

SONO VARIO

The inline moisture determination for aggregates

Manage quality
at the very dosing of aggregates



Based on the innovative TRIME® radar technology, the determination of water contents during the dosing of aggregates is possible: Without value drift over lifespan and wear of the probes.

Moisture Sensor Experts

IMKO 

The new dimension of quality control in the process

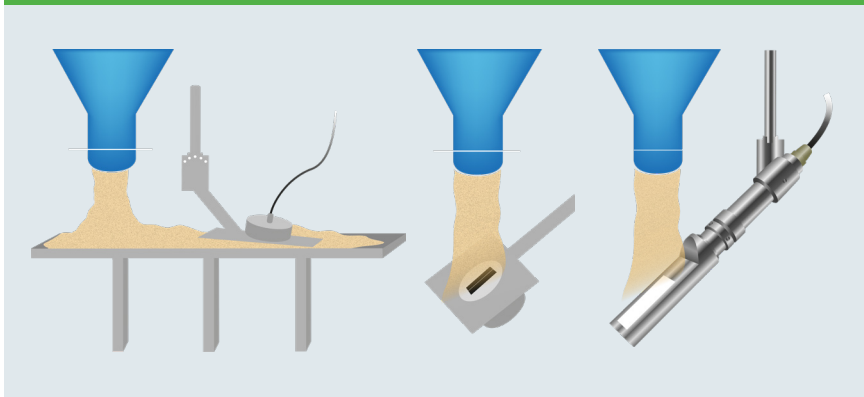
- ➔ The sensor measures sand, gravel, crushed stones and grit up to 32 mm as well as other aggregates such as expanded clay with highest accuracy
- ➔ Calibration for all common aggregates are stored as standard
- ➔ Individual adjustment to other aggregates is possible
- ➔ Wear/abrasion have no influence on the measuring principle. Regular recalibration is not necessary
- ➔ Specially hardened surfaces (optional) delay wear of the sensor and significantly extend the lifespan.
- ➔ Compatible with all common control systems
- ➔ Simple commissioning and parameterization

Long-term reliable online moisture measurement, batch by batch in your raw materials

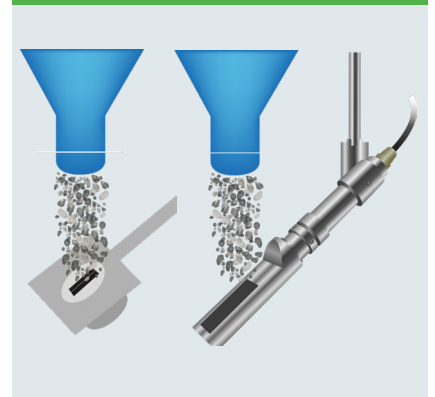
SONO sensors quickly and reliably measure the moisture of all aggregates such as sand, gravel, crushed stones or expanded clay. A few seconds of material flow are enough to generate a proper reading for your control system. Typical mounting positions are just below the silo hatch or on the dosing belt.

Consequently, the w/c calculation is maintained, the necessary amount of water is added and the recipe perfectly managed. This contributes to real time quality management in your plant. So, the time consuming monitoring of each batch is a yester routine. Staff is free to focus on value-added tasks in the plant.

Moisture measurement in sand
0-4 mm



Moisture measurement in gravel
and crushed stone from 4 to 32 mm



Correct installation is essential for stable and reliable measurement results.

We recommend an installation under the silo hatch for sand, crushed stones, and gravel or a permanently installed slide for sand (as displayed above). This ensures constant compaction of the sand and reliable self-cleaning of the sensor. We do not recommend installation in the silo.

Application examples in the process

The sensor has to be mounted that way that no material can remain on top of it. The material flow should be uniform and sufficiently high > 30 mm.



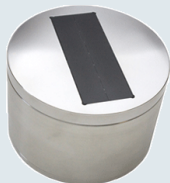
The right products

Description



SONO VARIO Standard

Application: Sand, gravel up to 8 mm not for crushed stones
 Measuring field: Ceramic window
 Probe: Stainless steel
 Mounting: baffle plate, slide



SONO VARIO Xtrem

Application: Sand, gravel, crushed stones, abrasive, sharp-edged
 Measuring field: Special resistant ceramic
 Probe: Hardened & resistant steels, wear parts replaceable, Cost reduction
 Mounting: baffle plate, slide



SONO SILO Standard

Other design of SONO VARIO Standard for narrow installation spaces.
 See SONO VARIO Standard



SONO SILO Xtrem

Other design of SONO VARIO Xtrem for narrow installation spaces.
 See SONO VARIO Xtrem



SONO VIEW

Application: Optional stand-alone display,
 Up to 16 sensors can be connected
 Additional function: Interface for PC parameterization incl. PC software
 Power supply: +12 to +24 V DC

Technical Data

Version	Probe dimensions
SONO VARIO Probe housing: Stainless steel with ceramic window	SONO VARIO: Ø 108 mm, height 45 mm
SONO VARIO Xtrem Probe housing: Stainless steel with ceramic window and oil hardened steel surface	SONO VARIO Xtrem: Ø108 mm, height 71 mm
SONO SILO Probe housing: Stainless steel with ceramic window	SONO SILO: 375 x 55 mm (height x width)
Measuring range water content	Measuring range conductivity
Measuring range: 0-100% vol. moisture content, accuracies up to 0.1% are possible	Conductivity EC-TRIME: 0...12 mS/m
Power supply	Measuring field dimensions
+12V bis +24V DC; 3W	approx 30-50 mm, depending on humidity and material
Calibration	Visualization
The SONO VARIO probes are supplied with a universal calibration. Standard aggregates can be measured (plug and play).	Connection to a PLC: analog interface (0-20mA, 4-20mA). External display (SONO VIEW) or serial interface.

Kontakt

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