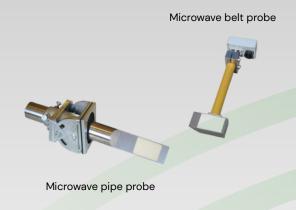


for the continuous determination of the moisture content in sand and aggregates





Today, concrete quality is crucial for the industrial production process. To meet increasing quality requirements, controlling and regulating moisture content is essential.

The BTS-5000 moisture meter quickly and accurately determines the moisture content in sand and aggregates. It thus forms the basis for correct aggregate dosing.

Improving concrete quality through continuous measurement. Moisture levels are determined throughout the entire dosing process, allowing the production process to be continuously monitored to ensure precise sandwater adjustment.

All types of sand and aggregates can be measured.

The moisture measurement takes place directly in the bulk material flow, which ensures that the probe is cleaned by the material flow.

The **modular design** allows for easy expansion of the moisture measurement system, as up to four measuring probes can be connected. The BTS-5000 can be integrated into any PLC or control system without the need for additional software.

The BTS-5000 can be operated in a **temperature range** of +1 to +50 °C.

Signal output: 0-10 V DC, 0(4)-20 mA, RS232, RS485

Dimensions: WHD 160 x 120 x 50 mm Front frame WHD 170 x 130 x 4 mm

Power supply: 230 V AC / 50/60 Hz, 115 V AC / 60 Hz

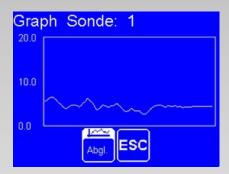
BTS-5000

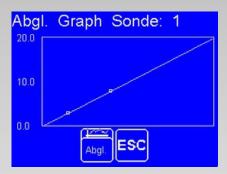


Application

Manual output: By pressing the manual button, a humidity value can be set via the display. This value is also output via the signal outputs.







Calibration is very simple. Proper operation is ensured by adjusting the sensor for drier material (2-5%) and for moister material (6-9%). The values are displayed graphically and can be changed at any time. The device uses these values for subsequent measurements.

Particularly user-friendly operation thanks to the clear touch display.

The averaging starts as soon as a signal is present at the digital input and takes place over the entire duration of the signal. Continuous averaging can be activated for an adjustable time of 1–30 seconds. The average value is shown on the display and output continuously.

Graphical representation of the humidity curve for each connected probe.

The sampling rate, ranging from 0.1 to 240 seconds, can be individually adjusted by the customer and changed at any time. The humidity curve can be graphically displayed for up to 13 hours.

The display range is flexibly adjustable between 0 and 30%. When producing with drier materials, the display range should be set between 0 and 10% to achieve better readability of the graphical moisture display.

The measurement data is transferred and processed 100 times per second to determine the exact moisture content. This is a real-time measurement. The measured value is available without delay, allowing moisture fluctuations to be detected even in fast-flowing material.

BTS-5000



Microwave probes for sand moisture measurement

MS 150 / MS 150 K microwave pipe probe for moisture measurement in silo

Output: 0-20 mA, 0-10 V DC

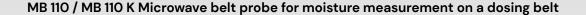
Voltage: 15–24 V DC

Measuring range: 0-20 % (depending on the medium)

Measuring accuracy: +/- 0.3 % (depending on the medium)

Probe dimensions: MS 150: \varnothing 55 mm, L 670 mm / MS 150 K: \varnothing 55 mm, L 400 mm

Holder dimensions: W x H x D 130 x 120 x 140 mm



Output: 0-20mA, 0-10VDC

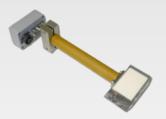
Voltage: 15-24V DC

Measuring range: 0-20% (depending on the medium)

Measurement accuracy: +/- 0.3% (depending on the medium)

Probe dimensions: MB 110: L 360 mm / MB 110 K: L 260 mm

Material height on belt: at least 60 mm



For particularly abrasive materials, the MB 110 / MB 110 K microwave probe is also available with a hard metal coating. It is also possible to integrate a temperature measurement into the probe.

BTS-5000