## **Suppliers Offer Equipment Solutions For Heat Treating Pallets, Containers**

With the advent of global phytosanitary standards for wooden pallets and containers to eliminate the spread of wood-eating insects from one country to another, appropriate treating processes for lumber and pallets have come to the forefront.

Lumber and pallets may be treated by fumigation or heat to eliminate the risk of insect infestation, and procedures are in place to certify that wood packaging meets these new requirements.

Treating lumber and pallets with wood is not an entirely foreign concept, of course, because the forest products industry is accustomed to kiln drying lumber. Although heat treating for global phytosanitary standards and kiln drying lumber are not the same, they share some similarities in science, technology and equipment.

Indeed, many companies supplying heat treating systems for the pallet and container industry are manufacturers and suppliers of dry kilns and dry kiln equipment. They have many years of experience in supplying kilns for lumber drying, and have used their expertise to develop heat treating solutions for the pallet industry. In fact, some have developed systems that can perform dual functions – treating pallets to meet phytosanitary standards and kiln drying lumber. In addition, some suppliers have had prior industry specific experience with equipment and products for heat treating processes for pest eradication.

Equipment solutions for heat treating pallets vary widely, depending on a number of factors. Systems are available to treat relatively small quantities of pallets (less than a truckload) to multiple truckloads. Suppliers can erect a heat treatment chamber from the ground up, provide units that can be readily put in place on a concrete pad, or supply equipment packages that enable heating treating pallets in a shipping container or trailer van. Chambers may allow loading and unloading pallets by forklift, or they may use a specialized loading system. Fuel may range from wood to electricity or propane.

Another issue to consider in evaluating and selecting equipment for heat treating pallets is the control system and record keeping. Systems are available that function automatically and may be monitored remotely; they also capture and record data during the process – information that may be needed to meet certification requirements.

There are also differences with respect to cycle times and fuel costs per pallet.

The following pages contain information on advertisers that supply pallet heat treating equipment. Also included is information on advertisers that supply related computer software or are accredited certification agencies.

As with any decision to invest in plant or equipment, carefully scrutinize your company's requirements and the technology offered by suppliers.

(Editor's Note: See the October issue of Timberline magazine for additional articles on applications of pallet heat treating equipment.)

### **American Wood Dryers Treats Pallets**

The American Wood Dryers Inc.'s Pallet Heat Treater is a computer-controlled treating chamber with a capacity of up to 480 pallets. An automatic shut-down feature provides an instant alert when the heat treatment cycle is finished. Remote off-site software enables the process to be monitored without being present at the treating facility.

The American Wood Dryers Inc. Pallet Heat Treater is made of all-aluminum construction to ensure a non-corrosive chamber that will resist deterioration. It uses a system of four wood core temperature probes, exceeding the most stringent audit requirements. Cycle time is about four hours.

American Wood Dryers has more than 20 years of experience in high temperature wood treating and is a reliable source for a quality built, insulated, all-aluminum pallet heat treating chamber. The insulation, door quality and seals will reduce pallet treating costs over the long term, according to American Wood Dryers, which offers lease financing.

A merican Wood Dryers, based in Oregon, is known for its

quality, efficient all-aluminum dry kilns. The company has hundreds of kilns in operation in 19 countries on four continents. Its dry kilns feature all-aluminum structural framework to ensure years of



American Wood Dryers Inc. Pallet Heat Treater

maintenance-free operation and are available in models for direct forklift loading or track system loading.

For more information, contact American Wood Dryers at (503) 655-1955.

### Better Built Sanitizer Is 'Forklift Friendly'

Better Built Dry Kilns has experience in lumber drying and developed its Pallet Sanitizer. It has a useable width of 9 feet, 6 inches, a height of 10 feet, and depth of 54 feet – making it easy to load and unload with a forklift. Features like stainless interior skins, trusses, blower cabinet, fan housing and heat exchanger ensure lasting quality.

An indirect fired system eliminates the possibility of carbon monoxide poisoning since the gases of combustion go out the chimney. In addition, it is efficient because it does not require a continuous supply of incoming fresh air to support combustion.

The stainless steel heat exchanger is designed to output 800,000 BTU and features a fully modulating burner. This is an important feature because only about 5% of the heat is required after set point is achieved, and an on-off burner can overshoot, causing damage to the

pallet boards.

