Vaisala's HMP228, a microprocessor-based instrument for oil moisture measurement, is ideally suited to measuring the potential water contamination of oil hydraulic systems.

sition system for use in plant diagnostic applications. This advanced system enables the user to visualize the process performance of the HMP228 sensor to a degree of detail not found in conventional data logging systems.

HMP228 identifies the content of water in oil

Vaisala's HMP228 moisture transmitter enables British Steel personnel to identify the content of water in oil, as a metric for monitoring the performance of a number of hydraulic mill-control systems. The HMP228 unit provides a network connection in the form of an RS 485 capability, and reliably measures potential water contamination in oil hydraulic systems.

The installation of the HMP228 has resulted in a greater degree of confidence in the hydraulic control systems and enables a quicker engineering response during fault finding. ■

The view pictured from the mill.

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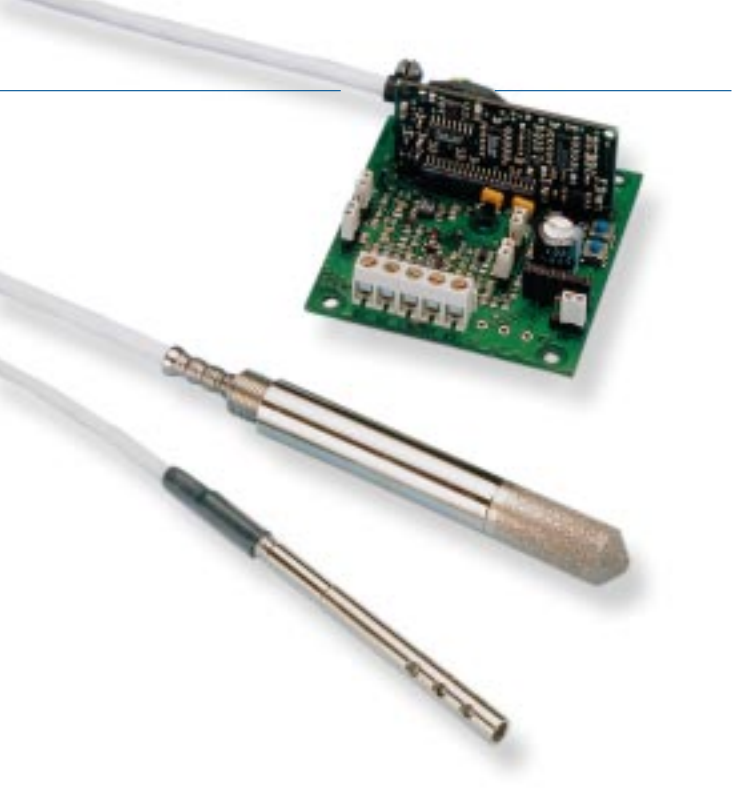
HMM210 Series of Humidity Modules for Environmental Chambers

With their capacity for fast, real-time measurement in wide temperature ranges, the HMP210 series of humidity modules is ideal for use in environmental chambers. These chambers are used by industry to test high performance instruments in harsh environments.



The HMM210 series of humidity modules is ideal for accurate relative humidity, temperature and dew point measurement in demanding environments.

As is well-known, relative humidity affects the operation of machinery and equipment. Electrical equipment, in particular, is very sensitive to moisture. For this reason, environmental chambers are used in certain industries to test the impact of harsh environments on equipment performance. The measurement of relative humidity and temperature plays a critical role.

Accurate RH, temperature or dew point measurements

Vaisala's HMM210 series of modules is optimized to deal with harsh environments in which there are high humidities and wide temperature ranges. The humidity measurement is fully temperature compensated. Being highly versatile and flexible, the modules can provide relative humidity, temperature and dew point measurements with various configurations.

All modules are microprocessor-based, and are equipped with analog or digital outputs. In addition, they have good EMC characteristics.

Flexible OEM applications

The HMM210 series of modules is designed for OEM-type (original equipment manufacturers) applications needing humidity or dew point measurement in demanding environments – as in environmental chambers.

HMM210 modules provide users with fast and stable humidity measurements. A warmed humidity probe is available as an option to HMM211 and 213. The advantages of using Vaisala's patented technique of a composite humidity sensor are as follows:

- no condensation problems
- fast humidity response time, especially in rapidly changing temperatures
- improved stability and accuracy in high humidities.

Reliable HUMICAP® sensor

The HMM210 series of modules uses Vaisala's HUMICAP® sensor, which is highly accurate and has excellent long-term stability and negligible hysteresis. The sensor is insensitive to dust and most chemicals. However, in conditions characterized by extremely high levels of chemicals and cleaning agents, sensor regaining is available as an option to assure accuracy between calibrations.

Calibrations can be done quickly and easily with Vaisala's HMI41 humidity indicator, or alternatively with an HMK15 saturated salt calibrator. ■

Reliable humidity measurements at extreme temperatures

Special Demands in Bakery Applications

Bread baking involves high temperatures and humidities. To achieve optimum results, the baking process must be monitored and controlled carefully.

The measurement of humidity in many high-temperature baking and drying processes requires special instruments characterized not only by stability, reliability and accuracy, but also by ease of use and flexibility of configuration. The DMP246 transmitter meets these requirements. When configured to customer specifications, it can be used safely in temperatures up to 350 °C.

In many high-temperature baking and drying processes, the achievement of the right conditions makes all the difference between prime and inferior quality foodstuffs. Applications such as bread baking or cereal manufacturing, for example, must have a carefully controlled humidity level in the dryers and ovens in order to keep quality and yield high.

To maintain humidity within acceptable limits, the moisture content of the process air must