

Cleanship



PREVENTION AND DETECTION OF FOULING ON SHIP HULLS

Ships have to be frequently taken out of service to be cleaned due to formation of fouling on them in the marine environment. As a consequence of fouling buildup, considerably more fuel is con-sumed thereby resulting in both an economic and environmental impact. The marine industry glob-ally spends significant capital (equivalent to billions of euros) in addressing fouling using a variety of invasive cleaning techniques.

The Cleanship project, proposes an effective non-invasive solution, based on an ultrasonic approach, for improving the maintenance of ships . The solution is to deploy long range ultrasonic waves travelling throughout plates of a ship hull for, as much as possible,

- (i) prevention of fouling
- (ii) detection of fouling

In order to achieve this, the project aims to develop an integrated system.

A multidisciplinary consortium consisting of both industrial and academic experts from across Europe are collaborating to this end. They anticipate having a functional prototype system for validation in due course. Updates are available via the Cleanship project website (<u>www.cleanshipproject.eu</u>) and the project coordinator; Brunel Innovation Centre of Brunel University.



Ship and biofouling example photos provided thanks to Lloyd's Register.

CLEANSHIP is a collaboration between the following organisations: BRUNEL UNIVERISTY, SOFCHEM SARL, ENKON ENDUSTRIYEL KONTROL KAYNAK SANAYI VE TICARET LIMITED SIRKETI, INNOVATIVE TECHNOLOGY AND SCIENCE LIMITED - INNOTECUK, WRS MARINE INSPECTIONS AND SERVICES BV, LLOYD'S REGISTER EMEA, CENTRE FOR RESEARCH AND TECHNOLOGY HELLAS, FUNDACION TECNALIA RESEARCH & INNOVATION.

www.cleanship-project.eu

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