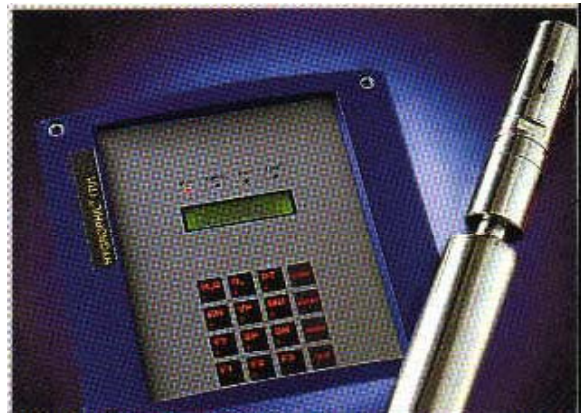


EMC-9 Energy & Moisture Control

- Optimizing Dryer Operation
- Saving Energy
- Permanently stable without recalibration

METHODE : Drying means causing evaporation. The vapor has to be removed in order to keep the evaporation process continuing. A mixture of hot air and water vapour exits the dryer via a chimney. The energy required to heat the air contributes a major part to the cost of the dryer. This is why the mixture of hot air and water vapor is crucial for the profitability of the whole drying process, especially when energy costs increase. The quantity of water vapour per unit of duration depends directly on the weight of the fabric, on its width, on its moisture content at entry and at exit of the dryer and on the line speed through the dryer. It is therefore impossible to use the hot air to its maximum capacity if the regulation dampers are constantly open all the time to the same degree. It is desirable to be able



to measure the moisture content of the extracted air exactly and to adjust the dampers position or the revolution of the extraction fans manually or better still automatically to optimize drying operation.

APPLICATIONS: Drying of textiles, paper, cardboard, construction materials etc.

TECHNICAL SPECIFICATIONS:

Signal-processing: Measurement of moisture content in air via Zirconium oxide dual element.

Measurement ranges :

DT (Dew Temperature): 0-98 oC ,

H₂O : 0.2 – 95 % VOL

MH : 0 – 1000 g/kg

Accuracy : %VOL H₂O better than 1%

Output : 0/4 – 20 mA

Environment :

Sensor electronics: –10 – 50 oC

Sensor tip : 100 / 200 / 300 oC

No moisture condensation

Power Supply : sensor 24 VDC / AC

Controller : 220 VAC

COMPONENT PARTS:

a) Sensor-Element

b) Controll-unit