



Moisture Measurement in Sugar

MoistTech's IR3000 online moisture sensor is accurate to laboratory standards with the added benefit of making a continuous measurement over the flow of product at critical locations in the process, both at intermediate and final moisture levels. Fast accurate moisture control is crucial for control of sugar production plants, safe storage and transportation of the final product.

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.

Sugar processing is extremely sensitive to moisture content. Regulating the moisture content during the drying process optimizes production for best quality. If the final product moisture is too high, this can give rise to problems such as screen blockages, bridging in the storage silos and shelf-life issues. It is essential to sugar manufacturers that the moisture content is controlled throughout the process as well as a final test is made prior to shipping.

In a typical line for production of cube sugar, the sugar crystals are moistened in a screw conveyor by adding 2-3% moisture and then fed into a mold for heating, allowing the moisture to dry and bind the crystals.

INSTALL

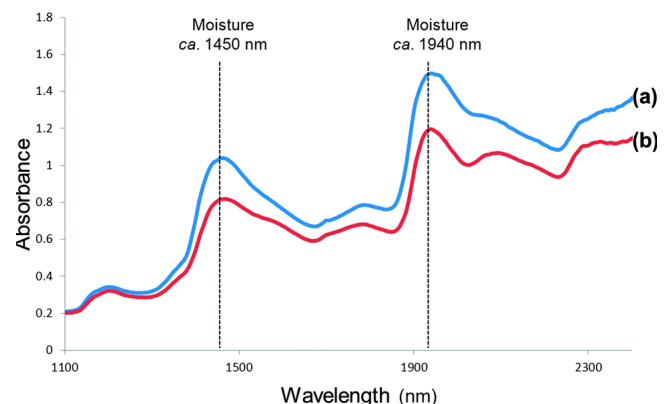
The on-line sensors can be installed into any hopper, silo, material line, belt or screw conveyor and the moisture results are displayed onto an external display or PC.

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!”