Vessel Maintenance and Dry Docking

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Dry docking & maintenance

Dry docking to take place twice every 5 year.

Cost of dry docking

Every day vessel is in dry dock means loss of earning.

Vessel maintenance to be planned in such a way to maximize ROI.
Identify : Choosing job for Dry dock :

- Jobs which can not be done during sailing or cost effective doing in dry dock
- Class requirement
Consolidation of maintenance:

- Vetting observations
- New regulations
- Class survey status
- Vessel experience (modifications)
- Hull condition, previous hull cleaning reports
- Condition data Based on Monitoring, visual inspection, Planned maintenance system
Importance of repair specifications and consolidation of job

To get quotes from different yards

Outline basic budget

Compare jobs on basis of ROI

To have buffer in budget for unplanned job

Follow up in yard
Machinery maintenance schedule to be discussed with shore.

Each step in maintenance to be break down and explicitly listed out.

To confirm with dock if all information is sufficient.

CONDITIONAL ASSESSMENT

- OIL ANALYSIS
- VIBRATION ANALYSIS
- ULTRASONIC TESTING
- PREDICTIVE DATA ASSESSMENT
- LOG BOOK & PMS
Improve

- Improvement is required in planned & unplanned jobs - Can be categorized as below

- **Not possible to detect beforehand. Usually related to underwater hull.**

- **Last minute breakdown of machineries. Can not be avoided but usually marginal.**

- **Avoidable, not picked up due to inadequate procedures, data. Deficiency picked up by class.**

Unplanned jobs can derail all planning and increase budget.
Budget Control

Docking management

- Pre docking
  - Develop repair specification
    - Shipyard cost comparison
      - Repair yard selection
        - Repair contract review
  - Shipyard cost comparison
- Docking supervision
  - Hull painting
  - Machinery overhaul
  - Electrical works
- Post docking
  - Cost computation
  - Certification checks
- Follow up
  - Follow up on repair
    - Spare refurbishment
- Post docking supervision
  - Certification checks
    - Invoice settlement
      - Final dry dock report
  - Survey planning and execution
  - Reporting
Summary

Planning for dry docking start the moment vessel depart dock. Considering situation where men, machine and time is in hand, If planned properly, jobs can be completed within budget.

Vessel maintenance is on going process but jobs needs to be identified based on Return of investment and can be deferred if can be done in sailing without much efforts & costs.

Following important phases evolve for vessel maintenance identification
1. Identify
2. Consolidation
3. Confirm
4. Improve
5. Budget planning
THANK YOU!