



## Moisture Measurement in Powdered Drinks

Measuring the moisture content in powdered drinks is an important quality control step. With low moisture content, product can be packaged at the optimum moisture level to increase shelf life and product quality. With the correct low moisture content, reactions in powdered drinks stored at room temperature take place so slowly that the nutritive value is not affected even after years of storage.

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.

Typical target moisture content is 0.3-4%; spray drying is the primary method used for drying drink powder in the industry. Spray drying in its simplest form consists of atomizing the feed, spray-air contact, drying and separation of the dried product from the drying air.

Many powdered drinks can absorb moisture from the environment under ambient conditions. The online NIR sensors are used by quality control personnel to continuously measure and monitor the moisture content after the spray drying process and/or just prior to packaging.

### INSTALL

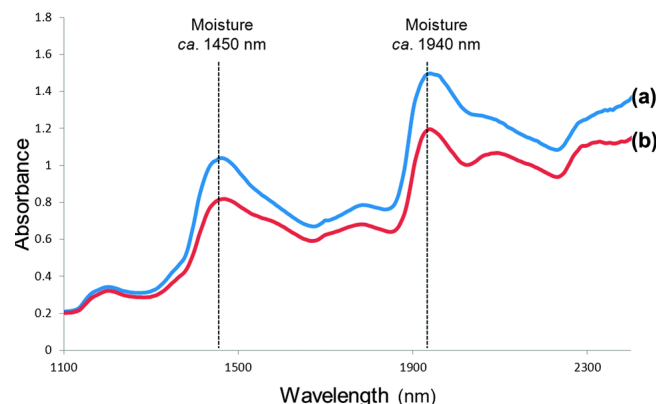
The on-line sensors can be installed into any hopper, silo, material line, belt or screw conveyor and the moisture results are displayed onto an external display or PC.

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!”