

# Reliability Centered Maintenance

## Predictive Maintenance

Predictive maintenance is the monitoring of equipment operating conditions to detect any signs of wear leading to a failure of a component.

The goal of the predictive maintenance program is to track the component wear with a methodology that insures that any impending failure is detected at its early stages based on key indicators.

Within the equipment operating dynamics, we may find the key indicators to use:

- Ultrasonic
- Vibration analysis
- Oil analysis
- Lubricant condition
- Wear particles

## Reliability Centered Maintenance

Reliability Centered Maintenance (RCM) is an evolutionary approach to equipment reliability.

## Literature

Reliability Centered Maintenance is an evolutionary approach to equipment reliability. It focuses on the optimization of the preventive and predictive maintenance programs to increase equipment efficiency. The complete story is available in this slides presentation, courtesy of Martechnic Hellas:

Read more in our slides presentation

It focuses on the optimization of the preventive and predictive maintenance programs to increase equipment efficiency, as:

Uptime  
Performance  
Quality

&hellip;while, minimizing the related maintenance costs

Next Generation Monitoring Today

On-Line Sensors &ndash; What is measured where:

Data Aggregation

On-ship controllers and data aggregation in central operations system (computer)  
On-Ship Visual Monitoring

HMI displays and SCADA monitors On-Ship  
On-Shore Visibility and Alarm Escalation

Communication and synchronization with corporate H/Q  
Integration to the Enterprise Asset Management System

Integration to corporate EAM; based on Asset Management PASS 55 standard (BSI PASS 55:2008)

Martechnic Hellas your end-to-end partner

Martechnic Hellas is your end-to-end partner in advancing your PM programme maturity level

Assist you in Oil and Lubricants Lab analysis with root cause diagnosis  
Provide you with all equipment and training required to insure high quality Water, Oil, and Lubricants in-depth analysis on-board

Upgrade your engines with on-line sensors, for continuous monitoring of Water, Oil, and Lubricants

Enhance your monitoring quality with supervisory computer-based visual workstations on-ship  
Connect corporate H/Q with IP Satellite communications, enabling integration to corporate ERP system, and specifically its  
BSI PAS55 compliant Enterprise Asset Management subsystem

[Read more in our slides presentation...](#)