



# Moisture Measurement in Fly Ash

Moisture control in fly ash processing is critical to product quality, the sensor will monitor the process in both wet and dry applications to reduce dust and provide dryer control.

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.

As an embankment or fill material, fly ash is used as a substitute for natural soils. Fly ash in this application must be stockpiled and conditioned to its optimum moisture content to ensure that the material is not too dry and dusty or too wet and unmanageable. When fly ash is at or near its optimum moisture content, it can be compacted to its maximum density and will perform in an equivalent manner to well-compacted soil.

The water content of the fly ash stabilized soil mixture affects the strength. The maximum strength realized in soil-fly ash mixtures generally occurs at moisture content below optimum moisture content for density.

## INSTALL

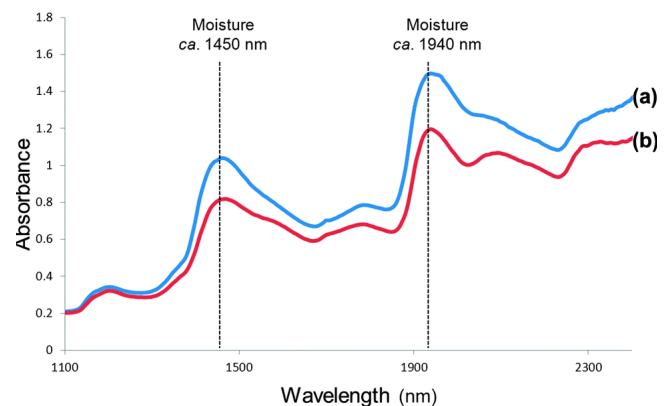
The on-line sensors can be installed into any hopper, silo, material line, belt or screw conveyor and the moisture results are displayed onto an external display or PC.

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!”