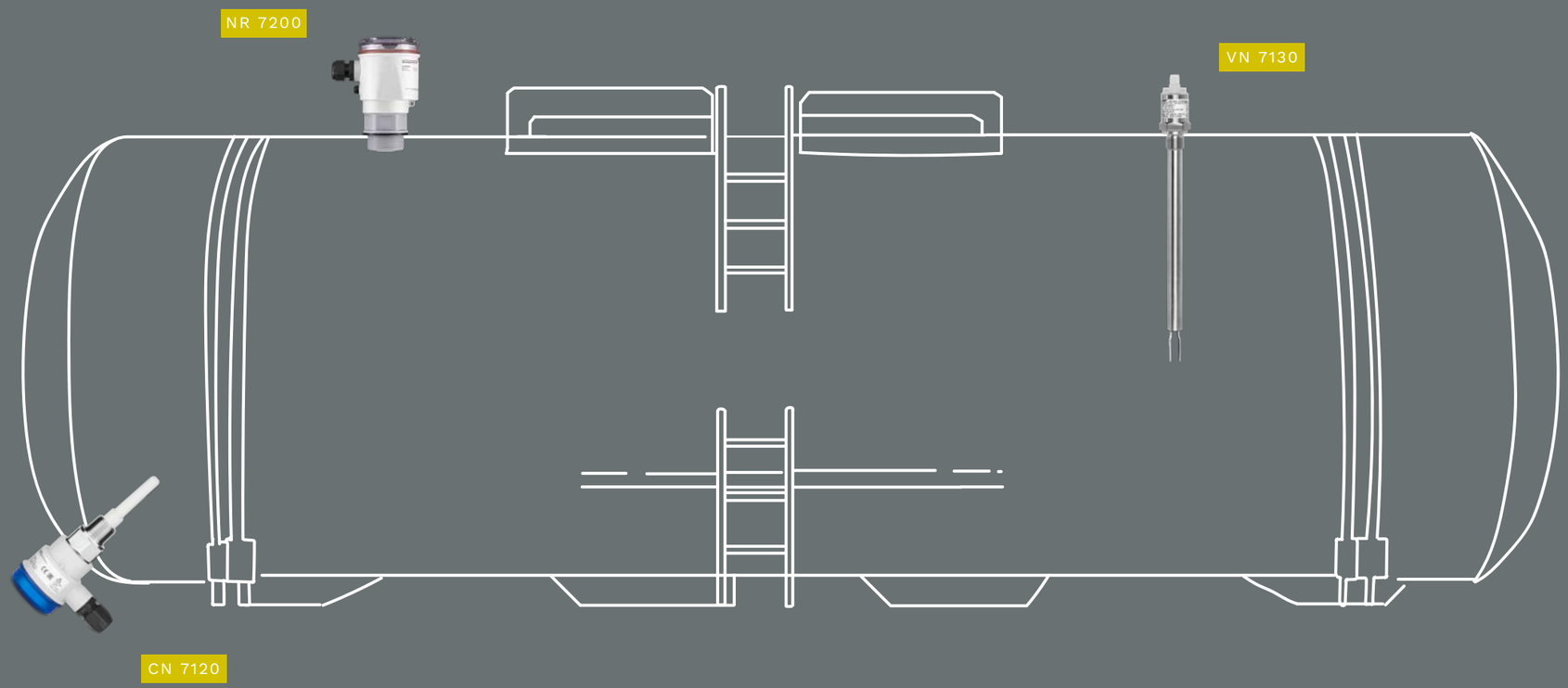
VN
Vibranivo®

CHALLENGE:

- Viscous medium
- Highly flammable fuels
- Build-up and residue formation
- Short measuring distance
- WHG certification

SOLUTION:

- Resistance to chemical influences
- Insensitive to build-up and residue
- Precision at low fill levels
- Compact design
- Ex-certified devices



Measurement Task
LEVEL & POINT LEVEL MEASUREMENT

Medium
LIQUID FUELS

Measuring Range
< 3 M | 9.8 FT

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

TANKS STORAGE

POINT LEVEL MEASUREMENT IN THE ELECTROSTATIC PRECIPITATOR

Electrostatic precipitators (ESPs) are a key component of flue gas cleaning in clinker production, helping to reduce dust emissions. In the rotary kiln, where raw materials such as limestone and clay are processed at extremely high temperatures and flue gases containing fine particles are generated. These particles are captured by the electrostatic precipitator and collected in hoppers. To ensure smooth operation and reliable system control, the use of precise point level sensors is essential.

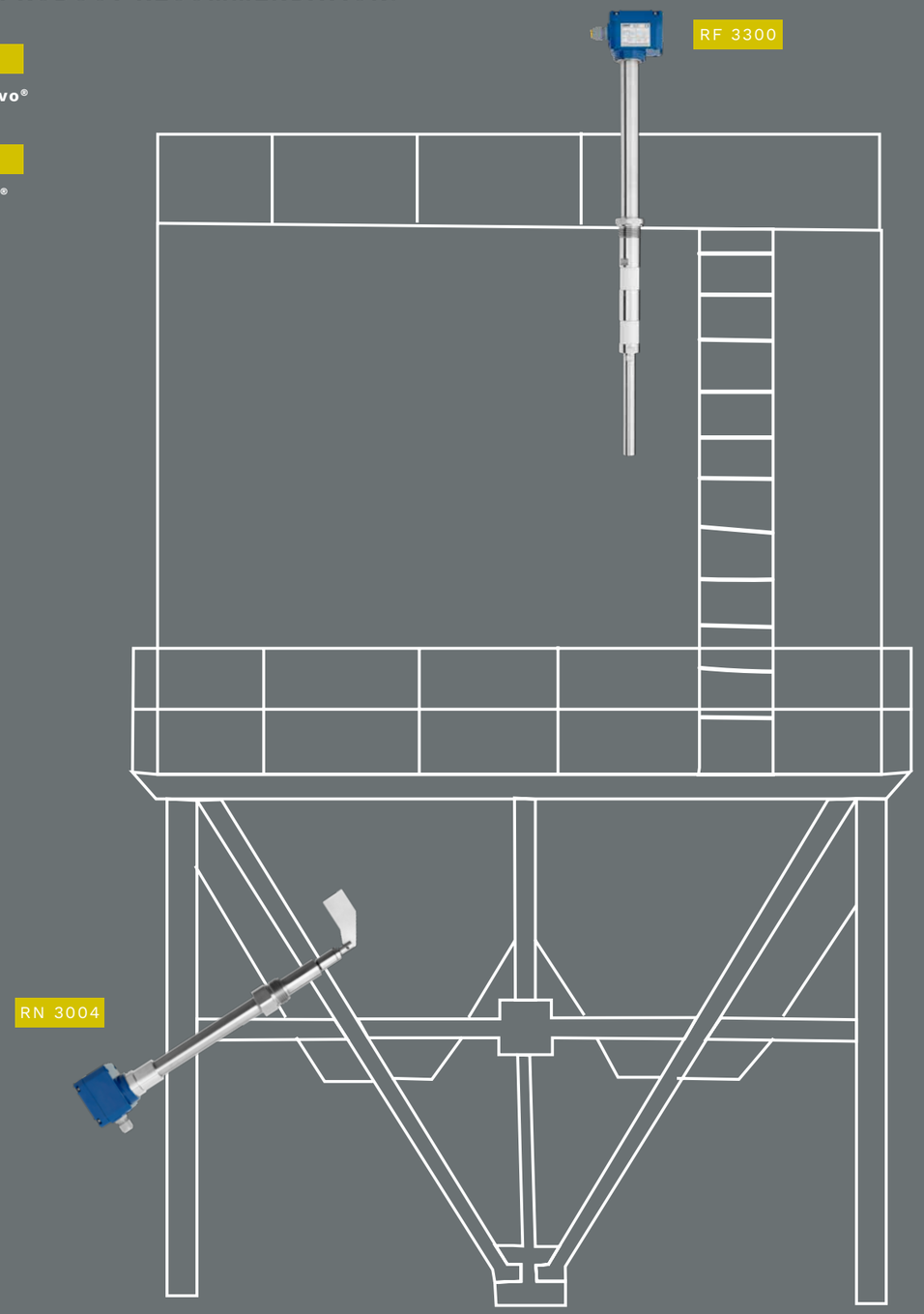
OUR PRODUCT RECOMMENDATION:

