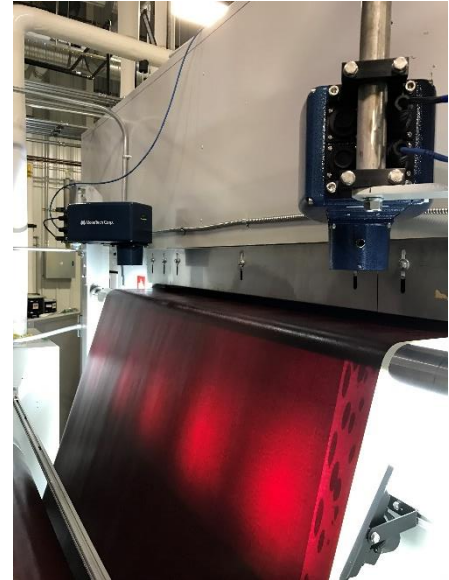# Moisture Control in Hot Melt Applications

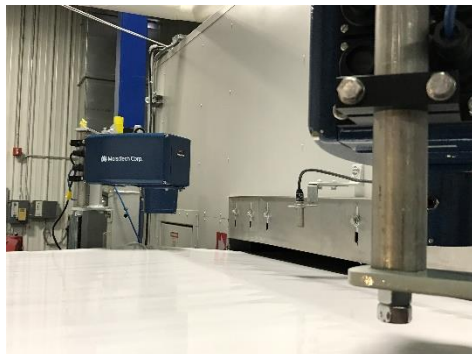MoistTech Instant NIR Online Moisture & Thickness Sensors

Hot melt adhesives are used for many applications in manufacturing. Whether you are using them to close corrugated fiberboard boxes, assemble parts, adhere toys, construct disposable diapers, affix parts and wires for electronic devices, coat label stock material or some other use, the amount and thickness of your hot melt adhesive can be critical to the finished product since hot melt thickness doesn't change during solidifying like solvent-based adhesives.

For the last 40 years, MoistTech has been working with sensors in some of the harshest environments. We have been measuring and recording our own research data in dozens of industries over thousands of components in order to create the best measuring sensor available. As a result of this, we have developed the IR-3000 near infrared (NIR) sensor.

There are many locations throughout manufacturing that our sensor can be used. These locations are often determined by the space availability and accessibility on the machinery as well as manufacturer's control plan. After installation of the IR-3000, a manufacturer can continuously monitor the process and control the thickness and moisture content either manually or automatically from readings of the IR-3000 online sensor

Our sensor calibrations, measurement wavelengths, sensor optical requirements and algorithms are pre-set at the factory. No further calibrations are needed.

The IR-3000 will provide non-contact, instant, continuous measurements in real time, capturing thousands of measurements per second. It is insensitive to material variations like particle size or color. The production environment is removed from the measurement calculations by the software so things like small gaps, inert material, foreign objects, or conveyor belts and screws can be programmed to not interfere with the measurements being taken.

Typical moisture accuracy is about ±0.05%, coating thickness accuracy varies from 0.1 to 0.01 micron depending on coating type. Typical analog range is 0-10% moisture and up to as much as 40%, subject to application.

For more info on this application please contact us at info@moisttech.com or 941-727-1800