



**CERTIFICATE OF ALTERNATIVE
SURVEY ARRANGEMENT OF MACHINERY**

PMS/S-570

**MACHINERY
PLANNED MAINTENANCE SYSTEM
SYSTEM APPROVAL**

This is to certify that the

Manager: Ocean Shipmanagement GmbH
have been granted approval of their computerised Planned Maintenance System, type:

CODie ISMAN

as basis for survey of machinery for retention of class. The Approval is based on a description of the Managers maintenance policy and the Planned Maintenance System.

GENERAL

This Approval will be accepted as basis for a survey arrangement as stated in the present DNV Rules, Part 7, Chapter 2, and components and systems covered by the present Rules of the Society for the additional class notation E0/ECO.


Each particular ship operated by the above mentioned Manager having this approved Planned Maintenance System in operation, may be granted a separate approval for the mentioned survey arrangement with reference to this document after a survey of the implementation of the Planned Maintenance System has been carried out on board with satisfactory result.

The Chief Engineer in charge of the Planned Maintenance System is to have in his possession a valid Letter of Approval issued by the Society as stated in the present DNV Rules, Part 7, Chapter 2.

VALIDITY OF APPROVAL

The approval is valid until cancelled, in writing, by the Society, generally with 12 months notice. The cancellation can be given with immediate effect, if it is evident that the conditions of the approval are not adhered to.

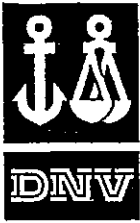
Høvik, 2006-06-08
for DET NORSKE VERITAS AS



Kim Rolfsen
Head of Section



Tuva Kristine Andersen



CONDITIONS FOR THE ALTERNATIVE SURVEY ARRANGEMENT OF MACHINERY

Machinery PMS survey arrangement

The Machinery PMS survey arrangement is operated on the following conditions:

- The vessel shall be manned by chief engineers who are familiar with the planned maintenance system. It is the responsibility of the managing company to ensure that the chief engineers are well qualified, and a statement confirming this is to be kept onboard.
- All machinery and equipment subject to class shall be clearly identified with the DNV code in the system.
- The job descriptions for the main overhaul for all the machinery and equipment subject to class shall cover the requirements for class survey and will be credited as a class survey each time these jobs are carried out. If some main overhaul intervals are based on running hours and these intervals normally will exceed 5 years, the items will still be credited after 5 years based on satisfactory documentation of regular maintenance records and tests.
- Maintenance job descriptions and intervals shall be based on manufacturer's recommendations. If experience shows that maintenance intervals need to be adjusted, documentation is required if such intervals shall be extended.
- A system for tracing components that are being re-used in different positions (circulating components, e.g. piston, cylinder cover) shall be established for all machinery and equipment covered by class.
- The sea and sanitary valves and main steam turbines cannot be credited by the chief engineer, and shall always be surveyed by a surveyor. This is to be stated in the instructions in the planned maintenance system.
- The parallel operation, testing of the generators and testing of setting for main and emergency generators protection devices and circuit breaker cannot be credited by the chief engineer, and shall always be carried out in presence of a surveyor. This is to be stated in the instructions in the planned maintenance system.
- Backup routines shall be established.
- Change of planned maintenance system shall be reported to DNV.
- Damage to machinery systems or equipment covered by classification shall always be reported to the Society and into the planned maintenance system as a corrective action. The corresponding repair shall always be verified by a surveyor.
- The survey arrangement shall also include the instrumentation and automation equipment covered by Pt.6 Ch.3 for the class notations E0/ECO if applicable for the vessel. All jobs related to the notations E0/ECO have to be included and clearly identified in the planned maintenance system, with proper test routines and maintenance descriptions. If these conditions are not complied with, the survey arrangement will be cancelled and substituted by either Machinery Renewal or Machinery Continuous, and all machinery and equipment will be given a due date 5 years from the last survey date.

Annual survey

To prolong the validity of the survey arrangement an annual survey of the implemented PMS system onboard is required. The purpose of this survey is to review and evaluate the previous period's maintenance activities and experience. If found necessary by the surveyor, opening or testing of machinery may be required.

Fee

The fee charged during the annual PMS survey will be 20% of the total machinery fee with a 15 % discount. Until the vessel has completed the present 5-year cycle; i.e. until the expiry date of the classification certificate is reached, the fee to be charged in accordance with our present routines; the number of items reported multiplied by the fee with a 15% discount. Expenses in connection with travel and subsistence will be added.