RN

Rotonivo®

RF

RFnivo®



CHALLENGE:

- High temperatures
- Light material
- Corrosive media

SOLUTION:

- High-temperature designs
- High sensitivity
- High-quality and durable materials

Measurement Task
POINT LEVEL MEASUREMENT

Medium
CLINKER DUST

Measuring Range
< 10 M | 33 FT

Process Temperature
> 250 °C | 482 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

ELECTROSTATIC PRECIPITATOR

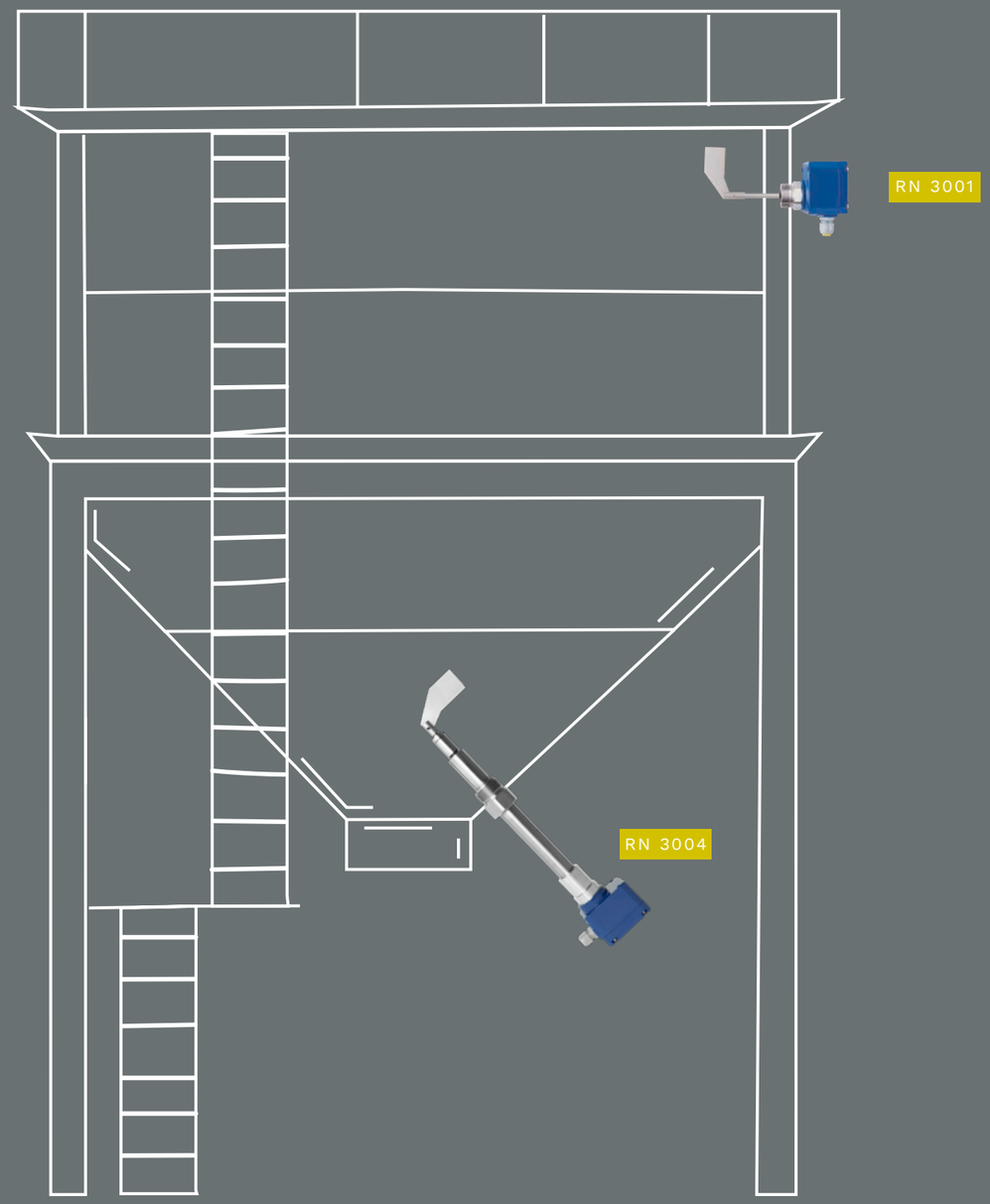
POINT LEVEL MEASUREMENT FOR CLINKER STORAGE

The produced clinker is temporarily stored in large bunkers or silos before further processing. Precise and reliable point level detection ensures the smooth operation of downstream processes and optimises production control.

OUR PRODUCT RECOMMENDATION:

RN

Rotonivo®



CHALLENGE:

- Dusty atmosphere
- Heavy mechanical load
- Elevated temperature

SOLUTION:

- Measurement principle unaffected by dust
- Robust design
- High-temperature versions

Measurement Task
POINT LEVEL MEASUREMENT

Medium
CLINKER

Measuring Range
< 30 M > 98 FT

Process Temperature
< 150 °C | 302 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

BUNKER CLINKER

PNEUMATIC CONVEYING

Pneumatic conveying efficiently transports powdered or granular construction materials over long distances. Using compressed air, the materials are delivered to processing areas. Pressure conveying vessels ensure a continuous material supply, while point level sensors accurately monitor fill levels and secure the conveying process.

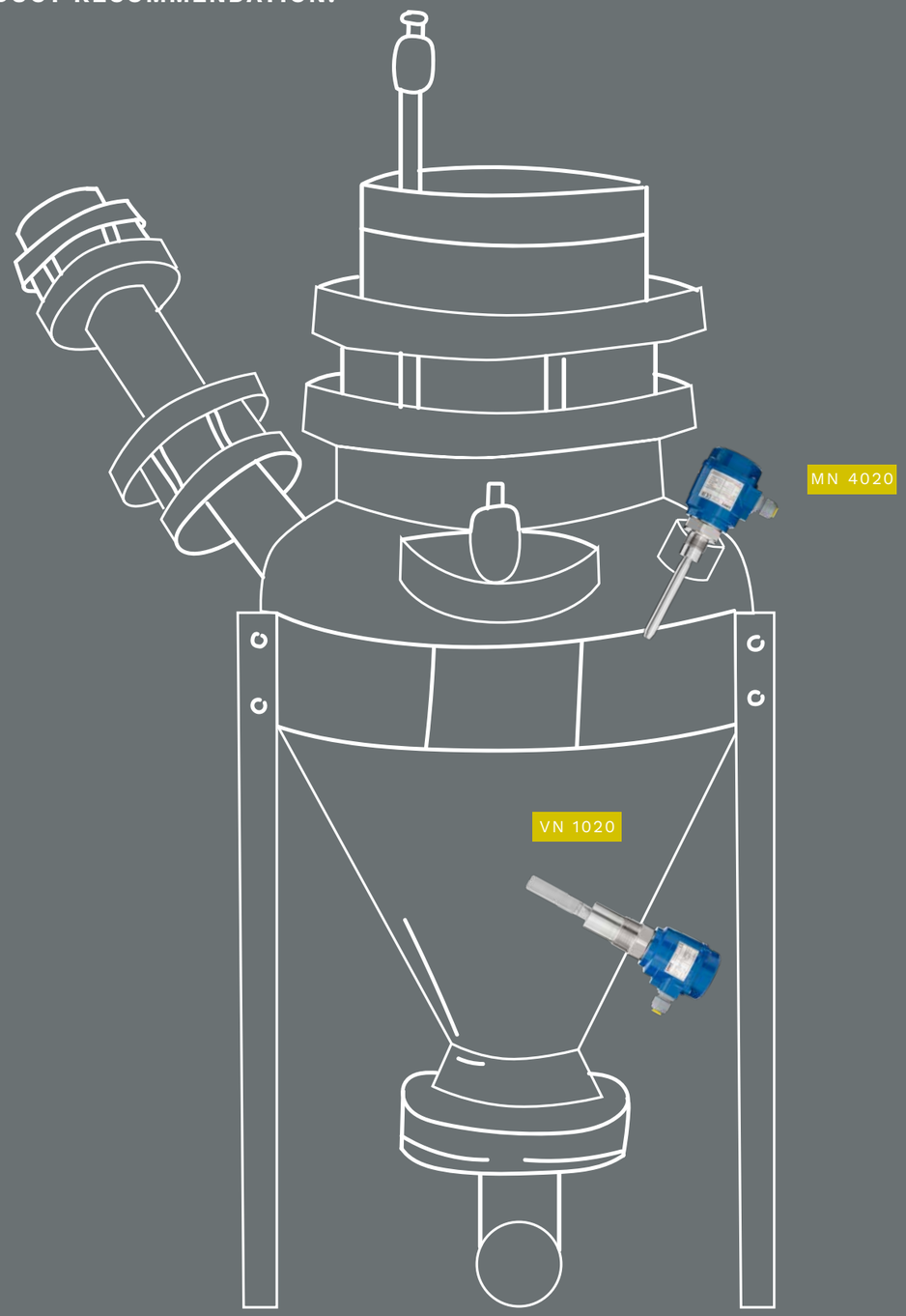
OUR PRODUCT RECOMMENDATION:

