

# INFERNO

## HEAT TREATMENT SYSTEMS

# THE INFERNO

[www.palletinferno.com](http://www.palletinferno.com)



### FORMULA FOR SUCCESS TODAY AND IN THE FUTURE FOR WOOD PACKAGING SOLUTIONS:

Pallet & Wood Packaging Product **Sanitization** = ISPM-15 HT + Sterilization

In a single pass or charge, patent pending and scientifically proven, The Inferno can Heat Treat for ISPM-15 certification and sterilize pallets and other wood packaging products to a surface moisture content of less than 20% for **mold prevention** in very low sanitization run times resulting in significantly lower energy costs.



The Inferno Heat Treating, LLC • [www.palletinferno.com](http://www.palletinferno.com)  
Contact: Mike: (920)-427-8029 • Tom: (715)-923-8403

# INFERNO HEAT TREATMENT SYSTEMS

## The Inferno Customer Testimonials



The Inferno pallet sterilization capabilities eliminated the need to dip pallets in chemicals and air dry store them to prevent mold for our customers. Since The Inferno can ISPM-15 heat treat and sterilize pallets in 1 run, our customers now have the flexibility to store and warehouse product on all their ISPM-15 HT pallets whether or not it is shipped domestically or internationally. The Inferno has allowed us to pick up new customers thus adding a second shift. The Inferno is easy to operate and involved light training of my staff to integrate into my operations quickly.

Michael Mapes  
President

"I would like to reach out to you to thank you for the high level of service your company has provided us over the past 3 years.

Approx. 4:30 am Saturday Aug. 16<sup>th</sup>, 2014 we had a fire in our heat treat chamber and the unit was considered a total loss. Immediately I contacted our Emergency Response Team. We began calling on contractors and equipment manufacturers to replace anything lost in the fire and to minimize any possible downtime. Tom Wiedemeier was one of those equipment manufacturers we contacted Saturday morning. He actually answered the phone and in a matter of a few hours we had an agreement with Tom to bring us an Inferno Heat Treat Chamber the upcoming week. Tom did whatever it took to not only provide us with a new heat treat chamber but also helped us to negate any loss of business. Tom personally delivered, set up and trained our staff on the operations of the Inferno. Since then, whenever we have a service or parts needs, Tom and his staff are extremely knowledgeable and very reliable. Tom's support through our unfortunate event, made the challenges tolerable. I strongly recommend anyone in need of a heat treater to seriously consider Tom Wiedemeier and the Inferno Heat Treat Chamber".

Best of Regards,  
James W. Brill  
President

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### THE INFERNO STERILIZING & HT (SANITIZATION) BENEFITS FOR PALLETS & OTHER WOOD PACKAGING MATERIALS

- **Can Sanitize (Heat Treat and Sterilize) 100-200 pallets/hour in a single pass**
- Sterilizing results produces steep moisture gradients with surface MC%'s below 20% for **mold prevention**
- **Water stains are not present** on products after heat treating and/or sterilizing, especially near bottom
- Kiln drying times for a similar amount of pallets can take 75%+ more time to dry and save days if air/fan drying for mold prevention
- The Inferno energy cost/pallet to sterilize for mold prevention are much less than kiln-dried pallets because of the shorter run times
- The Inferno's pressurized forced air technology will get consistent temperatures in all places of your products
- **Structure of pallets are not compromised**
- In operation and proven ISPM-15 HT certification compliance since 2011
- Most heat treating units that require loading and unloading time are not operational during this time reducing the capacity output of products every day, The Inferno is in constant heat treating operation
- Eliminates the need to buy kiln-dried lumber to manufacture dry pallets for mold prevention
- Reduce your inventory and facilities footprint of products if drying on site with fans or outside air for mold prevention
- Use The Inferno's excess capacity to sterilize or HT for other companies to increase revenues, even HT firewood
- Target and grow future revenues by capturing business of new companies requiring sanitization
- Electricity is cleaner and more safe than other energy sources; no harmful chemicals and residues
- The Inferno is easy to operate and integrate into your operations
- The Inferno can be moved in the future as your business and operations footprint changes (see picture below)
- The machine is designed to reside indoors resulting in more consistent performance since it is out of the weather elements, especially in winter climates
- The machine can be configured to "flip flop" infeed and outfeed decks based on placement inside building

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## HEAT TREATMENT SYSTEMS

### HEAT TREATMENT SERVICES & TECHNOLOGY

The Inferno is a system/process that allows you to kill unwanted pests by **meeting vigorous ISPM-15 guidelines** for heat treating wood based materials. The Inferno can **also sterilize finished pallets or wood packaging materials** very effectively and quickly to a surface moisture contents at 19% or below. Sterilizing these materials is an effective method for preventing mold.

- Based on pallet size, this machine can heat treat and/or sterilize 100 to 200 pallets per hour
- The machine can be configured for flow through (constant motion) or batch runs
- The machine runs on electricity which is clean and safe
- One simple switch will activate the machine to preheat and function. The heat is controlled by a control panel enclosure that also controls speed and air flow
- Pressurized, forced air sterilizing technology vs. current drying ovens
  - Significantly reduces heat treating or sterilizing cycle times
  - Water stains are not present on pallets
  - Lower energy costs to operate
  - Higher output of product (increased capacity)
- Stacked pallets are set on in feed deck and travel through doors and exit on the out feed deck
- Air doors minimize loss of heat for incoming and exiting pallets saving time and money
- Machine includes 9 wireless Data Loggers for maintaining ISPM-15 certification
- Effective to accommodate an emergency small batch run for a customer order
- A fire system is optional

**IT'S SIMPLE – IT'S EFFICIENT – IT GETS THE JOB DONE**

# **INFERNO**

## **HEAT TREATMENT SYSTEMS**

### **MACHINE SPECIFICATIONS**

- Constructed of quality, heavy duty materials for long life
- Outside Machine Height is 12.5', Width 8', Length of oven is 25', In feed deck is 10', and Out feed deck is 10'; Inside dimension of oven is 5.5' wide by 9' high
- Powered with efficient 3-phase frequency drive motor
- Needs 480 volt, 3 phase, 300 amp service
- Designed with air doors to minimize heat loss if needed
- Control panel to control air flow, heat and speed of travel
- Approximate weight is 20,000 lbs
- Steel for legs, back, and uprights is 2" x 4" x ¼" wall tubing (painted)
- 2-81X Chains are placed 36" on center to accommodate stacks of pallets

### **MACHINE OPERATIONS**

- The Inferno can accommodate a wide variety of sized pallets and packaging materials
- Can be used as a flow through or batch run
- Reaches temperature in minimal time in about an hour depending on facility conditions and temperature
- Variable, time/temperature control allowing multiple use applications
- Easy to operate, minimal labor required
- Push button switches used to run machine by a control panel enclosure. This can be adjusted easily by using a digital programmable inverter inside panel
- Stacked pallets are set on in feed deck and travel through doors and exit on the out feed deck
- Outside of machine does not get hot and the machine gives off very little heat/stem
- For heat treating, data loggers track progress of time and temperature for certification
- Run batches back to back for heating efficiencies