

High Quality Lumber Production
Proven Savings and Efficiency
Lifetime Customer Support
Resonable Prices

# We manufacture Control Systems for:

- Package Kilns
- Track Kilns
- Multi-zone Kilns
- Predryers
- Heat Treatment Kilns
- DH Kilns

- Direct-fired Kilns
- Hot Water Kilns
- Solar Kilns
- Steam Chambers
- Conditioning Rooms

1. Lignomat's control systems use latest drying technologies to assure high standards in lumber drying. Our customers report better grade recovery, more even moisture distribution and shorter drying times, while reducing energy consumption.

**2.** User-friendliness is guaranteed with easy-to-manage graphical interface and controller fine tuning capabilities.

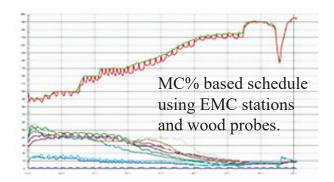
**New Software features:** Remote control, text/email alerts and customized information are now available on your smartphone, tablet or laptop without third party interaction. The operator interface snaps to fit your smartphone and tablet screen.

**3** Lignomat provides state-of-the-art measuring systems with wirebound or wireless sensors for:

Humidity: EMC or Wet-Bulb Dry-Bulb

Wood Moisture: MC Probes, Sample Boards

Wood Core Temperature



# **Innovative Ideas with Proven Results:**

## **Lumber Quality**

Our main focus is on perfecting the drying process for hardwood and high-grade softwood lumber. Tight controls, customer inspired options, flexibility to allow

different drying techniques, customizable software and service by informed engineers and technicians have given Lignomat control systems the best reputation in the industry.

# **Versatile and Uniform Equipment**

Lignomat's control systems are engineered to operate different types of kilns with the same base hardware and software. This allows ease of operation, equipment familiarity and trouble- shooting efficiency, while reducing down time and spare parts for multiple kiln operations.

## **American Made - German Engineered**

Lignomat pioneered and began manufacturing computerized kiln controls in the early 80's. Many of which are still drying lumber today. This is a testament of Lignomat quality, customer support and our dedication to our customer base.

1980's LSA kiln control system



# **Lignomat Kiln Control Systems**

### **PLC and Discrete Relay based Systems**

Depending on your needs and preference, PLC and relay-based controls are available. Multi-zone kilns and some advanced control options require PLC based controls.

Relay based controls are a simple, more affordable solution for single zone kilns, while still having standard options such as heat treatment and auto- samples, timber rest, demand load control and auto alerts available to you.

### **Kiln Control Module (KCM)**

Each kiln is equipped with one KCM module. Individual kiln settings and diagnostic LED's are on the KCM. The KCM will continue regulating to the desired value of the current schedule segment if the rest of system is down.

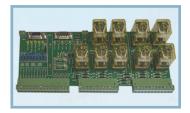
#### MP-32 Kiln Web Server

The MP-32 can manage up to 32 kilns. For a direct connection to the MP-32 you can use your LAN, VPN or just connect a monitor, keyboard and mouse.

#### Siemens S7-IS200 PLC



## **Descrete Relay I/O**



#### Kiln Control Module



#### MP-32 Kiln Web Server



# **New Features**

## **Lignomat netKCS Auto Alerts**

Now you can receive text and Email notifications for events as they happen. From a drop down list you select events such as schedule completion, kiln start-up, kiln shut-downs, alarms and more.

# **Timber Rest - Preserving Lumber Quality**

When a schedule is advancing too quickly for the lumbers current state, this option allows the kiln operator to give the lumber a breather. The schedule will rest and resume manually or automatically after a predetermined time.

### **Lignomat Network Based Operator Interface**

netKCS with MP32 is accessed through your local network or remotely via your VPN or any other secure remote access method.

Any desktop computer, laptop or smart phone with Internet browser can be used. Control, monitor, access histories and manage schedules through your own remote network access method.

In a scenario, where your network is down, a direct connection to the MP-32 can be established with a monitor, keyboard and mouse or a router and PC. Operator interface access is no longer dependent on a single PC's health.

#### Flexible Schedule Creation

Drying, equalizing, conditioning and heat treatment schedules stream together by time, wood moisture content or mixed schedules. Schedules can be written using EMC or wet-bulb depression values.

We provide the kiln operator with a frame work for kiln schedules and give him the opportunity to enhance and change schedules using his own experience and knowledge.

## **Standard Features**

#### **Heat Treatment**

Heat treatment is a feature available in all fully automatic kiln control systems from Lignomat. It is also available as a stand-alone monitor or control system. Dry-bulb, wet-bulb, EMC and wood core temperature sensors can be used depending on your needs. Data is recorded in compliance with ISPM 15 standard inspections.

## **Integrated Weight Samples**

Taking weight samples manually is the preferred method many kiln operators choose for high moisture content lumber. We have implemented a procedure to simplify data entry and calculations in our software. MC% and MC% loss-per-day are documented and if desired, used to run a moisture content based schedules.

### **Steam Priority**

When steam demand exceeds boiler capacity, steam distribution can be allocated among the kilns and predryers to conserve steam for more critical kilns.

The kiln operator sets up a priority list for individual kilns and predryers based on his requirements.

### **Save Money with Energy Management**

Using our peak demand energy management feature you can manage power consumption by reducing fan speed based on time-of-day schedules and/or real time power consumption data.

This money saving feature helps to avoid higher rates and penalties for exceeding peak demand limits and excessive power consumption during time-of-day and holiday high rate periods.

## **Our Commitment**

### **Quality Products with life-time Customer Support**

We have been designing and manufacturing top-of-the-line kiln control systems for over 40 years. We have always been fully committed to support our customers with phone service, on-site service and updates for existing Lignomat systems. We strive to deliver high quality products and good customer service.

In-house hardware and software engineers develop, maintain and support old and new software for customer specific applications and idea implementation.

#### **Best in class**

Our main focus has been to develop efficient and user-friendly kiln control systems which produce high grade lumber. This is the reason why quality, reputation and cost of our control systems are second to none in the industry.

### Lignomat exchange program

Over time, like anything, maintenance and repairs are a reality. In case of a hardware failure, components can be easily exchanged and are available from Lignomat with same day shipping before 5:30pm EST (later upon request).

## **Lignomat Service Contract Option**

Lignomat offers a yearly service contract to existing customers where hardware, software, service, loaner units and software upgrades are discounted or completely free.

Contact us for a quote to replace existing kiln control units or for a new installation:

Lignomat USA Ltd 800-227-2105 503-257-3708 www.lignomat.com

Email: sales@lignomat.com