META-Automation

MMR-9

Infrared Moisture Measurement System

- Contactfree Measurement
- Excellent Accuracy
- Insensitiv against Grade or Color Changes

METHOD: Water shows in infrared region strong resonance bands wenn infrared radiation passes through material. The power attenuation at these resonance bands is directly proportional to moisture content (gr/m2) in the material.

META's MMR-9 gauge makes use of this physical feature to establish a very reliable and high accurate measuring method for continuous on-line measurement of moisture content. The use of enhanced infrared technology such as high quality light source, temperature compensated photodetector and multi channel narrow band filter makes the MMR-9 gauge insensitiv against disturbances caused by changes in grades or color or presence of carbon in the material, a feature particularly important in the mill daily processing routine.

APPLICATIONS: Pulp-, Paper-, Cardboards-, Wood-, Food and Mineral-Industries, Gas processing etc.

COMPONENT PARTS:

The measurement heads placed upper and lower of the web/product or in one side in case the reflection method is applied can be used as stand-alone



measuring system providing an analogue output in range of 0-10 VDC resp. 0/4-20mA or they can be integrated into the META versatile QMS-9000 quality control system. Scanners or C-frames are available for fix-position or cross-scanning measurements and controls.

TECHNICAL SPECIFICATIONS:

Dimensions (h x w x d) [mm] : Transmitter/receiver: 250x300X210

Weight ≈ 12 Kg

Measuring Range: 0-150% abs.
Transmitter/Receiver Clearance:

100 mm ± 10 mm

Measuring Spot : Ø 18-50 mm **Measurement Options :**

Transmission or reflection

Uncertainty: Reproducibility
2σ ≤0.1% on 1 sec basis

Correlativity to lab

 $2\sigma \le 0.1\%$ on 1 sec basis Outputs : 0-10 V-0/4-20 mA Power Supply: 24 VDC (Option

230/110 VAC, 50/60 Hz)

Environmental Conditions:Up to 40

oC (no cooling),0-95%r.H. **Electronic Unit**: (option), LCD-display, alplanummeric keypad.

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