VN

Vibranivo®

MN

Mononivo®



CHALLENGE:

- Overpressure
- Confined installation conditions
- High dust exposure
- Abrasion from material

SOLUTION:

- Pressure-resistant up to 16 bar / 232 psi
- Compact design
- Hermetic sealing
- Abrasion-resistant construction and materials

Measurement Task
POINT LEVEL MEASUREMENT

Medium
POWDERS OR GRANULES

Measuring Range
< 2 M | 6.6 FT

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 10 BAR | 145 PSI

PRESSURE CONVEYING VESSEL

LEVEL AND POINT LEVEL MEASUREMENT IN THE CEMENT STORAGE SILO

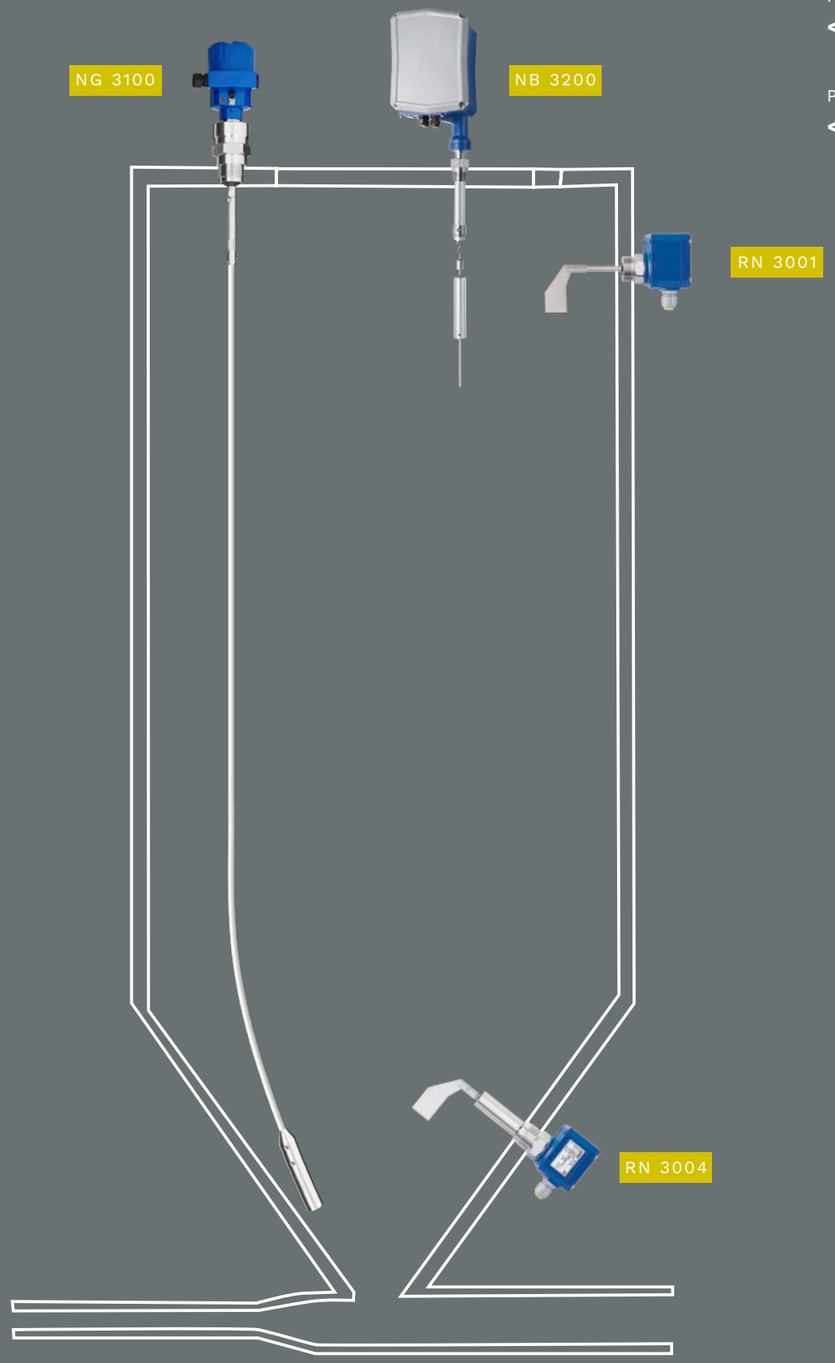
The finished cement is stored in large silos to ensure efficient further processing or delivery. Precise level and point level sensors are essential for transparent inventory monitoring, overfill prevention, and ensuring reliable material availability.

OUR PRODUCT RECOMMENDATION:

NB
NivoBob®

RN
Rotonivo®

NG
NivoGuide®



CHALLENGE:

- Dusty atmosphere
- Material build-up
- High mechanical loads

SOLUTION:

- Measurement technology unaffected by dust development and build-up
- Robust design

Measurement Task
LEVEL & POINT LEVEL MEASUREMENT

Medium
CEMENT

Measuring Range
< 30 M | 98 FT

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

CEMENT STORAGE SILO

FILLING OF SILO TRUCKS

Dry cement is packed in bags or containers and delivered to construction sites or sales points. For larger quantities, silo trucks are used to transport the cement directly to the construction site. Precise point level sensors control the filling process, prevent overfilling, and ensure efficient and safe handling.

OUR PRODUCT RECOMMENDATION:

RN

Rotonivo®

VN

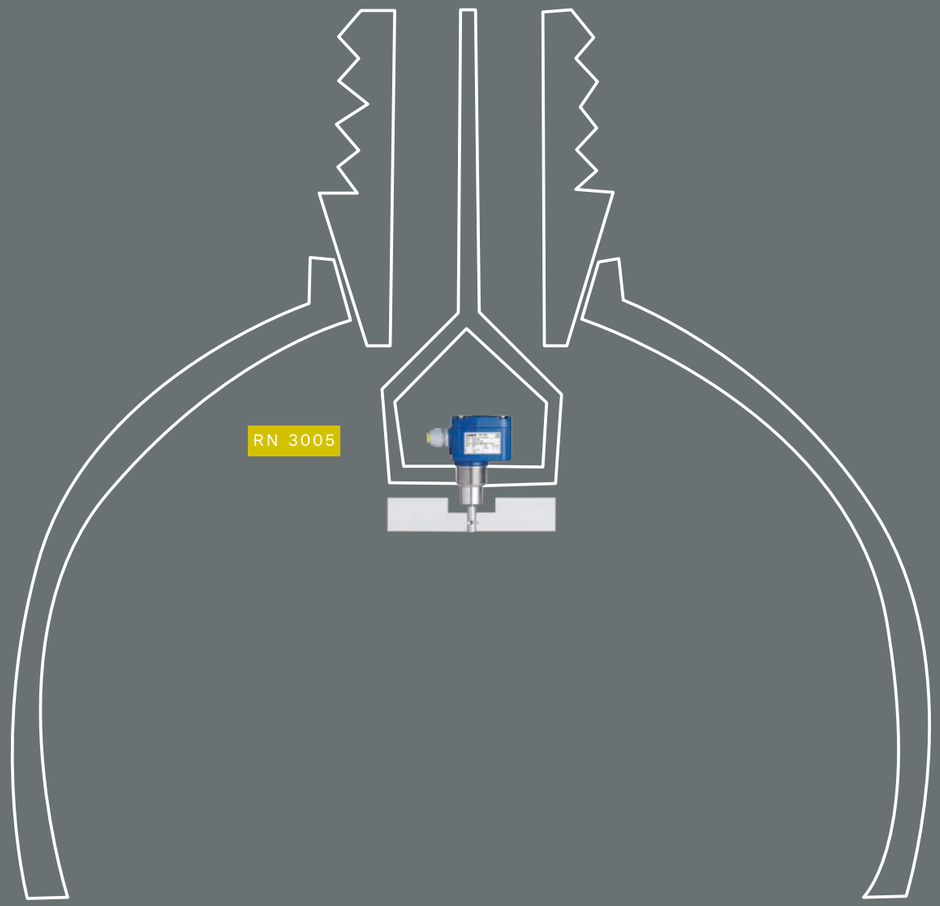
Vibranivo®

CHALLENGE:

