



conservation technologies

sculpture & monument conservation

As part of National Museums Liverpool and based at the award-winning Conservation Centre, Conservation Technologies provides a tailor-made solution to a wide range of sculpture and monument conservation issues, as well as actively developing new technologies and opportunities for the museum and heritage sector.

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18th Century wooden panel before and after conservation treatments

Conservation Technologies is at the cutting edge of the conservation industry and has pioneered the development of technologies to care for items and artefacts from all historical periods including Egyptian, medieval, archaeological and Victorian to the present day.

The team recommends the most suitable conservation techniques and activity for clients who have responsibilities for collections of sculptures and monuments.

All objects receive sensitive conservation treatment in a safe and secure environment, emergency stabilisation, (if necessary), as well as aftercare and maintenance programmes.

Conservation Technologies' resident team of conservators and scientists have extensive experience in analyzing and handling objects in a wide range of materials including marble, stone, terracotta, ceramics, bronze, plaster and wax.



Initial investigations and recording of artefacts



Bronze Monument after conservation, to commemorate Nelson's victories (2005)

services

- Condition surveys
- Visual recording
- Ultra-violet and infrared light investigation
- Three dimensional scanning/recording
- Authentication of sculptures
- 3D product development for the museums and heritage market
- Treatments
- Scientific analysis
- Presentation of key data
- Non-contact replication of objects
- Training, tuition and research
- Laser cleaning

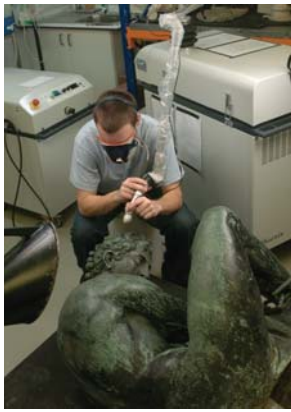
resources

Award winning facilities at Conservation Technologies'

Conservation Centre include:

- Secure 3,000 sq ft area devoted to sculpture conservation and technology complete with secure storage
- Laser cleaning
- Extensive range of analytical and diagnostic equipment
- Polarising microscope
- 3D recording and replications
- 3D Virtual Reality Touch technology

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Laser cleaning of monumental bronze

laser cleaning

Conservation Technologies works closely with clients to assess the service that will best meet their particular requirements. Staff are on hand to carry out laser cleaning tests to evaluate the suitability of the technique, this can be on-site or at the Conservation Centre.

For many years Conservation Technologies' staff have been actively involved in the development of laser cleaning systems, giving them a wealth of technical and practical experience.

The team has undertaken the laser cleaning of Liverpool's Eros Statue and the city's Cenotaph. They have also worked with regional and national museums, local authorities, fine art dealers, ecclesiastical organisations and private clients.

Laser cleaning is a valuable addition to the conservator's toolbox as it offers a highly selective, reliable and precise method of removing layers of corrosion, pollution, unwanted paint and other surface coatings.

It is also an extremely controllable alternative to help remove unsightly and damaging layers from the surface of an artwork as on a wide range of sculptural materials including marble, bronze, ivory and aluminum.

Lasers have been successfully used to clean prehistoric artefacts, sculptures and monuments, preserving patina, fine surface detail and important surface coatings.



Slings of sandstone sculpture during repair.



Laser cleaning training

training courses

Conservation Technologies holds regular two-day courses offering students the opportunity to gain hands-on experience of laser-based cleaning.

The course includes an introduction to lasers, safety and maintenance, interaction of laser radiation with a surface and practical laser cleaning with the opportunity to carry out test cleaning on samples bought in by participants.

Staff from the Natural History Museum, Metropolitan Museum of Modern Art, Canterbury Cathedral and Westminster Abbey have completed the course, which comprises of lectures, demonstrations, practical work and individual tuition.

case studies



Plaster model of Goscombe
Johns War Memorial
Port Sunlight, during laser cleaning.

Conservation Technologies has combined many years of experience in the field of sculpture and monuments conservation and has undertaken diverse range of conservation projects.

These include museum-based work for local and National Museums and Art Galleries, as well as the conservation of monuments and architectural elements on historic buildings for a variety of public and private institutions and individual collectors.

Projects normally involve the production of detailed condition and visual surveys and proposed treatment reports. High quality photography and video documentation is used and in addition to this, we have the ability to capture very accurate 3D digital scans of an object for reference and archiving and for monitoring condition over time. The scanned data can also be used for replication of missing elements and also for reproduction for display and handling in an educational environment.

The initial preparatory work is often followed by practical conservation treatments, maintenance and display advice.



Conserved bronze panel from
Tyson Smiths War Memorial (1946)



Conserved polychrome wooden
German 16th Century relief

We conserve sculptures made from a very broad range of materials: inorganic (stone, metal, terracotta and plaster) and organic (wood, ivory, and some plastic). These sculptures may also be of composite nature and have a polychrome surface. Having an appreciation of the historical and aesthetic aspects of sculpture, together with an understanding of the material conservation issues, is vital to our working process.

The sculpture and sculptural objects we have conserved have spanned stone worked during the Pre-historic period to modern monumental sculptures made from new material. Once we have gained an understanding of the sculpture, we tailor the conservation treatment to the object, using a variety of conservation techniques. These combine well-tested traditional methods with the most innovative and reliable of the latest techniques available, such as laser cleaning.

We are regularly involved in the packing, transport and display of sculptures. These sculptures go to a wide variety of display venues (indoors and out) and may also at times go back in-situ onto the inner or outer face of an historic building.

enquiries

For further information on any of the services we provide, please contact:

Conservation Technologies

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