

TO WHOM IT MAY CONCERN

Company Shipshave AS in Stavanger, Norway have developed a semi-autonomous hull cleaning robot device.

The robot device harvest propulsion energy to clean the hull under water whilst the vessel is in transit.

The device consists of a winch, a rope or thin wire, and a wash robot.

The Winch is small, max.- 150 kg and is electric powered.

The wash cleaning robot has a weight of approx. 5kg, and has an integrated camera and a 15V, 30 Ah battery integrated.

The intention is that the equipment shall be mounted/fitted and operated by crew for each cleaning operation.

According to received information about the equipment itself, the intended use and the integration with the vessel it is understood to be of such character that certification of the equipment as per class or statutory requirements including MED is not required.

The integration of the equipment with the vessel like fitting of winch and electrical connection is to be considered separately according to regular class requirements.

Operation of the equipment related to possible EX zones and need for antistatic execution must be considered related to vessel type and operation in each case.

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for **DNV GL**



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