- High filling speed
- Continuous material flow
- Confined installation space
- Dusty atmosphere

SOLUTION:

- Fast response time to prevent overfilling
- Compact design with a short boom length
- Measurement technology unaffected by dust



Measurement Task
POINT LEVEL MEASUREMENT

Medium
BUILDING MATERIALS

Measuring Range
< 2 M | 6.6 FT

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

LOADING TELEHAN

LEVEL AND POINT LEVEL DETECTION IN PREHEATED BITUMEN TANK

Asphalt is created by the controlled mixing of minerals, rock dust, and bitumen – a binder derived from petroleum. This multi-stage process takes place in specially designed asphalt mixing plants. The bitumen is stored in heated tanks to ensure its fluidity. Bitumen becomes pumpable at temperatures of 120 °C / 248 °F, which is why the temperatures in the tank can reach up to 200 °C / 392 °F.

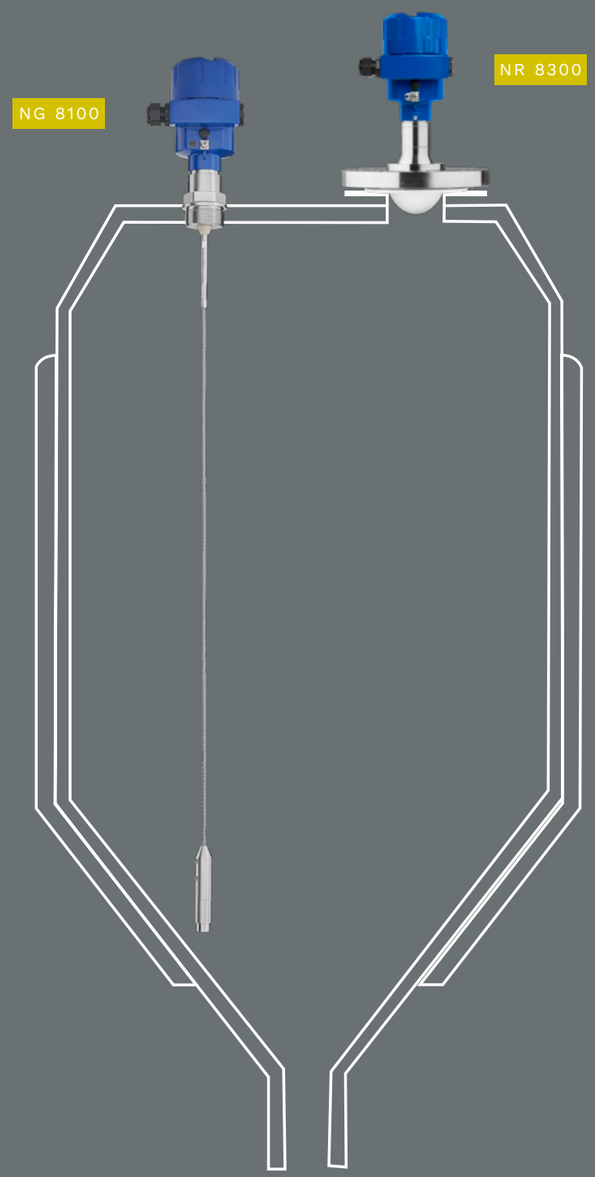
OUR PRODUCT RECOMMENDATION:

NG

NivoGuide®

NR

NivoRadar®



CHALLENGE:

- High temperature
- Build-up
- Condensate
- Strict safety requirements

SOLUTION:

- Temperature-resistant up to 200 °C / 392 °F
- Measurement principle unaffected by build-up and condensate
- SIL 2/3

Measurement Task
LEVEL & POINT LEVEL MEASUREMENT

Medium
BITUMEN

Measuring Range
< 10 M | 33 FT

Process Temperature
150 °C - 200 °C | 302 °F - 392 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

TANK BITUMEN

POINT LEVEL MEASUREMENT IN THE COLD DRAW SYSTEM

Various minerals such as sand, gravel and chippings are stored in the cold conveying system according to their aggregate size. The system ensures that the materials are provided in the correct quantities and mixing ratios for further processing.

OUR PRODUCT RECOMMENDATION:

RN

Rotonivo®

CHALLENGE:

- Different rock sizes
- High mechanical load
- Continuous material flow

SOLUTION:

- Measuring principle independent of the rock size
- Robust and durable design

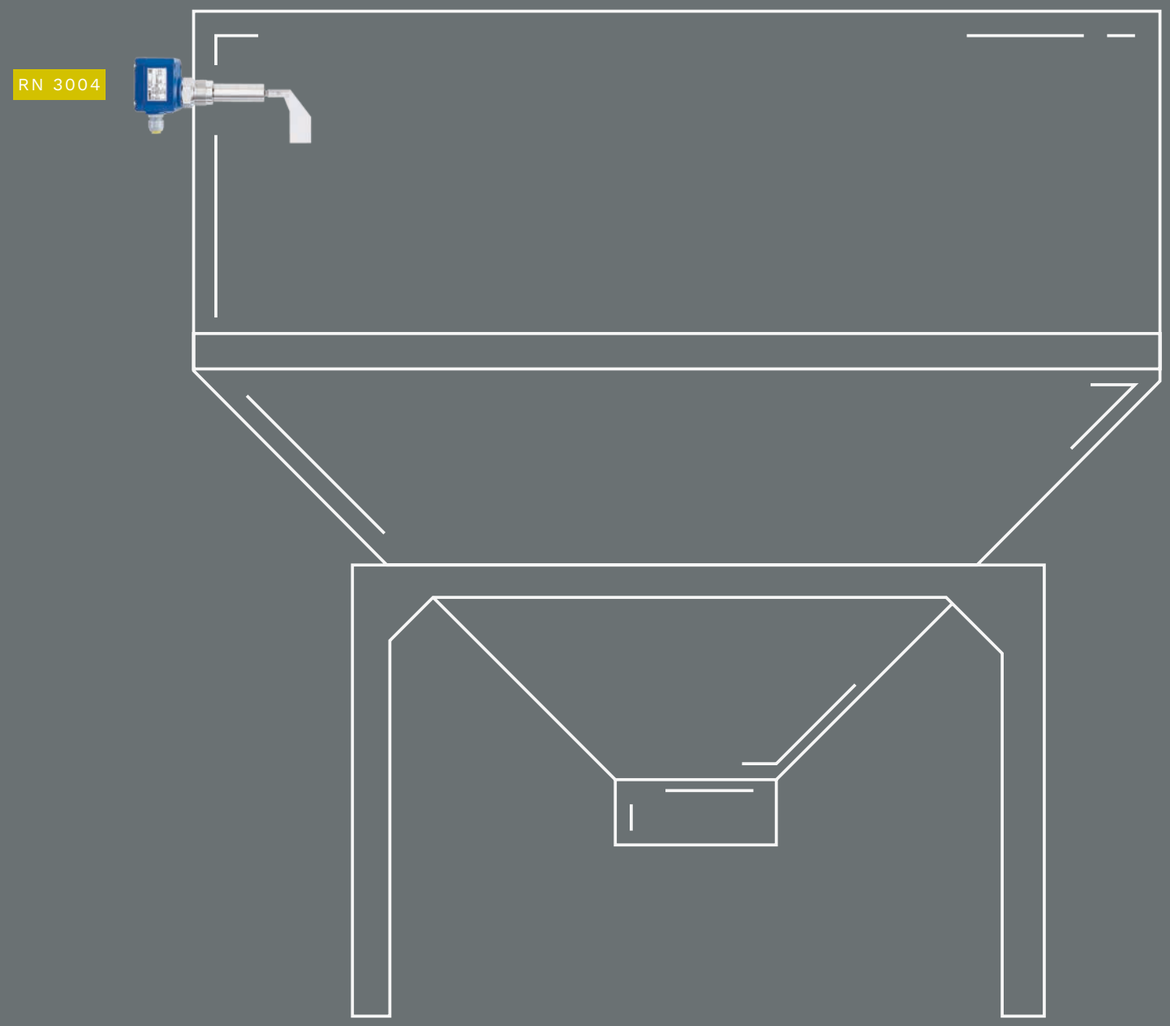
Measurement Task
POINT LEVEL MEASUREMENT