A computer control system provides the required print-outs and interfaces with four RTDs in the charge — one to control the environment and three to sense the temperature of the pallet stringers. This can be modified to suit any changing requirements as it is fully programmable. The system automatically pumps down and shuts off when finished. The unit will also surface dry pallets.

The Better Built Dry Kiln Pallet Sanitizer is assembled on site by the company's experienced personnel, and a qualified technician is sent to the customer site to install the computer and train the operators.

Better Built can also supply a roof top model for mounting on top of a



Better Built Pallet Sanitizer can treat truckload quantities, is available in indirect-fired natural gas.

customer's container or a high volume machine that moves over a pre-staged charge of 3-4,000 pallets while exposing a processed charge.

For more information, contact Better Built Dry Kiln at (859) 578-8240 or visit the Better Built Dry Kiln Web site at www.betterbuiltdrykilns.com.



Circle #94 on Reader Action Card

### **BOLDesigns Has 5 Pallet Treater Models**

BOLDesigns offers Pallet Treaters in two configurations and to meet virtually any size and capacity requirements for heat treating pallets. The company supplies steel, painted and galvanized models with all aluminum as an option.

BOLDesigns Pallet Treaters feature structural panel construction for roof and walls with 2x4 tubing welded frames, 4-inch mineral wool insulation, galvanized sheet interior, and corrugated galvanized skin exterior applied in the field for a strong building.

A 'gun' type burner fires into a stainless combustion chamber with hot gases distributed into the Pallet Treater through a duct with openings to provide balanced heating. The Pallet Treater includes required flame safeguards, air switches and sensors for safety.

A thermostatic control maintains the required temperature. The controller has a dual safety back-up to prevent overheating. The controller tracks tempera-

tures in up to eight locations, including four to six in pallet stringers in remote corners of the Pallet Treater; these track internal temperature of stringers with probe installed. The controller logs the data, which can be downloaded and printed to provide reports for certification and stamping.

To accomplish the 56–30 heat treating cycle (133 degrees F for 30 minutes), the temperature in the chamber must be raised to 200 degrees to keep cycle times less than four hours. The direct cost of heat-treating (electricity and gas) is about 5 cents per pallet.

Advantages of the BOLDesigns Pallet Treater include: Easy loading (whole side open for forklift access); Turn-key units ready to run (plug in gas and electrical); 4 inches of insulation; All sizes available; Metal 2x4 solid weld construction; Steel or aluminum construction; Dual use (treat pallets or dry lumber)

The system's computer software fea-



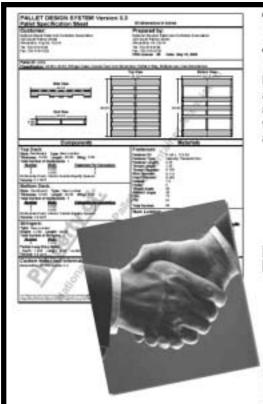
BOLDesigns Pallet Treaters have capacity of 160-960 pallets.

tures presentation-quality graphics, onetouch table view, fast and easy logger setup, and data exporting to spreadsheets.

BOLDesigns offers five models of Pallet Treaters with capacity ranging from 160 pallets to 960 pallets.

For more information, contact BOLDesigns at (800) 645-7001 or visit the Web site at www.boldesigns.com.

(See article on our heat treating customer in October 2003 Timberline.)



#### The technology is ours ... the business it generates is yours.

NWPCA is pleased to introduce extraordinary innovations to what is already recognized as the wood packaging industry's leading marketing and design tool — Pallet Design System<sup>6</sup>. PDS has a new version, 3.3, with features that will expand your ability to serve your customers and attract new ones:

- · Custom load types
- Box stacking pattern
- Load stabilizer
- Load-bridging response
- A simplified grading specification for pallet components

Learn more about PDS and what it can do for your business.



Call NWPCA at 703/519-6104 or e-mail us at palletinfo@ palletcentral.com. "When you use PDS, you have over 20 years of research and development supporting your pallet."

> Marshall White, Ph.D Director William H. Sardo, Jr. Pallet & Container Testing Laboratory

Circle #27 on Reader Action Card

### Brunner-Hildebrand Does 3 Functions

Brunner-Hildebrand supplies kilns and pallet heat treating chambers. It has been supplying heat treating chambers and kilns to the European pallet industry for years and has more than 500 kiln installations in North America.

