PROCESS SENSORS CORPORATION

World Leader in Advanced Near Infrared Technology

113 Cedar St., Milford, MA 01757 • Tel: 508-473-9901 • Fax: 508-473-0715 • info@processsensors.com







Application Notes

MOISTURE MEASUREMENT AND CONTROL FOR WOOD PELLET MANUFACTURING

Process Sensors NIR Moisture Meters can provide valuable information needed to intelligently control the production process. The result is a consistent product produced at minimum cost and down time.

Moisture is a major consideration throughout the pellet manufacturing process. Below are some of the locations where our customers have used our sensors:

1. PSC can measure the green product prior to the dryer. The main advantage is to aid the loader operator in balancing the input moisture load to the dryer. Green product is generally stored outside where it is subject to the environment, some is wet and some is dry. Large amounts of wet material can overload the dryer and moist sawdust is the result. The loader operator needs a large readout at the input hopper so he/she can intelligently select wet or dry material to balance the input moisture.
2. Measuring the output of the dryer provides quality control on the dryer output and allows the product to be binned by moisture content.
3. Measure the output of individual bins for accurate blending.
4. Most important is the moisture in the blended product as it enters the pellet press. It must be within a tight moisture range to produce an acceptable pellet. The instantaneous readings are very helpful to the Press Operator. The 4-20 ma output can be sent to a PLC which in turn can control the Pellet Press drive parameters in real time.
5. Laboratory or off line measurements can be made in 10 seconds with the MCT 600.
6. Some mills use Hog Fuel for the boiler feed, our MCT 300 offers good trend moisture measurements on the incoming Hog Fuel. The advantage is improved boiler control.