

From Integrated Pest Management to Integrated Contamination Management (ICM®)

Ecological technology designed
by conservators for conservators

Brussels | London | Berlin | Mobile



Integrated
Contamination
Management

by



A detailed tapestry depicting a landscape scene. In the foreground, a stork stands on a grassy bank, looking towards a pond. Two swans are swimming in the water. The background features rolling green hills, trees, and a distant building. The entire scene is framed by a wide, ornate border of yellow and white flowers on a blue and green background.

The work of art
is the focus
of attention
and respected
at all times



Joseph Beuys, Scala Napoletana, 1985.
Courtesy the Joseph Beuys Estate. Photo: Tate.

PREVENTIVE TREATMENT AGAINST
WOODBORING INSECTS



Biombo (Kentucky) © Alexandre da Cunha, 2017.
Courtesy the Artist and Thomas Dane Gallery. Photo: Tate.

PREVENTIVE TREATMENT AGAINST
WOODBORING INSECTS

Humidity regulated Warm Air Insect Eradication Treatment (ICM[®])

The humidity regulated warm air treatment used by ICM[®] is a 100% effective and eco-friendly method for treating a wide variety of materials which have been attacked by insect pests. All life-cycle stages of insects which inhabit any organic material will die when exposed to warm temperatures over a defined period of time during our ICM[®] humidity regulated treatment.

In the ICM[®] treatment the humidity is controlled – and so there are no risks of harm to the objects. Because there are no chemicals or noxious gases involved in the treatment, there is no risk to your health or the environment. The machinery has a low power consumption, therefore operating costs are also low.



Ethnographic objects
© Musée d'Archéologie
Nationale, Paris

CONTAMINATION:
ANTHRENUS VERBASCI



©Courtesy of Sam Fogg, London
CONTAMINATION:
WOODBORING INSECTS



©DBP Entomology

By IPARC: International Platform for Art Research and Conservation

We are a company of professional conservators with in-house state-of-the-art research & analysis facilities, including, multispectral imaging (X-ray, / IR/IRR, UV, Macro-XRF), camera inspection, microscopic and chemical analyses.

A large number of museums, galleries, auction houses and institutions in the EU have tested, frequently used and endorsed the warm air method over the past two decades. This sustainable solution will control insect pests and prevent damage in both historic works and modern or contemporary pieces and collections.



Mike Nelson, The Asset
Strippers, 2019. Installation view,
Tate Britain, 2019.
Photo: Tate (Matt Greenwood).

PREVENTIVE TREATMENT AGAINST
WOODBORING INSECTS



Mur de la monte des anges by Jan Fabre
© M HKA, Antwerp
CONTAMINATION: ANTHRENUS VERBASCI



Installation view of 'Finding Fanon Part Three',
Larry Achiampong & David Blandy,
Tate Exchange, Switch House, Tate Modern, 2016, courtesy the artists

PREVENTIVE TREATMENT AGAINST
WOODBORING INSECTS

For all kinds of objects

The warm air treatment of moveable heritage and art works is perfectly suitable for objects and materials such as paper, textiles, leather, fur, ethnographic pieces, carpets, furniture, musical instruments, polychrome sculptures, paintings and also natural history specimens.

For all kinds of insects

The treatment can be used in the fight against heritage eating insects, including clothes moths (*Tineola bisselliella* and *Tinea pellionella*), varied carpet beetles (*Anthrenus verbasci*), silverfish (*Lepisma saccharina*), the grey silverfish or so called 'paperfish' (*Ctenolepisma longicaudata*), common woodworm (*Anobium punctatum*), powder post beetle (*Lyctus brunneus*), death watch beetle (*Xestobium rufovillosum*), house longhorn beetle (*Hylotrupes bajulus*), tobacco beetle (*Lasioderma serricornis*) and biscuit beetle (*Stegobium paniceum*).

Warm air process

The ICM® process is based on the fact that insect proteins denature irreversibly at temperatures between 42–52°C, dependent on the species. The method was established more than 30 years ago and is 100% effective, quick and presents no risks to materials.

Next-generation treatment chambers

A second generation of treatment chambers have now been developed under the ICM® brand, which outperforms other methods in terms of speed, ecological impact and capability. Ultrasonic, and hence very evenly spread, humidification and a sophisticated filtering technology (active carbon filters, HEPA) as well as 24/7 data mirroring and remote-control monitoring provide a managed and safe environment for the treatment of valuable and unique objects.

From a conservation perspective the key to using warm air to eradicate insect pests is to maintain the equilibrium moisture content of the material during the warming-up, holding and cooling phases.

This is achieved by using tailor made proprietary software to control the relative humidity (RH) and temperature of the atmosphere within the chamber, thereby preventing any physical or structural change in the object through loss or absorption of moisture.

Treatment options

ICM service centers

IPARC provides treatments in its own ICM service centres in London, Berlin and Brussels.

Private individuals, foundations and institutions are regular clients.

To book your object or collection for pest eradication – whether it is textile, sculpture, framed painting, panel paintings, polychromic and ethnographic objects or archive materials, our conservators are available to assess the objects for treatment.

We typically require this type of information:

- What the object is made of
- If possible, how and where it has been stored and for how long
- The full dimensions (H x W x D) of the object





- When you would like to have it treated
- Any other details or description regarding the general condition of the object
- Photographs are always appreciated.

An average treatment cycle in our service centre takes 24 hours. As such it is a valuable option for loans and quarantines.

We recommend that you have your object treated by ICM® before commencing any conservation or consolidation work. Any infested object admitted into the IPARC studio will be treated prior to conservation. However, depending on the type of conservation, recently restored objects can be treated as well. We will be able to advise you on a case-by-case basis.



Mobile treatments

The mobile chamber system is integrated in a truck. It evolved from the static chambers that have operated since the mid 1980's on the continent and in London since 1994. The owners or keepers of large collections of valuable works of art and antiques can treat their infested pieces on site. An on-site treatment in the mobile chamber minimizes the handling and movement of objects, avoids creating unnecessary security risks and obviates additional insurance cover.

The site should be equipped with the following infrastructure:

- Accessibility for the 3,9 metres high, 9 metres long and 2,6 metres wide vehicle
- Even and level surface to park the truck
- 24/7 access to the truck for our staff
- 380V/32A electrical connection, within 20m of the treatment
- Running water/regular tap, within 20m of the treatment site
- Preferably WIFI connection for remote access to the treatment control PC.

A typical treatment cycle in the mobile unit including loading and unloading takes 20 - 30 hours.

Reporting

Following treatment, a report is provided with the graphs, pictures before and after treatment and relevant data (temperature, RH, length of holding phase). A Guarantee and Certificate of 100% success in eradication of all stages in the life cycle of an insect is presented on payment of invoice.



Follower of Pieter Coecke van Aalst, end 16th century
Private collection

CONTAMINATION:
ANOBIUM PUNCTATUM

Chamber rental

Museums and collections can also rent ICM chambers. They can be built in different sizes and can also be placed outdoors.

The framework contract includes all costs for rent, installation, insurance and programming.

In some cases, ICM employees can take over the entire handling: object-assessment, execution of the treatment cycles, documentation and reporting.



More info?

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