Medium
MINERALS

Measuring Range
< 3 M | 9.8 FT

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 0.8 BAR | 11.6 PSI



STORAGE CONTAINER

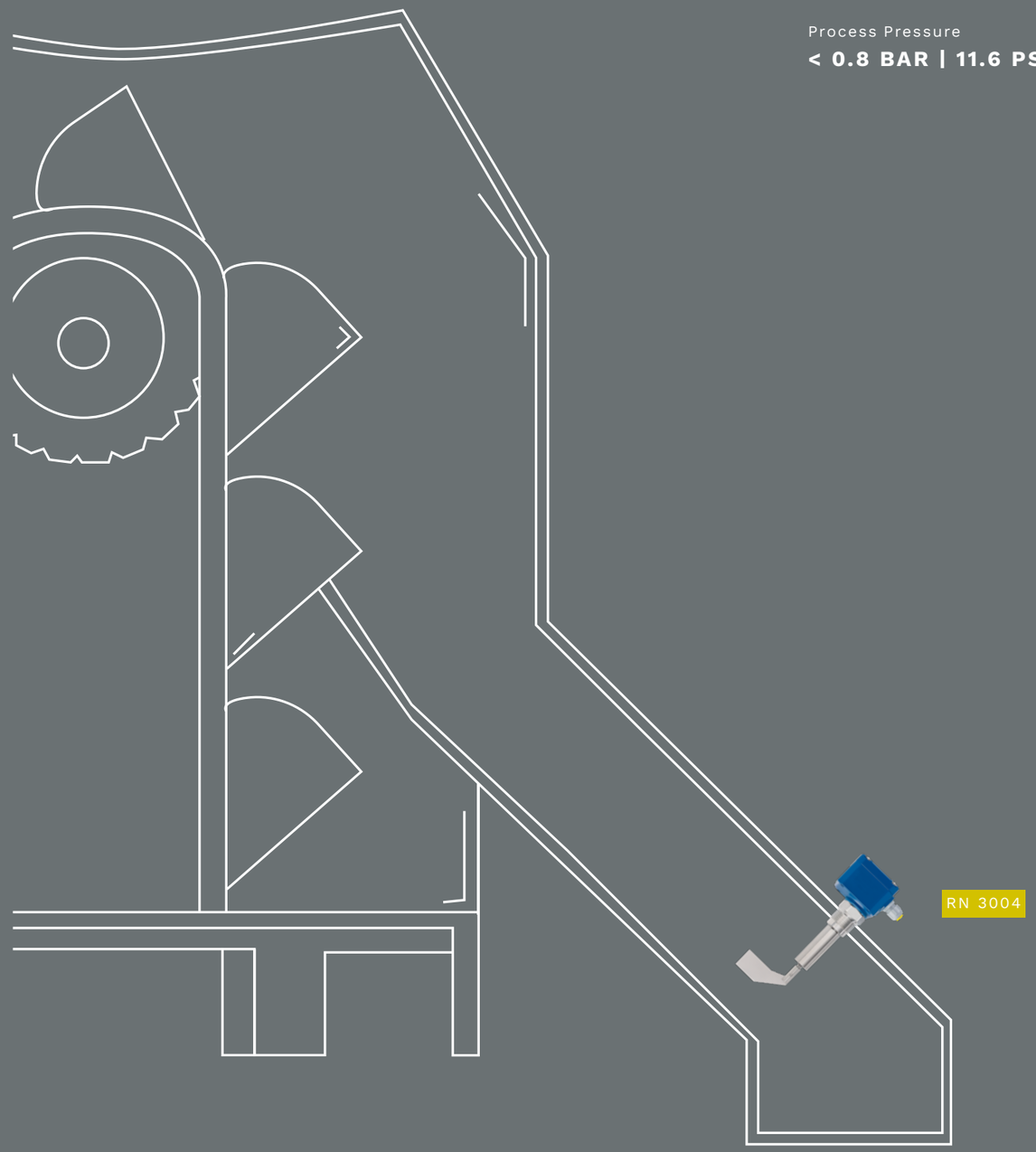
BACKFLOW INDICATION IN THE FILLING CHUTE

The material mixture is transported to the highest point of the screening plant using an elevator. The material is introduced into the screening plant via a specially designed filling chute. To ensure smooth operation, point level sensors are used as backflow indicators.

OUR PRODUCT RECOMMENDATION:

RN

Rotonivo®



CHALLENGE:

- Different rock sizes
- High mechanical load
- Continuous material flow

SOLUTION:

- Measuring principle independent of the rock size
- Robust and durable design

Measurement Task
BACKFLOW INDICATION

Medium
MINERALS

Measuring Range

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

FILLING CHUTE

MATERIAL SEPARATION IN SCREENING PLANT

The minerals are separated in the screening plant based on their particle size and stored in different chambers. Point level and level sensors ensure high material availability and enable efficient operation.

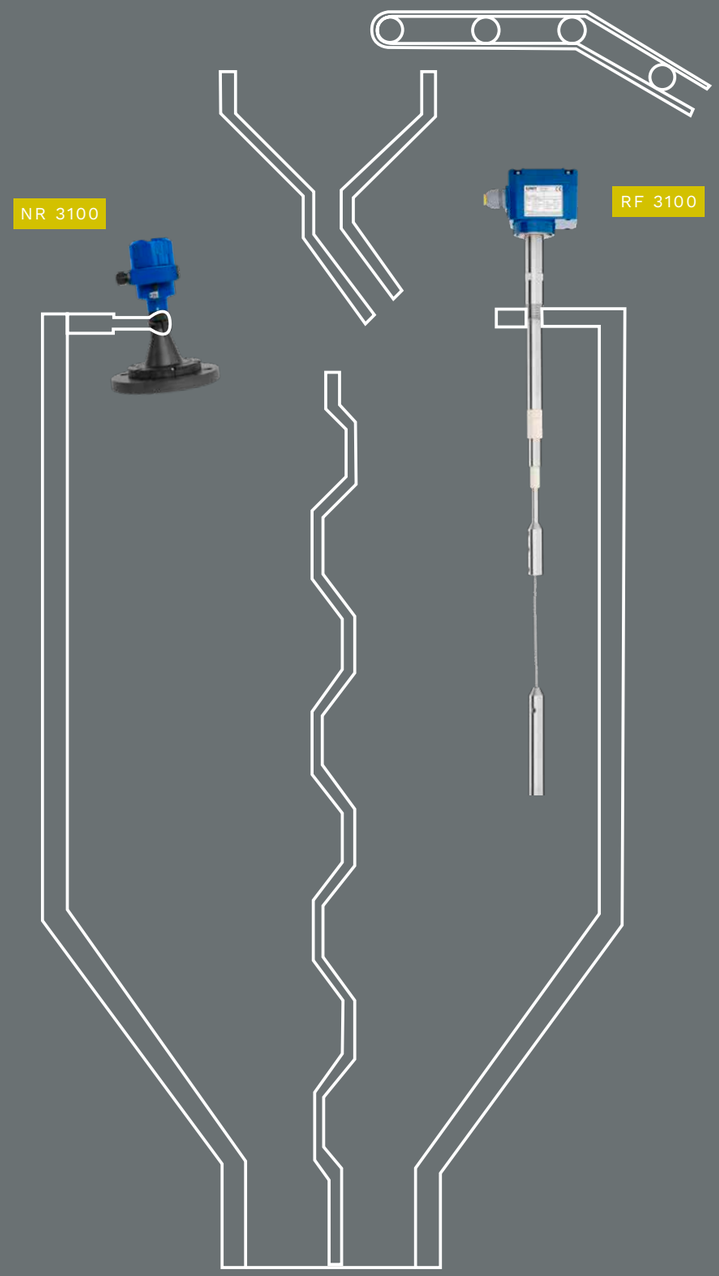
OUR PRODUCT RECOMMENDATION:

NR

NivoRadar®

RF

RFnivo®



Measurement Task

LEVEL & POINT LEVEL MEASUREMENT

Medium

MINERALS

Measuring Range

< 20 M | 66 FT

Process Temperature

< 80 °C | 176 °F

Process Pressure

< 0.8 BAR | 11.6 PSI

CHALLENGE:

- Restricted installation conditions
- Continuous material flow
- Different bulk weights

SOLUTION:

- Measuring principle independent of the rock size
- Robust and durable design

SEGMENT FER
CONTAINE

LEVEL AND LIMIT LEVEL MEASUREMENT IN THE STORAGE SILO FOR ROCK FLOUR

Rock flour is an indispensable filler in asphalt production. It supplements the fine components of the asphalt mix, increases stability and optimises the bond between aggregates and bitumen. Rock flour is stored in large storage silos, the contents of which are reliably monitored by precise limit and level sensors.

