

AQUASENSE, THE MICROWAVE MOISTURE SENSOR FOR SAND AND FINE AGGREGATES

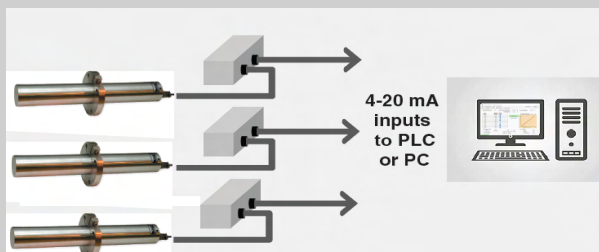


Accurate, rugged and easy to install and calibrate. AquaSense measures the moisture content of sand and fine aggregates using microwave technology which eliminates the errors associated with resistance and capacitance methods, guaranteeing an accurate reading every time. It's digital technology and Windows software make setup and calibration a simple process. Installed in any bin wall and can be directly connected to almost all batching controllers.

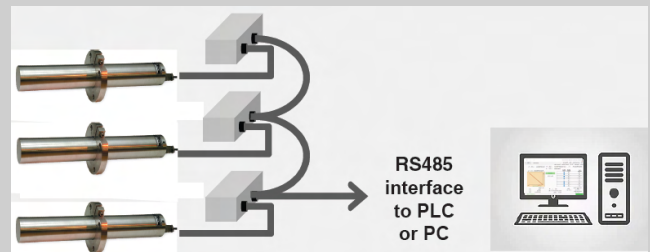
THE IMPORTANCE OF ACCURATE MOISTURE MEASUREMENT

In concrete production, the mix design is based on the aggregates, cement and water being present in the correct proportions. If the sand moisture decreases by 2% without being noticed (which can often happen in practice), the batching system will weigh up 2% more sand than required and will add noticeably less water than is required, resulting in a dry batch. If the operator corrects this by adding more water, the water/cement ratio will increase, reducing the strength of the product. If the moisture had been measured accurately, the proportions would all have been correct and there would be no need to add more water.

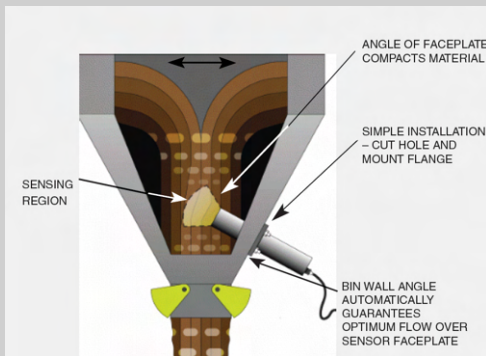
ANALOG CONNECTION METHOD



DIGITAL CONNECTION METHOD



BIN MOUNTING



SYSTEM FEATURES

- 4-20mA & 0-10V analog output, RS232 digital output & RS485 multi drop output.
- 1/10% to 1/4% accuracy, depending on material type.
- Multiple material calibrations allow different materials to be used in the same bin.
- Calibration via RS232/RS485 connection to Windows software on external system.
- Hard wearing ceramic faceplate & stainless steel body.
- Pre-calibrated, to allow immediate use. (Note that on-site calibration is recommended, since all natural materials differ from place to place.)
- Simple one-hole mount. Length of body allows correct installation without extra fixtures.
- Software ignores erratic readings from loose material during flow. and averages readings during flow period, eliminating errors due to dry or wet spots.
- The averaging mode setting provides a continuous average moisture over the batch.
- AquaSense guarantees: consistent yield, color, texture workability, strength and durability.
- Empty bin detection holds previous reading and gives output signal for alarm etc.
- Three display possibilities, : separate digital display or via RS232 or RS485 to computer or PLC.

CONFIGURATION & CALIBRATION

Easily configure and calibrate your AquaSense probe using our user friendly AquaCom software. This latest version includes a log allowing you to time stamp when a sample is taken. When your lab results are ready and added to the software it is directly correlated to the exact time and date the sample was taken greatly improving accuracy.

ScaleTron AquaCom (1.0.5)

File Communication Help Preferences Serial Port COM6

Monitor Configuration Calibration Moisture Calculator Firmware Update

Default Moisture% 8.28 Last Sampled Moisture +29.50 % Current Moisture +25.75 %
 Temperature 18.7 °C

Lab Moisture	Default Moisture	Tick to Enable
5.32	5.4	<input checked="" type="checkbox"/>
7.45	7.56	<input checked="" type="checkbox"/>
9.53	9.72	<input checked="" type="checkbox"/>
4.5	4.76	<input checked="" type="checkbox"/>
2	2.2	<input checked="" type="checkbox"/>
4.0	4.32	<input checked="" type="checkbox"/>
3.7	3.68	<input checked="" type="checkbox"/>
6.35	6.44	<input checked="" type="checkbox"/>

Calibrate Restore Default

Projected Moisture: 8.16 %

Lab vs Default
 Slope 1.00
 Intercept 0.15
 Consistency% 99.9

Initial Factory Settings
 Gain 175 Offset 80
 Analog Output Offset 0
 SSD 0 %
 Active Calibration Set 1
 Material

Sample Log

Take Sample Send To Cal
 Delete Row Export Data
 Clear All Import Data

Default Moisture: 8.28
 Time: 2023/03/02 09:59:20

Time Stamp	Default Moisture	Lab Moisture
2023/02/17 10:58:56	7.56	7.45
2023/02/17 10:58:57	9.72	9.53
2023/02/17 10:58:58	4.76	4.5
2023/02/17 10:59:00	2.2	2
2023/02/17 10:59:01	4.32	4.0
2023/02/17 10:59:04	3.68	3.7
2023/02/17 12:23:58	6.44	6.35

Logged in as a user ...