

Moisture Content in Corrugated Board

MoistTech Instant NIR Online Moisture Sensors

In the corrugating industry, controlling product moisture levels is critical to the manufacturing process. Moisture content has a drastic effect on quality and can lead to problems with warping, glue adhesion, and printability. Measuring the moisture at linear, medium, and face locations will yield significant improvements to the finished product. With the help of industry partners and 40 years of knowledge and experience, MoistTech has developed the IR3000 Moisture Analyzer for corrugated board. This first ever “Smart” sensor is unsurpassed in performance and reliability, and provides the ability to control the process with an accuracy of +/-0 .1% moisture.



In board plants, the sensor is often installed in extreme heat locations typically near a pre-heater. In these situations, the gauge is fitted with a built-in Vortex Air Cooling System to optimize performance and extend the life of the instrument. Furthermore, the environment in board plants can be very moist so IR3000 comes standard with an air-diffuser nozzle which prevents condensation from collecting on the sensor’s optical window.

- ✓ **Eliminate Curl**
- ✓ **Prevent Warp**
- ✓ **Stop Breakage**
- ✓ **Prevent Flute Exposure**
- ✓ **Reduce Energy Usage**
- ✓ **NIR Non-Contact**
- ✓ **Instant Continuous Measurements**
- ✓ **Accurate**
- ✓ **Immediate Production Adjustments**

The sensor(s) can be located throughout the process and can be directly connected to the users PLC or any laptop. Ethernet 4-20 ma are included as well as our high-tech Windows operating software. DPM- Digital Panel Meter and a Color Touch Screen Operator Interface are available as read-out options. Moisture in corrugated board is a well-documented and well understood application. Measurement wavelengths, algorithms, and calibration parameters

are pre-set before installation making the sensor a “plug and play” device. Mounted on a traversing frame, the IR3000 can scan across the paper web to obtain cross-web moisture profiles which allows detection of wet and dry streaks in the material. The sensor can also be installed for single point measurement beneficial for analyzing moisture levels near the edges.

For addition information or to discuss your application, please contact our headquarters.