

# Lignomat USA, Ltd.

Moisture Measurment and Computer Kiln Controls 4430 NE 148<sup>th</sup> Avenue, Portland, OR 97230 Tel. 503 257 3708 - Fax. 503 255 1430 - www.lignomat.com

#### Peak Demand Energy Management (see flier)

Circulation fans consume the most electricity by far in the dry kilns. The controller monitors power consumption as it enters the facility and has preset demand high & demand low limits which limit or even cut power to the Circ. fans to avoid higher peak demand brackets, reducing your kW/Hr. rate.

#### Data trend analysis with History Pro Software (see flier)

Using SQL or similar databasing software you can collect detailed Fan/heat/vent/spray position data, environmental/lumber charge conditions/projections/details, over time and create data sets to analyze data trends such as kiln performance, dry times, degrade rates etc. Aiding efficiency and showing visual details that help you see issues before they are out of hand.

#### Automatic text & email alerts (see flier)

The controller monitors the drying process and notifies the correct person for the correct event as soon as it happens. As the operator interface is right on your phone, you can verify, adjust or make any moves right now. Time is spent more efficiently.

### **AHDRC drying function**

This cycle type has been developed with a couple larger companies and results they are seeing is cutting 4/4 oak drying times nearly in half while resulting in flatter, brighter lumber with no notable increase in degrade. Increasing production and saving energy.

## NSM Auxiliary inputs, display and alerts

This allows you 3 inputs (per NSM unit) that can be used with any dry contact or 4-20mA reference or similar. Display names are customizable and the state of that input is displayed/monitored on screen. Example of use: One customer has 2 boilers so he uses 2 NSM units with 3 inputs each. The inputs are connected to his boiler contacts for boiler off, low water & low flame. So, when any of those conditions are true the controller displays it on the screen and sends a text, alerting the responsible party. It saves them from boiler/kiln shut downs, most notably during weekends and holidays.

#### **Steam Priority**

Monitors steam pressure, generally at a header, displays pressure on screen, sends you a text for low pressure if desired, and allows you to prioritize chambers for allocation of steam when such events arise allocating steam where it is most needed.

#### Decentralized operator interface

Controller connects to your computer network (wireless or wired) so you can access it with any device on that network that runs a browser. Phone, laptop, PC etc. So you do not have to be in front of the computer in the control room to pause the kiln in order to go in and take samples, inspect function, etc...... Compatible with Windows, Mac & Linux OS's.

#### Modulating heat & vent control

Replacing your heat/vent solenoids with I to P transducers allows the valves/louvers to meet the environments needs regulating between 0% & 100% instead of 100% open or closed with no middle ground. This helps stabilize the temp/humidity values helping to reduce over venting/heating helping to keep more heat energy inside the kiln.

## Improved regulation

Your controls from the 80's or early 90's do not regulate as efficiently as the control hardware/software available today.

#### Reliability & available parts

Your current kiln control hardware is obsolete and have not been built new for almost 30 years and is less reliable in general than modern control hardware. At some point they will not be able to be repaired.