IMKO MICROMODULTECHNIK GMBH

SONO-MIX MINI

Small Mixer Probe for Installation directly inside Wiper Blades of Intensive Mixers or in Screw Conveyors

HighTech and lightspeed for accurate and reliable moisture measurement at the best possible installation places, with following features:

- **The small measurement window size with only 36 x 90mm allows the direct installation inside a wiper blade.**
- **No disturbing holding arms any more inside the intensive mixer.**
- **Auto-correction function: the probe recalibrates themselves in the event of abrasion at the probe head.**
- **Intelligent pre-processing inside the probe with smooth mean value accumulation and adjustable filters.**
- **Extremely robust and durable with long service life due to special ceramic head.**
- **Simple installation inside screw conveyors, e.g. in mobile truck mixers.**
- **Precise measurements due to disc-shaped radar scans with a representative measurement field.**
- **Optimised behaviour concerning fines and color components in the mixture.**
- **No necessity for expensive evaluating devices, which many other probes require.**

SONO probes are not microwave probes! They are outstanding by new and innovative features:
http://imko.de/en/support/publications „Comparison SONO-Microwave“

Technical Data SONO-MIX MINI

SENSOR DESIGN	MOUNTING
Casing: High Grade Steel V2A 1.4301 The probe head surface consists of stainless steel with highly abrasion-resistant special ceramic.	Sensor Dimensions: 135 x 60 x 40mm Measurement window size: 36 x 90mm
MEASUREMENT RANGE MOISTURE	**MEASUREMENT RANGE CONDUCTIVITY**
The sensor measures from 0% up to the point of material saturation. Measurement ranges up to 100% moisture are possible with a material specific calibration. The moisture value is output to analogue channel 1.	The probe can measure moisture in materials with conductivity ranges up to 50dS/m (like fresh concrete).
MEASUREMENT FIELD EXPANSION	**MEASUREMENT DATA-PREPROCESSING**
Approximately 30 – 50 mm, depending on material and moisture.	Five different measurement modes, with continual or floating average value, Kalman filter algorithms and further powerful control features.
POWER SUPPLY	**AMBIENT CONDITIONS**
+10V to max. +24V DC 2.5 W max.	0 - 70°C
SIGNAL OUTPUT	**PROBE CONNECTION**
2 x Analog outputs 0(4)…20mA Output 1: moisture in % variably adjustable. Output 2: not connected !	The probe´s connection is performed via a cable gland and a 6-pole cable with a length of 5 meter.
COMMUNICATION	**CALIBRATION**
A RS485 interface enables network operation of the probe, whereby a data bus protocol for the connection of several SONO probes to the RS485 is implemented by default. The connection of the probe to industrial busses such as Profibus, Ethernet, etc. is possible via optional external modules (available upon request).	The probe is delivered with a suitable calibration curve. A maximum of 15 different calibrations can be stored inside the probe. For special materials, variable calibrations with polynomials up to the 5th order are possible. A zero point correction can be performed easily with the SONO-CONFIG software or the display module SONO-VIEW.
OPTIONALLY AVAILABLE:	
	**SONO-VIEW** Stand-alone moisture display and configuration for advanced process control with TRIME and SONO probes. Up to 4 probes can be connected via serial interface for displaying the measured values, setting of operation mode, calibration curves and other functions.

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