



Moisture Measurement in Wood Chips

Moisture control in wood chips dictates the quality and efficiency of the process and final product. The wood chips used in pulp production have natural variations in the moisture; the amount of water and bone dry fiber entering the process will vary.

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 MoistTech online and real time measurement of wood chips before they enter the pulp process makes automatic feed-forward adjustments possible. Most chip purchasers weigh wet chips, but pay chip suppliers based on dry chips delivered. To calculate the bone-dry tonnage delivered, a representative chip moisture content is applied to the wet weight of chips delivered to the mill.

Incoming wood from yard storage can vary largely based on the supplier, weather, season and more. Monitoring and controlling the fiber supply allows the operator to vary the moisture level of the water that supplies the steam shower, adjusting the flow to match the actual conditions of the fiber.

INSTALL

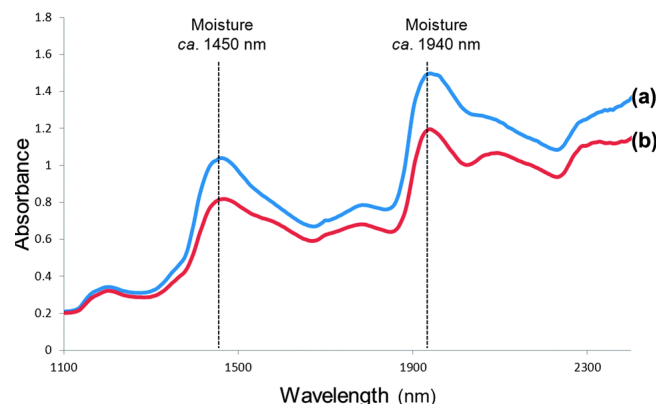
The on-line sensors can be installed into any hopper, silo, material line, belt or screw conveyor and the moisture results are displayed onto an external display or PC.

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!”