### toscano

# case study

#### Algae removal in Puerto Sherry

## INSTALLATION CHARACTERISTICS

- The Hispania yacht is a reconstruction of the original ship designed by William Fife for Alfonso XIII, under the formula international 15 meters class built in Karpard Pasajes.
- Puerto Sherry is one of the best marinas in Europe, located in the unique environment of the Bay of Cadiz, Spain.
- The port has an area of 13,520 hectares of sheltered water, and a land area of 15,450 hectares.



Reference letter from Puerto Sherry Captain



Hispania yacht

The Hispania yacht responsible in Puerto Sherry had to face often expensive maintenance works for algae removal of its hull, which involved taking from water and manually remove the fouling.

Being a historic vessel, any manipulation could pose irreparable harm, so Toscano Medioambiente was contacted to find a solution to the algae problem.

Toscano Medioambiente technical specialists recommended to them DUMO Algacleaner ultrasonic technology which, by not involving chemical or mechanical work on the hull surface, ensured its integrity and conservation, with a much reduced cost.

Moreover, ultrasound is a clean technology that generates no waste, and also avoids use of harmful chemicals. Thus, they could meet the legislative requirements and the environmental policy of Puerto Sherry.

DUMO Algacleaner installation was completed in less than one day, setting the transmitting equipment at the dock, adjacent to Hispania yacht.

On the other hand, the electronic control module is located besides the electrical coupling of the dock, without more works than fixing.

#### **MAIN RESULTS**

- The problem of algae concentration in the hull of Hispania has been fixed, at a lower cost.
- It has been prevented any damage to the hull of this historic vessel in its maintenance.
- The environmental objectives of the port have being met.

According to Francisco Colon, Port Sherry Captain, "... The results of protection against algae in the hull of HISPANIA, can be considered as satisfactory."





DUMO Algacleaner installation