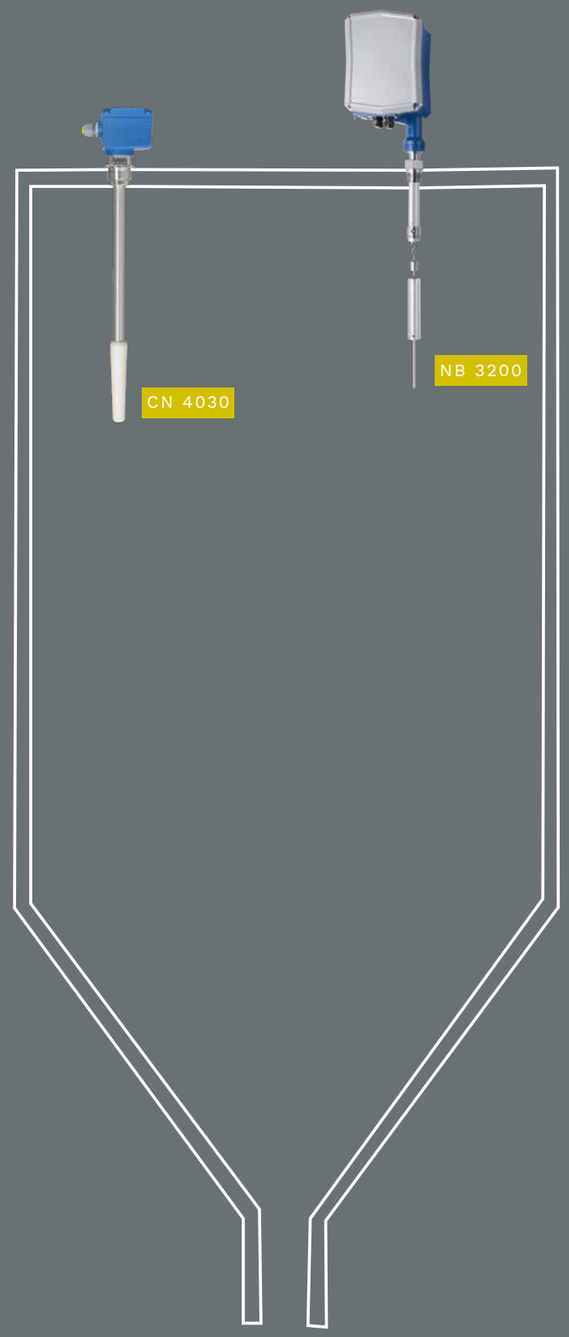
OUR PRODUCT RECOMMENDATION:

CN

Capanivo®

NB

NivoBob®



Measurement Task

LEVEL & POINT LEVEL MEASUREMENT

Medium

ROCK FLOUR

Measuring Range

< 20 M | 66 FT

Process Temperature

< 80 °C | 176 °F

Process Pressure

< 0.8 BAR | 11.6 PSI

CHALLENGE:

- Adhesions
- Dusty atmosphere
- Lightweight material with low DK value

SOLUTION:

- Measuring principle unaffected by dust formation and build-up
- High sensitivity

STORAGE SILO

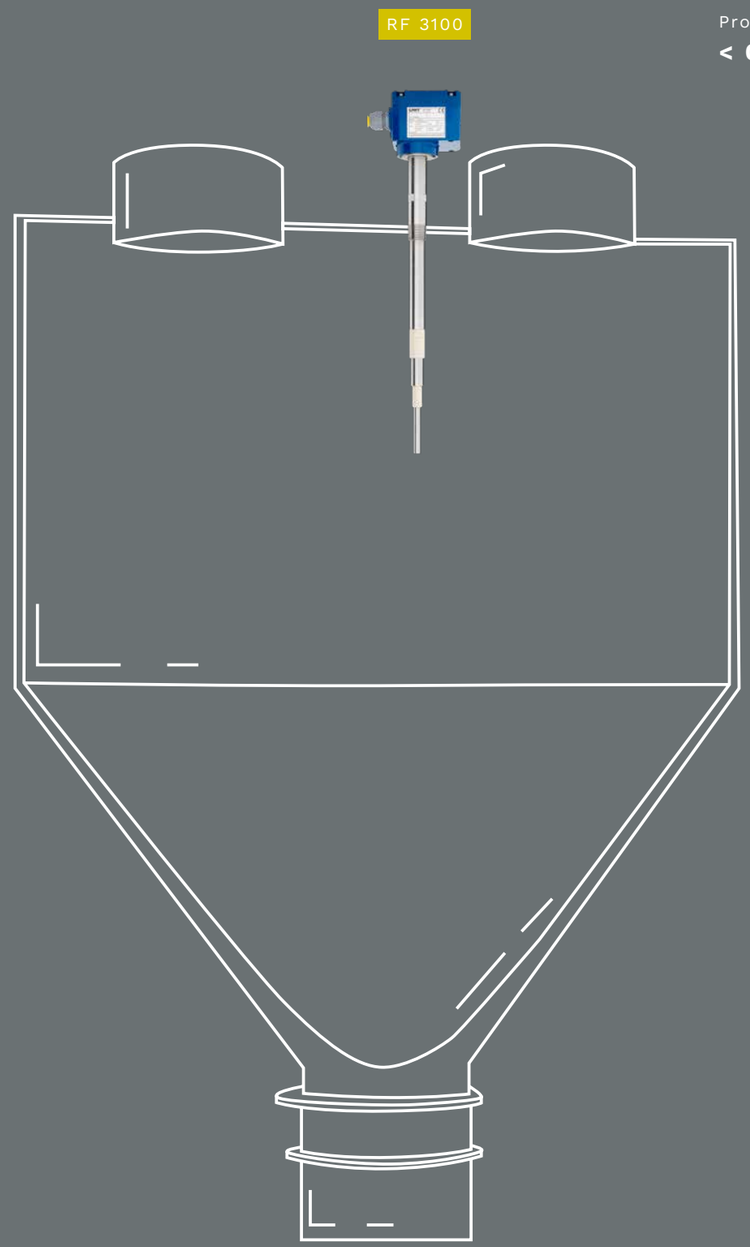
LEVEL LIMIT MEASUREMENT WHEN WEIGHING THE COMPONENT MIXTURE

Depending on the desired asphalt composition, the raw materials are mixed in different proportions. The mineral scale and filler scale play a central role in weighing the required quantities according to the mixing recipe. Point level sensors ensure efficient and reliable material dosing.

OUR PRODUCT RECOMMENDATION:

RF

RFnivo®



Measurement Task
POINT LEVEL MEASUREMENT

Medium
ROCK FLOUR, MINERALS, BITUMEN

Measuring Range
< 2 M | 6.6 FT

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

CHALLENGE:

- Restricted installation conditions
- Continuous material flow
- Changing mixing ratio

SOLUTION:

- Installation near the tank wall possible
- Measurement principle unaffected by passing material
- No recalibration required with changing mix ratios

POINT LEVEL DETECTION IN THE MIXER

In the batch mixer, various materials are precisely dosed and efficiently blended in specific proportions. The uniform homogenisation results in ready-to-use asphalt.

