THERMO Lignum

ECOLOGICAL INSECT PEST ERADICATION

WE SAVE YOUR ART OBJECTS

THERMO LIGNUM - THE ECOLOGICAL ALTERNATIVE

ECOLOGICAL INSECT PEST ERADICATION 100%

WE COMBAT INSECT PESTS IN ART AND CULTURAL ASSETS

SUSTAINABLY, GENTLY AND SAFELY

WWW.THERMOLIGNUM.COM

The Thermo Lignum®
WARM-AIR method

The Thermo Lignum® Process is based on the scientific conclusion that insects are incapable of surviving exposure to raised temperatures over and beyond a given period. Depending on the species we work with a core temperature target of 47 to 55 °C which is held over at least one hour. As a consequence the insect protein is damaged to such an extent that any survival is impossible.

The key feature of the Thermo Lignum® WARM-AIR method however, is not the application of temperature, but the computer controlled air humidity throughout the process. This guarantees a very gentle treatment even for the most sensitive art objects without the risk of damages.

Since 1988 the Thermo Lignum® WARM-AIR method is the optimum solution to completely eradicate insects pests and dry rot in objects of any type and size, from sensitive works of art to and including entire building structures.

Wood pests, like the common furniture beetle (anobium punctatum or plain woodworm), powder post beetle, house longhorn beetle, moths or carpet beetle, book lice and other damage inflicting insects are all equally **eradicated** in all their life cycle stages, **from egg, via, larva, pupa to adult beetle.**

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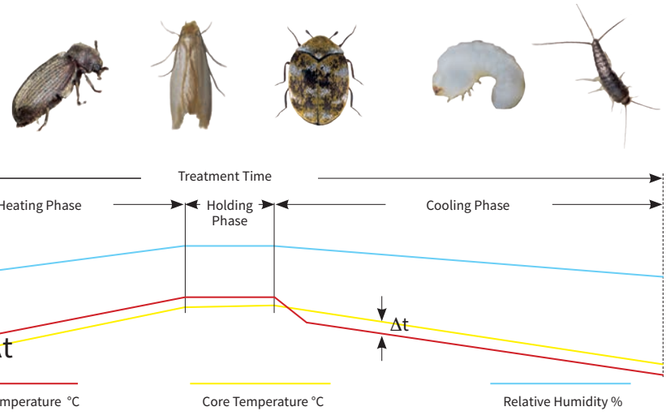
ECO-CHECK:
WATER AND WARM AIR
NOTHING ELSE.

- **Non-Toxic**
- **100 % CO_2neutral**
- **Short Treatment Period (16 - 24 hrs)**
- **Individual Treatment Process for each Object Type**
- **Low Consumption of Water and Energy**
- **Max. Temp. 52° - 57° C (depending on species and object)**
- **Harmless for your Valuable Originals**
- **Possibility of Biocide Decontamination**



What can we treat?

Almost everything that can be attacked by pests

The Thermo Lignum® process is ideal for removing insect pests from a wide variety of objects: Furniture, musical instruments, church and museum inventory, paintings, frames, modern art, sculptures, textiles and carpets, leather, fur, paper, books, ethnographic pieces and much more.

From a conservation point of view, the key to using warm air to combat harmful insects is to keep the moisture content of the material constant during the heating, holding and cooling phases.

For example, paper that is being eaten by paper fish requires different settings than the Persian carpet that is threatened by moths, or even wooden objects - in all forms - on which the "woodworm" is gnawing. During the entire treatment process, the use of our customized software to control the relative humidity and temperature inside the WARM-AIR chamber guarantees that your valuable objects will not suffer any physical or structural changes due to moisture loss or absorption.

The Thermo Lignum Mobile Unit

Flexibility for our customers

OUR EXPERIENCE FOR YOUR OBJECTS

For over 30 years we have been leaders in the development and implementation of ecological pest control. In order to avoid the risks and costs of a costly transport of your valuable objects, we offer the possibility of an on-site treatment against insect pests with our mobile Thermo Lignum® WARM-AIR chamber.

