

ED 360 MicroWater

Moisture Probe

Sensor for moisture detection in aggregates or similar material, developed with the latest Microprocessor technology. The system is complete with an easy to use software for the probe calibration and configuration.



- Reading
- Control
- Software calibration
- Accuracy
- Repeatability

Ed360 is a sensor for the moisture content detection in the aggregate or similar material.

This device, based on MICROWAVE Technology, can reach the best results in accuracy and repeatability.

The sensor works by detecting the microwaves absorbed by the water contained in the aggregate to be measured.

The reading is extremely fast, so the device can work in continuous reading, during the aggregate batching.

The probe is able to calculate the average of the moisture during the batch.

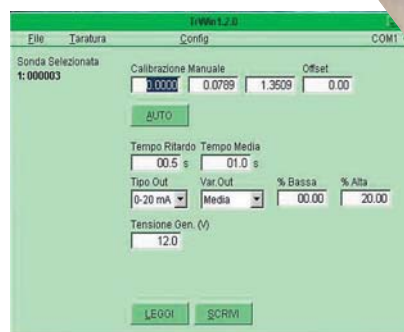
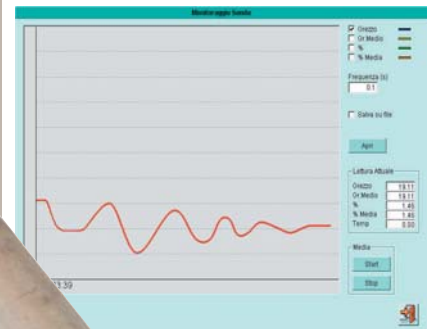
The probe features also a temperature sensor for the material.

The accuracy is very high, guaranteeing a continuous control of the water/cement ratio and a constant value of slump in the final product.

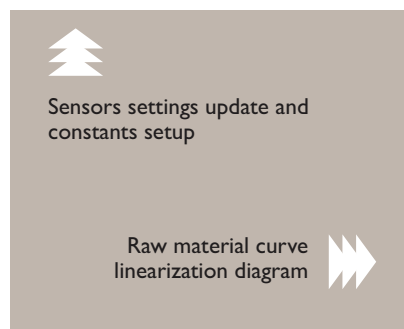
Advanced technology, with microprocessor, allows reading accuracy and perfect results constant in the time. This feature reduces the cost of maintenance and checking of the probe itself.



Microprocessor technology with SMD moutange



Signal monitoring and average reading check



Sensors settings update and constants setup

Raw material curve linearization diagram

The output toward the automation system can be analog or digital.

The flat surface of the sensor, and its big dimension, let the flow run on it every time with the same pressure.

The surface is made with a particular material, ALLUBIT ceramic.

This material is extremely hard and specially designed to work with aggregate or abrasive material.

All the electronics is inside the sensor, allowing to connect the probe directly to the PLC or PC without any interface card or additional junction box.

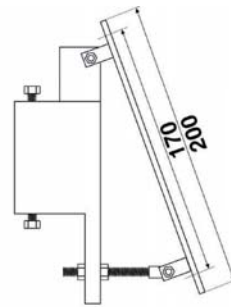
The sensor can be installed in silos, aggregate bins, continuous belt or weighing hopper.

The accuracy of the moisture reading depends on the right positioning of the probe.

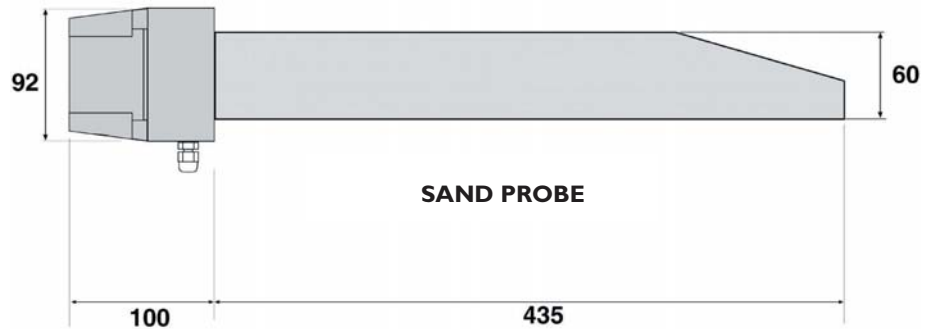
This must be in the middle of the material flow to reach the best results.

The ALLUBIT surface must be totally in contact with the material flow.

The set up of the probe requires the surface to be positioned with an inclination of 30° from the ground level to be sure that material will not stand on it and flow down normally.



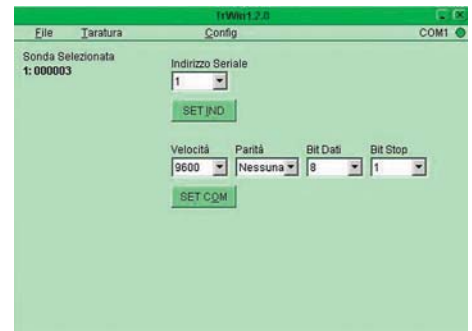
MOUNTING SLEEVE FOR SAND PROBE



Serial communication port settings completely configured with TRWIN software



Ceramic surface in ALLUBIT material



SENSOR SPECIFICATION

Power Supply:

from +15 to +30 Vdc

Temperature measure range:

from 0 to 70°

Maximum Moisture raeding (depends on material):

from 0%to 20%

Maximum frequency penetration (depends on material):

from 70 to 100 mm

Analog Output:

4-20mA and 0-10V

2 digital input:

one for the average reading and one for analog output selection (moisture/temperature)

1 serial port:

to connect the probe with PC\PLC in RS232 or RS485

Reading speed:

25 times per second

Calibration:

with TRWIN software