



Moisture Measurement in Bakery Dough

Maintaining the correct moisture content in dough can improve quality and consistency, as well as prevent processing difficulties, decrease waste and cut energy costs during the drying and baking process. Moisture levels in bakery dough can also effect the color, taste, appearance, stability and shelf life.

MoistTech utilizes near-infrared (NIR) technology that allows for a non-contact solution to provide accurate moisture content readings. Insensitive to material variations such as particle size, material height & color, the sensors provide a continuous, reliable reading with zero drift and no maintenance. There is a one-time calibration with a non-drift optical design allowing operational personnel to make immediate line adjustments based on real-time measurements.

Finished products rely on proper moisture control as some food items are sold by weight, which reduces costs. Moisture can lower the fat content and also reduce carbohydrates. But too much moisture creates a stale taste and contributes to bacteria and mold growth. Properly monitoring the moisture levels allows precise control over the ovens to optimize the production process with minimum energy requirements as well as prevent over cooking.

INSTALL

The on-line sensors can be installed before/after the oven, into any hopper, silo, material line, belt or screw conveyor and the moisture results are displayed onto an external display or PC.

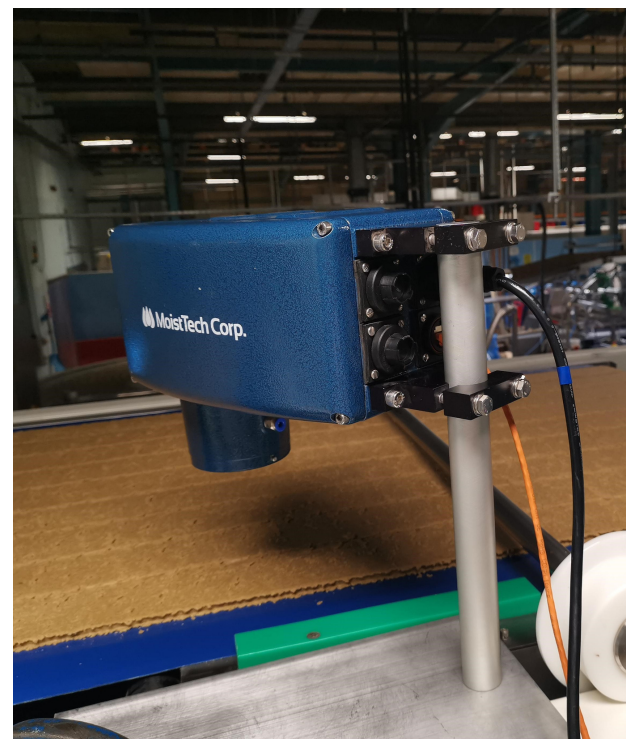
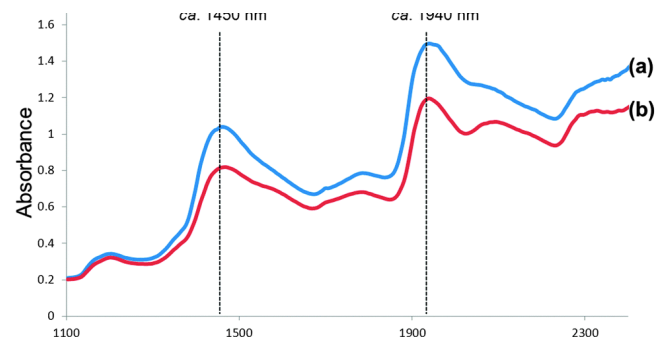
By installing MoistTech's IR-3000 NIR moisture sensor after the dough mixer or after the dough has been formed, manufacturers can continuously monitor the moisture content to adjust as needed.

Installing a moisture measurement and control system prevents bad product due to undesirable moisture levels. Fine tuning the setup and process of the manufacturing line allows for instant improvements both in the product and in the efficiency in which it is produced.

IMMEDIATE BENEFITS:

- Improved Product Quality
- Lower Waste & Energy Costs
- Process Optimization
- Increased Plant Efficiency
- Dryer Control
- Reduced Downtime

An ideal moisture control system accurately detects the moisture levels at different stages of the process, is easily maintained and has the ability to withstand even the harshest of manufacturing conditions. The IR-3000 series of sensors manufactured by MoistTech are specifically designed to be unaffected by ambient light or material variations to be able to provide continuous, repeatable, accurate readings to improve the manufacturing line and product.



“The addition of the MoistTech IR3000 has provided me with the ability to control our process by instantly increasing or decreasing material flow into the dryer. Prior to the MoistTech technology proved to be a guessing game and time consuming!”