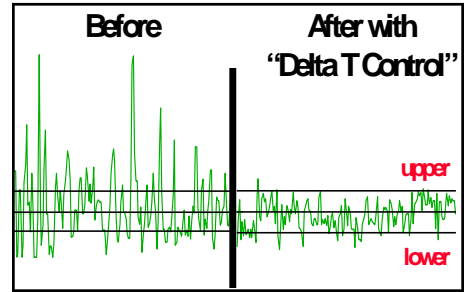
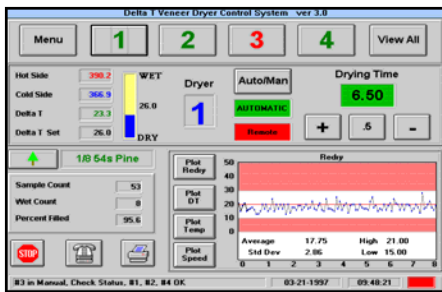
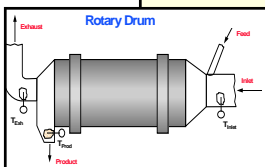


# Delta T OSB Moisture Control Technology

## Chemical Savings Reduction in Moisture Variations



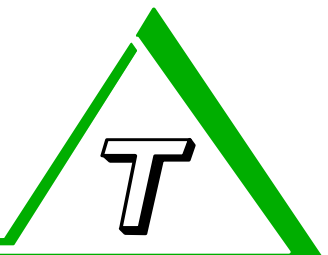
Automatically Handles Changes in Incoming Feed  
Eliminates Over-Drying  
Fully Automated and Computer Controlled  
Reduces Operator Variability  
Cooler Drying and Less Emissions



**Delta T Moisture Control Technology**  
Patented moisture control technology incorporating an inside-the-dryer moisture sensor that reduces product moisture content variation.

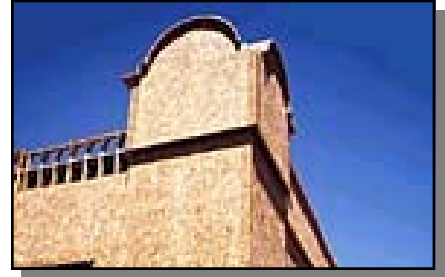
<http://www.moisturecontrols.com>

**Drying Technology, Inc.**  
P.O. Box 1635 Silsbee, TX 77656  
Tel: 409-385-6422 Fax: 409-385-6537



## The OSB Control Problem

Exhaust temperature-based control systems and those using after-the-fact moisture content data (i.e. downstream infrared moisture meters) are incapable of handling disturbances entering the dryer such as changes in feedrate, initial moisture content, skips, and humidity. As a result, the moisture content variation is wide. Overdrying is common place and production, quality, and energy conservation suffer.

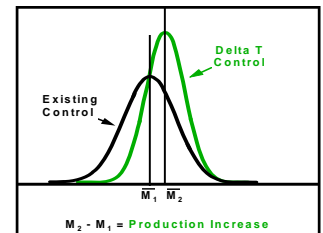


## The Control Solution

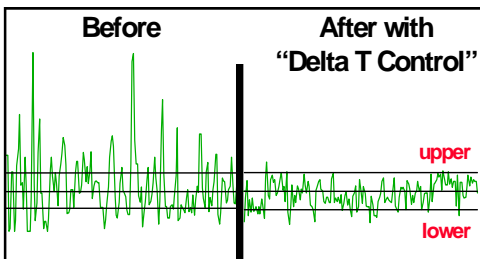
The *patented* Delta T Moisture/Dryer control system is based on the model:  $M=K_1(\Delta T)^p - K_2/S^q$  that relates the product moisture content (M) to : (1) the temperature drop ( $\Delta T$ ) of hot air after contact with the product; and (2) the production rate or dryer speed (S). With this model, it is possible to monitor and thus control product moisture before it exits the dryer which is a distinct advantage over the use of exit-temperature and feedback type controls. The Delta T can handle variations entering the dryer with the feed.

## The Results

The Delta T reduces the moisture content variation by 30-45% in most applications. This allows the average moisture content to be increased (see chart on right) without exceeding the established upper limit moisture content thus allowing a reduction in chemical additives.



In the example to the left, the **“Before”** plot shows the inability of the current control system to produce strands within moisture tolerances. The **“After with “Delta T Control”** plot clearly demonstrates the advantage of using the Delta T.



The Delta T automatically reacts to variations in entering moisture content, feedrate, skips, and product change-overs.

## System Features

Customized control screens are standard features on the Delta T Moisture Control System. User's often participate in screen development. The Delta T uses *Windows* operating environment to provide “total” dryer control.



The System includes an industrial workstation, for on the plant floor configurations, or a desktop PC for control room environments or it can be integrated into plant systems. Service and support can be simplified through on-line communications

