



TECHNICAL CIRCULAR No. 362 of 06th September 2016

To:	All Surveyors/Auditors
Applicable to flag:	All Flags
Subject:	Underwater Inspections
Reference:	CONARINA Class

The Immeasurable Value of Underwater Inspections

Competent underwater inspections, particularly if carried out regularly can detect:

- Problems with the propeller such as bent or damaged blades (which can put undue strain on bearings), roughness due to fouling, cavitation damage or bad polishing which can reduce the propeller's efficiency.
- Anodes which have wasted away, rendering the cathodic protection system unworkable, leading to corrosion and added hull friction
- Hull cracks or other damage which, if not rapidly arrested, can worsen and increase the cost of any subsequent repair
- Ropes inside the stern tube assembly which may cause seal problems if neglect
- Leaking stern tube or thruster seals which can cause an environmental problem in port and lead to costly changes to a ship's schedule if not caught quickly and repaired.
- Clogged sea chest grids (preventing proper cooling of the ship's engines), or loose or damaged grids.
- Loose or broken grids on thruster tunnels which can result in damage to thruster propellers
- Damaged, bent, broken or detached bilge keels which again can become much worse if not caught early.
- A damaged rudder which will continue to deteriorate if not addressed rapidly, resulting in the need for much more costly repairs and representing a safety hazard in extreme cases.

Customer Service Center

5201 Blue Lagoon Drive, 9TH. Floor,
Miami, Fl., 33126
Tel: 1 (305) 716 4116,
Fax: 1 (305) 716 4117,
E-Mail:

joel@conarinagroup.com

Technical Head Office

7111 Dekadine Ct.
Spring, Tx., 77379
Tel: 1 (832) 451 0185,
1 (713) 204 6380

E-Mail: cbozenovici@vcmaritime.com

Regular inspections carried out by competent divers and followed by comprehensive and accurate reports can detect any of these or other problems so that they can be corrected early and prevent more costly repairs and further damage.

Inspections before drydocking

There is another important way for underwater inspections to be used.

If thrusters are to be repaired in drydock they can be removed prior to the ship's drydocking and can be repaired and ready for reinstallation when the ship is in drydock, rather than waiting until the docking to find out and then having to extend time in drydock in order to repair and replace the thruster.

An accurate report on the state of the rudder can lead to effective repair and recoating of the rudder so that it does not suffer further damage.

Easy to combine with other operations

Because an underwater inspection is a small operation, it can be combined with one or more other operations very easily. This can be another maintenance operation like a propeller buffing or any type of repair job.

REFERENCES:

- **CONARINA Class**

ATTACHMENTS: No.

kindest Regards,
Cosmin Bozenovici
Naval Architect – Conarina Technical Head Office

Customer Service Center

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Miami, Fl., 33126
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