



# RAFFAELLO HOW PROJECT

CONTENTO TRADE SRL

Technological innovation for the environment

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Efficient wood



## BRIEF DESCRIPTION:

### Partners:

Contento Trade srl, Campofornido (UD), Italy  
Laboratorio di tecnologie agro industriali, Università de La Rochelle, France  
Centro Restauri, Fuorni, (SA), Italy  
Aquarius, Milano, Italy  
Tesi sas, Genova, Italy  
Centre National de la Recherche Scientifique - Centre Camille Jullian, Aix en Provence, France  
Atelier Régional de Conservation Nucléart, Grenoble, France  
Costa Edutainment S.p.a., Genova, Italy  
Giovanni Morigi e Figlio s.n.c., Bologna, Italy  
The Mary Rose Trust, UK  
Centre d'Arqueologia Subaquatica de Catalunya - Museu d'Arqueologia de Catalunya, Spain  
Soprintendenza del Veneto, Venezia, Italy  
Team, Genova, Italy  
PPV, Milano, Italy

### Objectives:

The study about how to complete the phases of 'digging, treatment and preservation' of wooden finds; in addition, the phases of 'utilization and communication', which are useful to reach the public in areas of a museum.

### It includes:

A collaboration among the members of the European network Arké. In addition, the museum becomes a context which aims to describe the object (what represents the find), the context (what happened when it was used), the find (when and how it was discovered and what happened beginning from that moment).

## OBJECTIVES:

HOW (Hands-On Wood) is born from the collaboration of the members of the permanent European net called "Arké". The project aims at the investigation of chain "excavation-treatment-conservation" of the waterlogged wood finds, adding



the "valorization-communication" phase, necessary to reach efficaciously the public present in the Museums.

The Museum, in fact, from exposition area becomes a space for events, able to communicate the story of the object (what the find represents), the context story (what happened in the period the object was used), the finding story (when and how the finding happened, and what happened from that moment).

Conservation techniques and communication experts will experiment the creation of new "show moments" able to strike the five senses of the visitors, involving them from the emotional point of view. For this purpose new technological solution, that will consider also the conservation of the finds, will be studied and tested.

The final purpose of the HoW project is to study and experiment how is possible to integrate, inside the systematic vision of the archaeological work, the phase of the "valorization and museal communication" to reach efficaciously the public and to increase the impact of the economical investment on Arts goods.

#### The project aimed at:

- ✓ elaborating a common approach to the museal planning of submerged wrecks, as integration and synergy of different competencies and specializations of the Arkè partners;
- ✓ studying technical solution to plan the best availability of the exposition center, using in an integrated way the sounds, the smells, the lights and the images but at the same time respecting the conservation exigencies of the waterlogged wood (sensitivity to temperature, humidity and light variation, etc);
- ✓ deepening the problems connected to the treatment and consolidation techniques of the waterlogged wood exposed in an suitable exposition center;

identifying communication techniques to create a diachronic and synchronic vision of the waterlogged wrecks for the exposition, to sensitize the public towards a "story" based on different levels (the object, the context, the fining)



## RESULTS OBTAINED

An expositive model has been elaborated, based on the multidisciplinary conceptual way around the exposed wrecks. The public can understand the interaction between the Wood and the Sea. To involve the public also from the emotional point of view, a study on the technological solutions and devices has been faced. These devices imply also the use of the five senses by the visitors. The examination of the exposition techniques used by some important Museums in Europe has been developed through an investigation that allowed to find new data and to increase the information level of the partners.

The restoration and conservation techniques of the waterlogged wood have been compared, starting from some case-histories (the ship Julia Felix from Grado and the Leudo from Varazze). A CD ROM deliberately realized shows some restoration and consolidation techniques of the archaeological roman wreck from Caorle through the "Arkè method", that gives back to the wreck the real color and dimensions, at economical and timing conditions really competitive compared to the techniques actually on the market.

The study of the optimized management of the microclimatic conditions in the wreck expositive place is strictly connected to the anti-bacteria consolidation and protection techniques for the waterlogged wood. To this purpose some integrated air conditioning systems (control of some air parameters) to minimize the bacteria attacks on the wood finds have been studied.

At the same time also the valorization of the museal structure thought the diffusion or aromatic essences in the exposition rooms, to render the environment more pleasant and evocative for the public, were examined. The realization of the expositive stand "Club Arké" by the "Salone dei Beni e delle Attività Culturali" in Venice contributed to increase the project visibility by the public.

The results of the studies from the HoW project activities has been presented and discussed in the three transnational meetings. During the last one also a Conference on the "Sea restoration" happened, and the problems of the restoration and the wood treatment was deepened by the responsible of the archaeological excavations that have brought to light:

- ✓ the eighteen roman ships, recently discovered in the harbor dock of San Rossore (PISA)
- ✓ the ship of the III sec. b.c. Ma'agan Mikhael of Haifa (Israel ) that is waiting for an appropriate placing by the Museum of Haifa.



After the Conference, to which Monuments and Fine arts responsible, restorations, experts and Museums directors took part, the partners of the HoW project reinforced their firm belief to imagine the archaeological work phases as a correlated system "from the excavation to the Museum". For this purpose, the Arké site [www.team.it/~arké](http://www.team.it/~arké) represent an important tool both to reinforce the partnership – actually composed by 20 members – and to point to some emergent themes of the underwater archaeology, as the creation of a permanent center for the waterlogged wood restoration in the North Italy.

The net of the Arkè partners, established in 1997 within the preparatory actions of the Raffaello program and transformed in 1998/99 in a permanent "club" of experts and scientists of the underwater archaeological heritage, focused on the different musealization aspects of the waterlogged wood objects and on the most efficacious modalities to involve visitors of the naval and shipping archaeology museums .

In the excavation-treatment - conservation sequence, the problem of the museal exposition has a crucial importance, in fact it concerns technical matters as the climatization, the soundproofing of the environment for the exposition, the restoration and the waterlogged wood consolidation. Moreover it's necessary to integrate the classical approach to expose the wrecks by planning the museum as privileged place for the creation of events both through the narration of "events" on the finds, and through new devices and technological solutions that allow a better fruition by the public thanks to the five senses.

For this reason the exchange and the consolidation of know-how among technical operators engaged in the recovery and defense of the waterlogged wood objects need to be integrated with the study of the "musealization" problems of the finds.

The final objective of the HoW project has been to face deeply the valorization and dissemination of knowledge themes on the waterlogged wood inside the integrated vision of the archaeological work.

The activities developed within the project gave the following results:

- ✓ the study of the problems of the finds musealization to increase the knowledge and the availability of the waterlogged woods, besides their attraction capacity towards the public;
- ✓ the investigation of the restoration techniques and the conservation treatments of the waterlogged wood heritage;



- ✓ the study of best environmental conditions for the museal setting of wood objects treated with the "Arkè" method;
- ✓ the elaboration of a virtual project of recovery of an archaeological wreck with the "Arké method", by producing a CD ROM
- ✓ the analysis of some exposition techniques adopted by some European shipping museums regarding the approach to the public and the use of special techniques to involve again the public from both the emotional/spectacular and informative/documental point of view;
- ✓ the set up of a handbook useful to give suggestion, remarks and technical indications for an optimal museal exposition of waterlogged wood treated objects.
- ✓ the communication and diffusion modalities of the project results, also through the Internet site of Arkè net.