



Moisture Measurement in Frac Sand

Moisture control in frac sand and similar products is essential as a very small variation in moisture content can have a large impact on the production process and final product quality and usage. MoistTech has been on-line and laboratory detectors that can be used to accurately provide moisture content within seconds.

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.

Typically frac sand is mined, washed, screened and stored in piles of various grades. The sand needs to be dried to the required moisture range before it can be sold or further processed to add a resin or alcohol coating.

Dryers are much more efficiency when the input moisture content is consistent. The moisture content entering the dryer will consistently vary due to the stockpiles varying in moisture range. The variations result in heating inadequacies which waste money, energy and create out of spec sand.

A plug-and-play design from MoistTech can create increased plant efficiency, product quality and produce instant ROI.

INSTALL

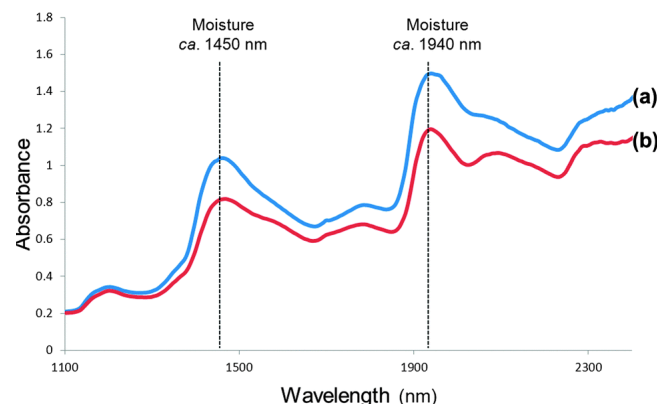
The on-line sensors can be installed into any hopper, silo, material line, belt or screw conveyor and the moisture results are displayed onto an external display or PC.

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!”