Brunner-Hildebrand kiln dried heat treated pallet kiln chambers can perform three functions: heat treating, combination heat treating-dry kiln, and conventional lumber drying.

The heat treating cycle takes three to six hours; the precise time is determined by the thickest pallet component and initial temperature of the pallet lumber.

Brunner-Hildebrand kiln dried heat treated pallet kiln chambers are equipped with Brunner computerized kiln control systems for complete record keeping. A simpler version is available as a heat treating chamber only; it includes a core temperature and time base control system with recorder.

Brunner-Hildebrand heat treating chambers and pallet kilns feature all-alu-

minum, corrosion-proof construction of walls, roof and door for low maintenance and long life. The interior uses 0.05-inch high-grade aluminum alloy sheeting on walls, roof and door. All joints are sealed with high temperature silicon. In addition to a door for loading and unloading pallets, each chamber or kiln has one or two all-aluminum entry doors for access by personnel.

Walls and roof contain 4 inches of high density mineral wool insulation for short cycles and energy efficient operation.

The pallet kiln aluminum fan deck covers the full pallet load for better control of air flow. Heating coils feature aluminum fins and stainless steel piping; electric-driven modulating heat control valves provide accurate temperature control. Stainless steel pipes with equally spaced openings provide uniform, quick steam distribution. An electric-driven control valve ensures accurate control.



Brunner-Hildebrand pallet heat treating chamber at Acme Skid & Plug division of Apache Products in Silsbee, Tex.

Heat treating chambers and pallet kilns have controlled venting systems.

Parts and service are available from Fort Mill, S.C., Nashville, Tenn., and Vancouver, British Columbia.

For more information, contact Brunner-Hildebrand at (803) 547-7121 or visit the Web site at www.brunner-hildebrand.com.

(See article on our heat treating customer in October 2003 Timberline.)

## Converta Kiln Guarantees 2 Hour Cycle

Converta Kiln Inc. has engineered and developed a system for heat treating pallets to comply with international phytosanitary regulations. The Tennessee-based company, with 23 years of experience supplying dry kilns and heating systems to the forest products industry, developed a pallet heat treating system that encompasses many of the features of its dry kilns while eliminating unnecessary dry kiln features that would add to the cost. Its pallet sterilization chamber provides a solid, dependable equipment solution specially for the pallet industry.

Converta Kiln conducted on-site tests at its plant to determine the precise amount of air circulation needed to transfer heat to the pallets without degrading the pallet lumber. Heavier heating systems, coupled with the precise air circulation control, enable Converta Kiln to maintain lower than normal interior building temperature yet reach the control temperature in about on hour. This

means that Converta Kiln can guarantee the heat treating process will not exceed two yours from start-up. Its pallet sterilization chambers have been certified by TIP and NHLA in the guaranteed heat treating time. With its guaranteed cycle time of two hours or less, fuel and electric costs are 6 cents per pal-

let, based on fuel costs of \$1 per gallon of propane.

The Converta Kiln pallet sterilization chamber is built for the rugged nature of pallet manufacturing. It is not a container-based unit, portable trailer system or a makeshift building. It is a substantial kiln building erected on-site on a foundation. Converta Kiln maintained the structural integrity of its regular dry kiln building with a finished structure of aluminum and stainless steel.

Converta Kiln pallet sterilization chambers are designed to load pallets



with a forklift or a track system. They are available in capacities ranging from one truckload (630 pallets) to three truckloads or more. Heat systems are direct fired or steam. The controls are fully automated with pushbutton start and automatic shutdown; they include four temperature probes and an easy-to-read chart showing when pallets have been heated to the appropriate temperature.

For more information, contact Converta Kiln at (800) 949-5456.

(See article on our heat treating customer in October 2003 Timberline.)

### Kiln-direct Kilns Heat Treat, Dry Pallets

Right from the start, Kiln-direct has been designing kilns and control systems specifically for the dual purpose of heat treating and drying pallets. Kiln-direct can provide you with the ability to offer your customers both. It currently has kilns in more than a dozen states.