OUR PRODUCT RECOMMENDATION:

RN

Rotonivo®

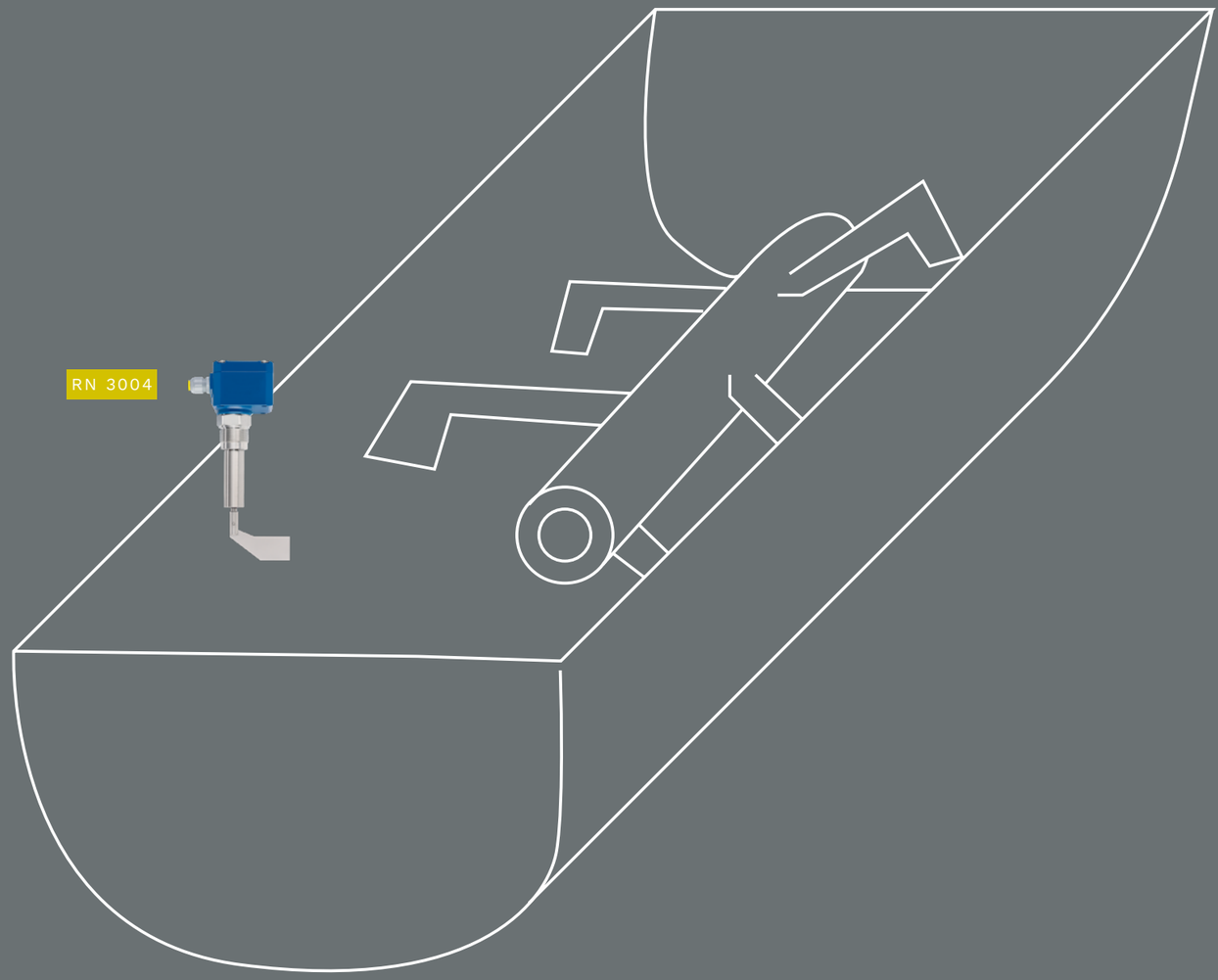
Measurement Task
POINT LEVEL MEASUREMENT

Medium
ROCK FLOUR, MINERALS, BITUMEN

Measuring Range
< 2 M | 6.6 FT

Process Temperature
< 200 °C | 392°F

Process Pressure
< 0.8 BAR | 11.6 PSI



CHALLENGE:

- Increased temperature
- Material movement
- High mechanical load

SOLUTION:

- Temperature resistant up to 200 °C / 392 °F
- Robust design
- Durable measurement technology even with strong material movement

LEVEL AND POINT LEVEL DETECTION IN STORAGE SILOS FOR ASPHALT

The finished asphalt is stored in silos for further transport. Point level and level sensors ensure reliable monitoring and maximum transparency.

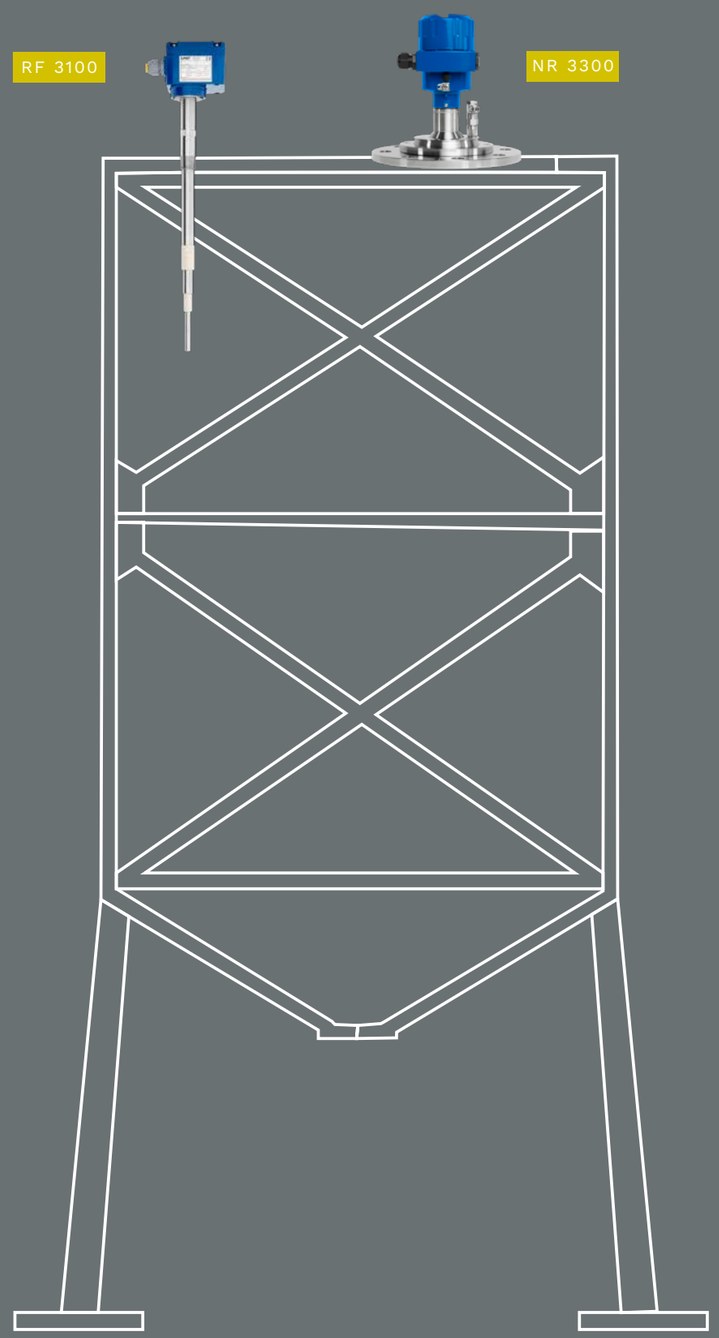
OUR PRODUCT RECOMMENDATION:

RF

RFnivo®

NR

NivoRadar®



CHALLENGE:

- Increased temperature
- Heavy material
- Adhesions

SOLUTION:

- Temperature resistant up to 200 °C / 392 °F
- Robust design
- Measuring principle unaffected by build-up (Active Shield technology)

Measurement Task
LEVEL & POINT LEVEL MEASUREMENT

Medium
ASPHALT

Measuring Range
< 10 M | 33 FT

Process Temperature
< 200 °C | 392 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

