



# Moisture Measurement in Powdered Detergent

Being such a porous material, powdered detergents can easily become too wet or dry, wasting manufacturers time and money. A proper moisture control system can easily detect out of specification moisture ranges to allow line personnel to make immediate adjustments.

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.

The moisture in powdered detergent can vary from 2-5% depending on the process that is used; typical spray dried powders are in the 1-2% moisture range. The use and storage of the material is highly dependent on the moisture content during the manufacturing process. Clumping and deterioration can occur with moisture levels that are not within certain specifications.

The sensor calibrations, measurement wavelengths, algorithms and sensor optical requirements are pre-set at the factory. Typical accuracy is about +/-0.1% moisture.

## INSTALL

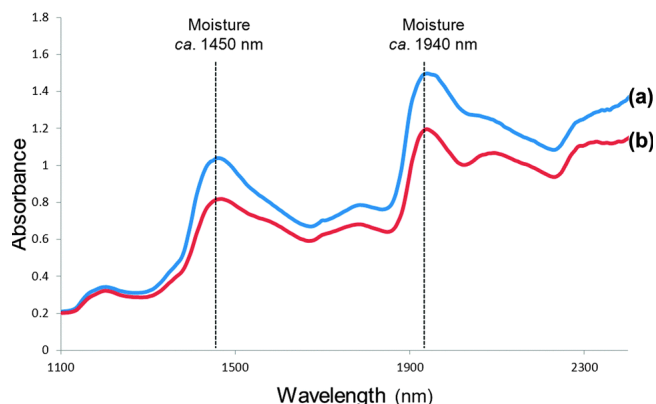
The on-line sensors can be installed into any hopper, silo, material line, belt or screw conveyor and the moisture results are displayed onto an external display or PC.

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!”