The Kiln-direct Turn-Key Pallet kiln is designed for companies that may heat treat up to two or three loads of pallets per day. Equally important is the initial investment. According to Kiln-direct, one charge per week is the break-even point, including depreciation, labor, energy, and inspection costs; this analysis is based on a 75 cents per pallet added value. (More details are available on the Kiln-direct Web-site).

To protect against corrosion the kiln is delivered with aluminum sheeting inside or a stainless steel option. The 1.5 million BTU high efficiency heating system ensures fast turn-around time. The power exhaust system allows cooling the pallets before moving them directly into a van, which can help minimize mold and fungi. In addition, the power exhaust can be used to dry pallets to 15-20% in as little as 12 hours. The kiln controller software has been specially adapted to pallet drying schedules, which are significantly different than lumber drying schedules.

Customer experience has shown that easy, convenient handling is the most important aspect of operating a profitable pallet kiln, according to Kiln-direct. Since handling and stamping costs far exceed energy costs, moving stacks of pallets directly from a nailing machine into the kiln and then straight onto the truck for delivery minimizes handling costs. For this reason, truckload kiln ca-



Kiln-direct Turn-Key Pallet Kiln

pacity is very practical. (For more detailed information, visit: www.kiln-direct.com/pallet/.

For smaller operations, Kiln-direct can help build a kiln or provide a component package for a container based solution.

For more information, contact Kiln-direct.com at (910) 259-9794 or visit the Web site at www.kiln-direct.com.

(See article on our heat treating customer in October 2003 Timberline.)

### Koetter Supplies Custom Kilns, Kits

Koetter Dry Kiln's Heat Treat Kilns will heat pallets to meet new European Union regulations. The company manufactures wood drying kilns that exceed industry standards and achieve favorable short-term and long-term financial results for its clients.

Koetter can supply a custom designed kiln to treat pallets or a Components Only Kit. Koetter Kilns are of high quality, longevity, and operational economy — plus they are easy to use.

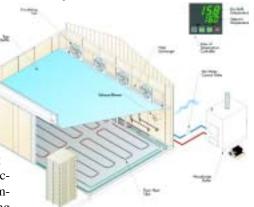
Koetter Dry Kiln standard features include: Wide side hinge doors for forklift loading; Overhead door on the 18N-PK & 52N-PK; Coated aluminum interior walls; Circulating fan wall; High horse-power hot water heating coils; Powered exhaust; Basic control instrumentation package; Chart recorder with type T thermocouple to verify the pallet core temperature; Coated sheet metal exterior; 230VAC; Outside installation on concrete pad poured by customer; Heavily insulated walls for excellent thermal efficiency; Hot water heat system that can utilize waste wood systems; Sturdy SIP

panel construction; Gentler chamber temperature of 160° to reduce warp and degrade; Forced air exhaust vent to remove water vapor, which reduces risk of staining from condensate and provides drying capability

Options Include: Hot water heated floor; Gas hot water heater; Wood Waste hot water heating system; Boiler connection kits; Kiln recommended spare parts kit; Boiler recommended spare parts kit; Door opening system for the KDK-18N-PK & 52N-PK; Construction supervision and startup services; Control room optional for the KDK-18N-PK & 52N-PK

#### **New Truckload Model**

Koetter's new one truckload heat treat chamber is its most economical unit. The KDK-12600D-PK, with a capacity of approximately 600 standard size pallets, incorporates high quality construction with the features that Koetter customers expect. This new model showcases a 25-foot wide entryway, a hot water heat exchanger, uniform air circulation, pow-



Schematic illustration of Koetter Dry Kiln Heat Treat Kiln.

ered variable exhaust, and an optional floor heat system.

All Koetter heat treat kilns achieve optimum financial results by exceeding industry standards and attaining the high longevity and operational economy.

For more information, contact Koetter at (812) 923-0635 or visit the Web site at www.koetterkiln.com.

(See article on our heat treating customer in October 2003 Timberline.)



### Marshall & Henderson Treats Quickly

Marshall & Henderson Inc. supplies mobile pallet heat treating systems. The unit is completely portable and can be moved from place to place or can be installed on a slab or blocks.

Marshall & Henderson started with a 'clean sheet of paper' and designed a pallet heat treating system using a direct fire furnace. It produces 1,200,000 BTU to treat quickly and so as to not change moisture content.