All we need from you is a suitable location, a power supply location, a power connection (32A/400V) and water.

The professional support during loading and unloading as well as the round-the-clock data control by our staff during the run guarantee a safe treatment of your valuable and unique objects.

We come to you

... or you rent our Thermo Lignum container

For new arrivals of objects, loans, returns or short-term projects we have the solution to protect your depot or exhibition from new infestation: Our 7.5 ton truck offers 25 m³ of space and is ready for use at any time due to its integrated technology. A typical treatment cycle in the mobile unit including loading and unloading takes app. 20 - 24 hours.

RENT A COMPLETE THERMO LIGNUM WARM-AIR CHAMBER IN A CONTAINER

Thermo Lignum® offers its customers the possibility to rent a complete Thermo Lignum chamber, built in a 20' or 40' container, for a longer period - minimum 3 months. The price includes training of the support staff, remote maintenance and troubleshooting during business hours as well as delivery and collection by carrier.

This full Thermo Lignum system in an insulated 20' or 40' high cube sea container is especially suitable for the treatment of objects in the context of a depot move.

The Thermo Lignum® System

100 % Ecological - 100 % Reliable - 100 % Safe

FOR MUSEUMS, STORAGE FACILITIES, COLLECTIONS, GALLERIES, ARCHIVES AND THEATERS there are many advantages in having a dedicated in-house Thermo Lignum® WARM-AIR system designed for their specific needs.

BENEFITS

- Designed for your specific needs
- Ready for use on site at any time
- Quick and efficient treatment of your precious objets
- Average treatment cycle no more than 24 hours
- Safe eradication of all insect pests at all stages of development guaranteed
- 100 % ecological and CO_2 neutral
- Free of toxins, working without any chemicals
- Objects can return to storage or exhibition immediately after treatment
- System operates extremely cost efficient. Average consumption of a 24 h cycle: 100 kW/h elctricity and 100 litres of water
- **Optional: special filter to decontaminate the objects if required**

FROM ART TO ARCHITECTURE

Space Requirements

for your Thermo Lignum® System

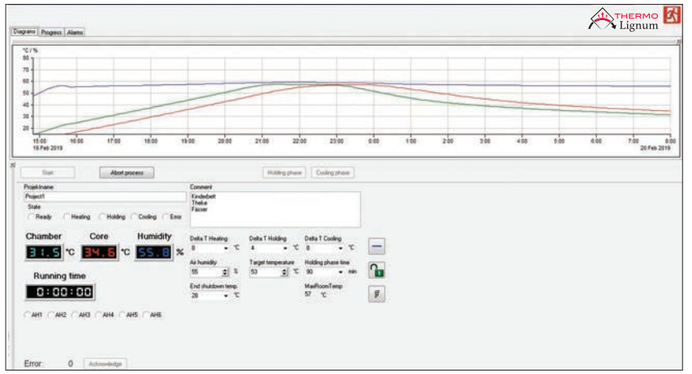
REQUIREMENTS

- Minimum dimensions oft he chamber: from LxWxH 2,5m x 2m x 2m to 8m x 3m x 3m
- Special sizes possible
- Electricity supply 400V/32A
- Water supply – 1/2' with minimum pressure 2 bar
- Waste water drainage
- Exhausted air connection to the outside
- Fresh air supply – from the processor directly to the building exterior

ALTERNATIVE: RENT A PROCESSOR

If you have limited capital resources, or if you only have more infrequent treatment requirements in any given year, you have the option to simply install a Thermo Lignum® chamber and rent in the processor if and when needed.

One of our technicians will come and connect the processor to your existing on site chamber in no time, and treatments can start immediately after. In the meantime you can use your Thermo Lignum® chamber as a quarantine room.



ECOLOGICAL INSECT PEST ERADICATION

Thermo Lignum® Systems

already installed in many countries

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