SILO STORAGE

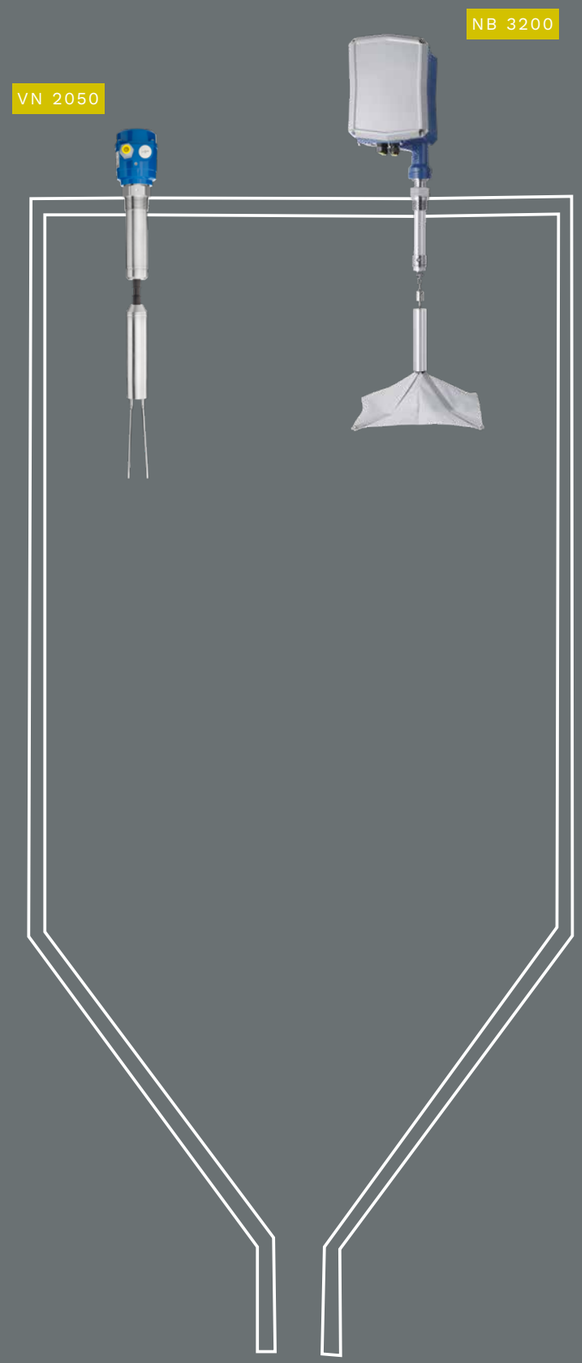
LEVEL AND POINT LEVEL DETECTION FOR LIGHTWEIGHT MATERIALS SUCH AS EPS OR PERLITE

To produce ready-mix plaster with outstanding thermal insulation properties, expanded polystyrene (EPS) or similar materials are added to the mixture of sand, lime, and cement. The extremely lightweight EPS beads, with a bulk density of just a few grams per litre / pounds per cubic foot, pose particular challenges for measurement. Therefore, precise level measurement and reliable point level detection are essential for efficient storage management.

OUR PRODUCT RECOMMENDATION:

NB
NivoBob®

VN
Vibranivo®



CHALLENGE:

- Lightweight material
- Extremely low DK value
- Electrostatic charging

SOLUTION:

- High sensitivity
- Measuring principle independent of the DK value of the material
- Self-cleaning effect of the measurement technology

Measurement Task
LEVEL & POINT LEVEL MEASUREMENT

Medium
EXPANDED POLYSTYRENE (EPS), PERLITE

Measuring Range
< 25 M | 82 FT

Process Temperature
< 80 °C | 176 °F

Process Pressure
< 0.8 BAR | 11.6 PSI

SILO

STORAGE

ROBUST LEVEL MEASUREMENT FOR RELIABILITY IN CEMENT SILOS

One of the largest cement plants in Kazakhstan required a reliable solution for continuous level measurement in a cement silo over 22 metres / 72 feet high. The extreme environmental conditions - including high dust levels, lump formation, increased process temperatures and an existing high spout - placed particular demands on the measurement technology.

The aim was to obtain precise measurement data for efficient production control and operational safety.

NB

NivoBob®

OUR SOLUTION

The implemented electromechanical UWT lot system, NivoBob® - NB 3200, is distinguished by its robustness and versatility. The NivoBob® was used in the tape version and features an integrated tape cleaner, effectively preventing dust build-up and ensuring precise measurements.

Installation was facilitated by an extended socket entry, allowing seamless integration into the existing infrastructure with the pre-existing base.

CORE COMPONENTS OF THIS CUSTOMISED SYSTEM SOLUTION

Precise level measurement and reliable monitoring of cement silos under the extreme, dusty and harsh conditions that are typical of the building materials industry place high demands on the measuring systems used and their adaptability:

Precision and Reliability:

The NivoBob® - NB 3200 lot system provides reliable level measurement over distances of up to 50 meters / 164 feet. Thanks to its robust design and precise sensor technology, it delivers consistent results even under extreme conditions. The tape version has been specifically developed for dust-intensive applications.

Tape Cleaner:

The integrated scraper ensures that the tape is automatically cleaned during each measurement process. This effectively prevents dust build-up that could affect measurement accuracy while also protecting the mechanical chamber from contamination.

Dual-Chamber Housing:

The sensor’s mechanics and electronics are hermetically separated. This ensures reliable protection of the electronics from dust and moisture, significantly extending the device’s lifespan and enabling low-maintenance operation.

Customised Sensing Weight:

For use in cement silos, a specially configured stainless steel sensing weight with spikes was implemented. This weight is ideal for fine-grained materials and steep bulk material cones, as it penetrates the material precisely and provides accurate measurement results.

BENEFITS AND RESULTS

This project implementation by UWT provides the cement plant with numerous advantages:

Consistent Material Detection:

The lot system ensures reliable measurement accuracy even under demanding conditions and varying bulk angles. This enables precise control of material inventory and helps prevent production downtime.

Durability:

A robust design and protective features such as the dual-chamber housing and tape cleaner make the sensor dust-resistant, low-maintenance, and durable for up to 500,000 measurement cycles.

Enhanced Operational Safety:

The ATEX-certified design of the NivoBob® provides maximum safety in dust-explosive environments. This makes it particularly suitable for applications in the building materials industry.

Application reports

Application Database

LEVEL MONITORING AND VISUALISATION DISPLAY

NivoTec®

Various technologies are available for level display. Simple LED digital displays for evaluating a 4-20 mA signal can be integrated into control cabinets or wall-mounted, ranging up to touch panels and web server modules with visualisation software. These can be configured on a project basis and customised to meet customer requirements.

UWT offers standardised products from the NivoTec® - NT 4000 series, which meet many requirements for level display and monitoring at a competitive price. The NivoTec® - NT 3000 series can be customised for individual customer projects. This web server solution meets all the requirements of modern level monitoring.

NivoTec®
Level monitoring and visualisation

NivoTec® - NT 4600
7 inch touch panel visualisation

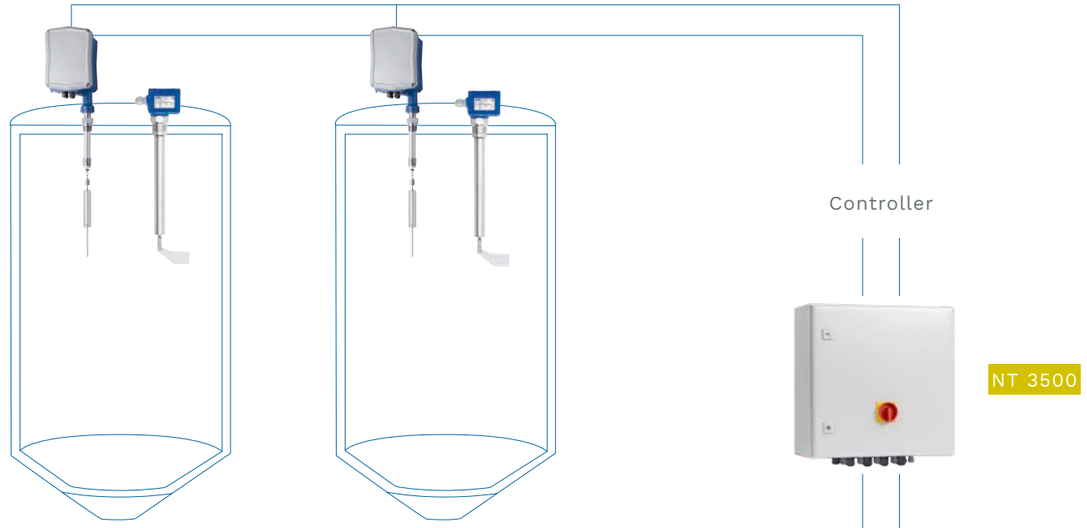
NivoTec® - NT 4700
Level Indicator one container

NivoTec® - NT 3500
Custom project visualisation

NivoTec® - NT 4900
Level indicator for control cabinet

NivoTec® - NT 4500
Standardised visualisation

NivoTec® - NT 9000
Local fill level display



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