The Marshall & Henderson pallet heat treating system achieves a 1% increase in core temperature per minute; fuel costs are as little as a penny per pallet, according to the company. Depending on the number of pallets treated and the starting core temperature, heat treating can be completed in two hours or less per charge.

The Marshall & Henderson pallet heat treating system is designed for complete forklift access for easy loading and unloading of pallets.

The system, which holds a full truckload of pallets and features aluminum construction, is easy to operate with computerized record keeping.

When the unit is delivered, Marshall & Henderson provides on-site start-up assistance and support to ensure the equipment is running correctly and to answer any questions.

For more information, contact Marshall & Henderson at (662) 547-6228 or visit the Web site at www.heat-treated.com.



Marshall & Henderson system holds a truckload of pallets.

## Nyle Control System Fully Adaptable

Nyle Corporation of Bangor, Maine has developed a computer control system for pallet sterilization that ensures certification can be achieved regardless of the certification agency used. The system can be adapted to future regulatory changes and costs no more than older technology using round or strip chart recorders.

The Nyle system uses a central computer that can run one or 100 sterilization chambers. It can be accessed from any location so that the operator can run the system and print various types of reports at the chamber location, the office or home.

The system is fully adaptable; it may be certified by any of the various agencies in the U.S. or Canada. "We expect that there will be changes and modifications to the procedures as the sterilization programs develop, so Nyle wanted a system that can grow with our customers," said Nyle president Donald Lewis.

"We have already had customers change from one agency to another, and

the control systems had to be changed because the requirements of the new agency were different," said Don. "We want to make sure that people are not put to a great expense when these changes develop. Nyle will provide software updates in the future at no charge to keep their customers up to date," he said.

With nearly 4,000 kiln systems sold in the last 26 years, Nyle has extensive experience in materials that are best suited for pallet sterilization chambers. The company insists that direct fired systems should not be used. It favors high air flows and uses high volume fans and blowers and stainless steel heat exchangers to ensure safe, long lasting equipment.

Nyle offers a broad array of pallet ster-



Nyle package system for installation on truck body, shipping container or small building.

ilization solutions. It can supply complete systems, including stainless steel chamber, and equipment packages for chambers built by customers, shipping containers or refrigerated truck bodies, or an existing room. Nyle also offers systems for hot water or steam heat.

Nyle Corporation is a USA owned and managed company. For more information, call (800) 777-6953 or visit the Web site at www.nyle.com.

### Pest-Heat System Easy, Cost Effective

Pest-Heat has developed a new technology for heat treatment of wood packaging that is easy and cost effective. The self-contained, portable Thermal Pest Management System can provide certified heat treatment of wood pallets, wood products, dunnage and crating.

Pest-Heat's Thermal Pest Management System is not just an oven or kiln. It is a new technology to treat both hardwood and softwood wood packaging materials.

The Peat Heat Thermal Pest Management System uses a controlled environment of high temperature air in a sealed chamber to permanently and safely eradicate pests. The patent-pending system is fast, safe, portable and cost-efficient.

In the early stages of pallet heat treating, John Healy, past president of the NWPCA, requested that the U.S. Department of Agriculture test a Pest-Heat chamber. The USDA found that it can successfully treat pallets to the 56/30 standard.

The Thermal Pest Management System was developed through many years

of testing and in partnership with the Defense Logistics Agency and the Army Center for Health Promotion and Preventive Medicine.

The Pest-Heat Thermal Pest Management System is completely self-contained and has minimal installation requirements. The high-capacity chamber can effectively treat up to 320 pallets in one operation and also handles crates, boxes or dunnage. Pay-back is less than six months of continuous operation, according to Pest-Heat.

The Pest-Heat Thermal Pest Management System produces 400,000-600,000 btu/hour of heat. It is pumped through a specially designed, perforated flooring at over 18,000 cfm. The heat rises and fills the chamber to reach the necessary temperature.

Pallets are loaded into the chamber with a special easy-to-use loading system of carts. Temperatures within the chamber are monitored and recorded using Pest-Heat licensed software and data recorders.



Pest-Heat designed Thermal Pest Management Chambers for high capacity, fast treatment times.

The Pest-Heat Thermal Pest Management System requires an electrical connection, a gas hook-up (propane or natural gas) and a level foundation.

