MoistTech Corp.®

Moisture Measurement and Control from Lab to Line

NIR TECHNOLOGY

Looking to Cut Costs? Look to Moisture Control

UNMATCHED PERFORMANCE

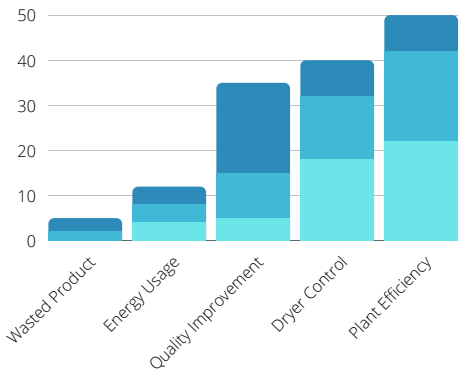
Dryer control is the most sensitive area of the tobacco process. Thousands of kilos per hour are processed where volume, temperature and input moisture vary. MoistTech Corp. manufactures a Near-Infrared tobacco moisture sensor that provides the user the ability to monitor and control the process within tenths of a percent.

Manufacturers constantly look for ways to cut costs and increase plant efficiency. Installation of top-quality moisture control technology provides exceptionally accurate and precise measurement and control protocols. Accurately measure moisture within 0.1% on many applications, improving product quality and providing significant cost savings.

PROCESSING EFFICIENCY

To improve threshing efficiency and reduce the quantity of lamina, moisture control is extremely important. High accuracy and fast response to moisture sensing allows for 100% product inspection while optimizing the process by producing a quality product at reduced cost. The 828 series moisture sensor has the ability to measure temperature as well as other tobacco components such as sugar and nicotine, if required.

Evaluating the plant process and implementing cost-effectiveness improvements allows for a multitude of benefits. Replacing old processes and technology with state-of-the-art equipment in moisture measurement produces immediate ROI, quality product and less waste. Eliminating waste is a major concern for plant operators - wasted product, wasted energy, wasted effort and time. Money saving opportunities that can be obtained with proper moisture measurement and control.



9 IMMEDIATE BENEFITS OF TOBACCO MOISTURE CONTROL

- Reduced Energy Usage
- High Quality Product Through Instant, Accurate Moisture Control
- Plant Production Efficiency Monitoring
- Dryer Control
- Blending Monitoring
- Increased Productivity
- Low Cost
- Highest Performance Operation
- Reduce Downtime

CONVEYOR MOUNTED MOISTURE CONTROL

IMMEDIATE MOISTURE CONTENT DISPLAY

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APPLICATIONS & ACCURACY

The 828 sensor measures moisture & other tobacco components in whole leaf tobacco, chewing tobacco, cigar filler, lamina strips, nicotine, cut tobacco, expanded tobacco, various blends, pipe tobacco, reconstituted tobacco and more. The accuracy levels achieved will vary in this application based off sampling methods and the variability of the material. Manufacturers receive instant, accurate and repeatable results that can be connected to any PLC, providing optimal sensor management.

Pre-calibrated from manufacturing, the moisture sensor offers a plug and play solution that requires little to no maintenance, does not drift over time and requires no re-calibration. More great features include the ability to add high and low alarms, ignore height changes in material or in color, provide 300 readings per second for the most accuracy and comes standard with unlimited licensing on software. The sensor has the ability to measure under the widest variations in process and the product loss capability eliminates gaps, inert material or foreign objects from the measurement calculation.

Typical accuracy is about +/- 0.1% on low moisture applications and +/- 0.25% on high moisture applications. Complete measurement ranges are 0-65% moisture.

INSTALLATION & EASE OF USE

On-line and laboratory moisture measurement and control with Near-Infrared technology is available through MoistTech. The on-line tobacco moisture analyzer can be used at all locations within the primary and leaf processing. Designed for the harshest process environments, the sensor is ideal for installations on chain conveyors and screw conveyors, feed forward control, post dryer, cutting, conditioning and prior to primary processing.

Unlike other technology, dust and steam do not affect the 828 series readings; dryer installations are possible with a cooling feature added to the sensor. Located throughout the process and directly connected to a PLC or laptop, the sensor is situated 4-8 inches from the product, providing the most light source and accuracy for measurement. Ethernet 4-20ma is included as well as the high-tech operating software; DPM and other read out options are available.

NEAR-INFRARED TECHNOLOGY FEATURES

Near-infrared (NIR) spectroscopy and imaging provides a fact, non-destructive and non-contact analysis of the chemical and physical information in a product. Using a NIR light source, the technology measures the amount of light absorbed and reflected by the product, providing a moisture percentage content. Other technologies do exist for moisture control but are not as reliable, accurate or up to date as NIR.

NIR provides versatility placement, quick and accurate measurements, unbeatable accuracy, low costs and significantly reduced operating costs.