

Delta T Kiln Control Technology

for Multi-Zone Steam and Direct-Fired Kilns

DRYING TECHNOLOGY, INC. DELTA T KILN CONTROLLER

Start/Stop Charge Parameters Plots Controls Manual Controls Schedules Reports

Today's Date: 08/28/95 Current Time: 04:08:10 PM

Start Time: 15:55 Kiln Time: 18:14

Chg # 5

Fan Direction: Forward

Last Reversal: 0

Vent Position: CLOSED

Schedule: 2x4

Step #: 2

Step Time: 8:10

Abs. Hum: 0.3474 Wetbulb: 165.5

Wetbulb Max: 167.0 Vent: 0

Rel. Hum: 36.8 Steam: 136.4

Hot Cold WtI Psi HD

Remote Control Utility Modem Service Support Utility

Shutdown Parameters

- Drying Rates
- Drying Rate
- Relative H
- Relative H
- Wet Bulb

Drying Rate vs. Drying Time Multi-Zone Steam Kiln

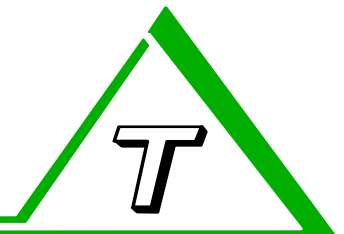
Drying Rate

Time

**Superior Kiln Control Technology
for new or existing kilns**

<http://www.moisturecontrols.com>
drying@moisturecontrols.com

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

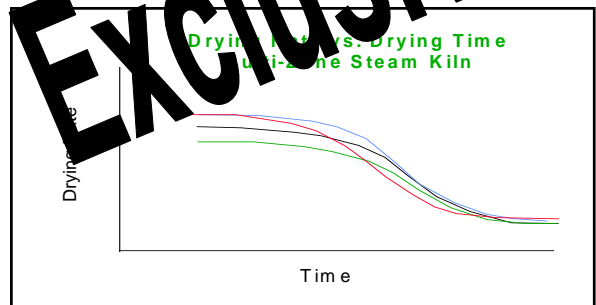




True Multi-Zone Control Drying

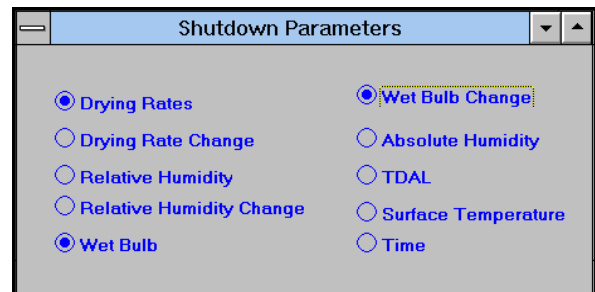
Multi-zone kiln control suffers from an inability to continuously calculate a parameter for use in comparing drying from zone to zone. Total drop across the load (TDAL) has sometimes been used; however, it has not been effective because TDALs are not comparable from zone to zone. Consequently, "true" zone control has not been achieved and a higher percentage of degrade is produced. The *Delta T Kiln Control System* solves this problem with its capability of continuously calculating zone drying rates that are comparable. Each zone drying rate is detected early in the schedule and categorized as either fast or slow drying. True zone control is achieved by adding an appropriate amount of heat to each zone for 90% to 95% of the total drying time. This causes each zone moisture content to converge toward a common target which significantly minimizes percent degrade.

EXCLUSIVE



Automatic Shutdown Parameters

The *Delta T Kiln Control System* allows kiln operators to select one or more shutdown parameters (pre-programmed or user customized) for automatic kiln shutdown. This feature, in conjunction with True Multi-Zone Control will take the guess-work out of lumber drying and will maximize production and quality.



Additional Features

System customized for users specific needs

Desktop PC with color monitor (15", 17", or 21"). System integrates with existing control hardware (i.e. PLC). *Windows*-based Delta T Kiln Controller software.

DTI Advisor - modem communications for rapid on-line service and support, fast file transfers, diagnostics, upgrades, and system analysis. Ability to determine Fiber Saturation Point (FPS) enables correct time to adjust fan speed and when and how much to control zone temperatures.

Plus:

Historical data archiving

Burner Control

Free software updates

Calculates relative humidity

Continuously calculates and displays drying rates

Steam management

True multi-kiln control capability

24/7 Service and Support

Customized to user needs