"The main focus of Pest-Heat is to service pallet manufacturers with a quality product," said company spokeswoman Lauren Sipple. Whether it is supplying technical assistance or accurate regulatory information, we feel it is our job to help the industry with what it needs to conform to the global phytosanitary requirements."

For more information, contact Pest-Heat at (877) 234-5630 or visit the Web site at www.pestheat.com.

## SII Dry Kilns Offers System for Pallets

The SII Dry Kilns Heat Treater system is designed to treat pallets, crates and other wood components in order to meet or exceed all international phytosanitary standards.

SII, which has over 32 years of experience in the lumber drying industry, has certified pallet heat treating systems in operation throughout the U.S. as well as a fully operational, certified system at its plant in Lexington, N.C.

SII's multi-purpose design enables heat treatment, pallet drying, and sterilizing or conventional lumber drying to meet global phytosanitary standards.

SII Dry Kilns can supply a complete Heat Treating chamber or component equipment. Options include all aluminum construction or aluminum frame with stainless steel inner panels. Chambers may be sized for specific customer requirements and pallet sizes to hold multiple truckload quantities of pallets.

SII Heat Treating chambers quickly and efficiently heat pallets to the required core

temperature, and control systems include documentation for audit purposes. Heating system options include steam, directfired, wood waste, gas and others.

SII Dry Kilns also offers pre-dryers in cross-draft and down-draft configurations, fan sheds, and computerized control systems utilizing stateof-the-art monitoring capabilities, including 'Sample Watch' in-kiln weight system and wireless lumber probes. The company also provides a full line of parts and accessories.

SII Dry Kilns is committed to research, development and training. As a leading manufacturer of lumber drying equipment, it stays abreast of new research so that it may implement developments that will help its customers. SII's in-house research, development and training staff uses test kilns to develop improved drying techniques, kiln designs and materials, and to conduct customer training. SII maintains an active liaison with univer-



SII Dry Kilns Heat Treater system for pallets.

sity researchers.

SII Dry Kilns is known for its design, manufacturing, installation and service of dry kilns. The family owned and operated company began in 1969 as a kiln installation and refurbishing business. The company now has over 60 employees and more than 1,000 drying facilities in operation. At SII Dry Kilns, key personnel have over 250 years of combined lumber drying experience.

For more information, contact SII Dry Kilns at (800) 545-6379 or visit the Web site at www.siidrykilns.com.



## TEMP-AIR Offers Variety of Options

TEMP-AIR offers the pallet and container industry a variety of options for heat treating wood packaging materials. TEMP-AIR systems make it easy and cost-effective to comply with new International Plant Protection Convention (IPPC) phytosanitary standards.

With a TEMP-AIR system, any enclosed structure can become a heat chamber – no matter the size.

TEMP-AIR's standard system includes: Heaters; Circulation blowers; Portable temperature recorder and data logger; Digital probes to measure temperatures in the core of the wood; Computer software to download temperature and customer information; Set-up, equipment training and trouble-shooting; License to use the TEMP-AIR patented process; Guaranteed heat treatment certification

The TEMP-AIR patented process draws 100% outside air through heaters to create a positive pressure in the en-

closed structure.

TEMP-AIR systems are versatile; they have the ability to maintain or reduce moisture while heat-treating pallets to meet customer needs.

TEMP-AIR offers multiple system applications, and all have been tested to meet IPPC export requirements. Heat chambers are available in a variety of sizes, and the company can develop custom treatment applications. Trained TEMP-AIR service technicians can provide emergency support, and the company can provide training and support to obtain heat treatment certification.

Martin Brothers Container in Martin, Tenn., uses TEMP-AIR's standard equipment with a 40-foot container. "The TEMP-AIR wood heating system has been an excellent purchase," said vice president Rocky Martin. "It is highly functional, in-



expensive and allows us to do business in Europe without adding a lot of overhead to the cost of the product. The time to heat is approximately two to three hours for 10,000 board feet of hardwood lumber."

Another customer, Southland Manufacturing Co. in Bowling Green, Ky., uses TEMP-AIR custom equipment with a custom 65-foot chamber. "Southland Manufacturing is extremely pleased with our choice of TEMP-AIR to supply its heating units," said president Glenn Atkinson. "Southland is heat treating thousands of pallets each day with no problem."

For more information, contact TEMP-AIR at (800) 836-7432 or visit the Web site at www.TEMP-AIR.com.

#### Companies Offer Certification Service

Several companies are accredited by the American Lumber Standard Committee to certify that wood packaging materials comply with phytosanitary standards, including Package Research Laboratory and Timber Products Inspection Inc.

Package Research Laboratory is a 75-year-old company that has been working with wood and packaging for its entire existence. With offices throughout most of the U.S. and European Union, Package Research Laboratory provides reliable assessments with minimum intrusion and at low cost.

Package Research Laboratory is knowledgeable about local, national and international regulations and offers a free help-line and periodic newsletters to answer regulatory questions. It provides a flexible accounting system and knowledgeable inspectors.

Timber Products Inspection is a diverse, 33-year-old company that offers wood products inspection, certification, testing, verification, training, and consulting services. The company offers nationwide coverage, strong customer service, and competitive prices.

Timber Products Inspection offers comprehensive services in inspection, testing and quality auditing that are supported by specialized physical and chemical laboratories.

For more information, contact Package Research Laboratory or Timber Products Inspection as follows:

Package Research Laboratory (973) 627-4405, ext. 248 www.package-testing.com

Timber Products Inspection (770) 922-8000, ext. 317 www.tpinspection.com

#### Computer Software Aids Heat Treating

Two companies supply computer software and technology to the pallet and sawmill industry that can help pallet suppliers manage their inventory and record-keeping when it comes to treating pallets to meet global phytosanitary standards.

Heat Treatment Auditing System Inc. offers a computer software program designed to help pallet companies manage their heat treatment business and comply with global phytosanitary standards. It can help pallet companies achieve compliance with government regulations, standardize procedures, perform audits, track inventory, plan and measure production, and streamline workloads. Heat Treating Auditing System also provides custom services.

Innovative Data Systems supplies several different computer programs for pallet and sawmill industry applications. The company's Pallet Track® Wireless Pallet Mill and Wireless Sawmill systems both provide the capability to track and document heat treated material and pallets and containers. Information about heat treated lumber that is purchased from a vendor or lumber that is heat treated by the pallet supplier or sawmill is recorded and tracked with a wireless terminal and bar code scanning.

For more information about these programs, contact the respective suppliers as follows:

Heat Treatment Auditing System Inc. (814) 669-1588 or www.htasinc.com

Innovative Data Systems Inc. (631) 244-0069 or www.pallettrack.com.

## CATHILD Offers Moving Kiln, MGTT Kiln

CATHILD is a pioneer in pallet heat treating and pallet drying with more than 15 years of experience. It is a worldwide manufacturer and supplier of pallet kilns with more than 100 pallet kilns installed throughout the world, especially in the U.S., Canada, Germany, France, Belgium and Chili.

The key to CATHILD's success is to design the heat treating or kiln drying chamber according to the customer's specific needs for heat treating or kiln drying pallets. CATHILD offers kilns and heat treating equipment that features low operating costs for fast payback.

CATHILD developed for the pallet industry the moving kiln and patented MGTT® (Moist Gas Thermal Transfer) system. CATHILD also developed an automated control that function without employee supervision.

The CATHILD moving kiln is based

on a simple equation: no loading time = increased production. It produces up to 20% more dried pallets and reduces operating costs 30%.

The CATHILD MGTT system is a direct gas firing method that heats the pallets by direct contact with the flue gases from natural gas or propane gas. The

heat treating or kiln drying process is conducted in a hot, moist atmosphere by the controlled addition of water vapor during combustion. This improves the heat treating or kiln drying process by reducing the cycle time while preventing lumber degrade, such as cracking.

The CATHILD MGTT system provides the following advantages:

• investment cost is less than a boiler



CATHILD Moving Kiln.

and coils

- energy cost is less than with a boiler (30% save, 98% energy efficiency)
- better quality of drying or heat treating (better control of temperature and relative humidity of air inside the kiln)
  - no maintenance

For more information, please contact CAHILD at (819) 752-3757 or visit the Web site at www.cathild-inc.com.

## HT/KD Pallet Kilns





www.cathild-inc.com

- MGTT System (Moist Gas Thermal Transfer)
- Moving Kiln
- Over 100 installations worldwide
- Low Cost

**CALL TODAY** 

819 752 3757



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