

Wärtsilä Propulsion condition monitoring service



To successfully manage a fleet, risks must be assessed – including the condition of propulsion equipment. As propulsion machinery is largely mounted underwater, it cannot be physically examined internally without going into dry dock. The Wärtsilä Propulsion condition monitoring service (PCMS) is class-approved and eliminates the need to enter a dry dock for visual inspections. The service provides you with up-to-date and in-depth information about the condition of your vessel's propulsion equipment.

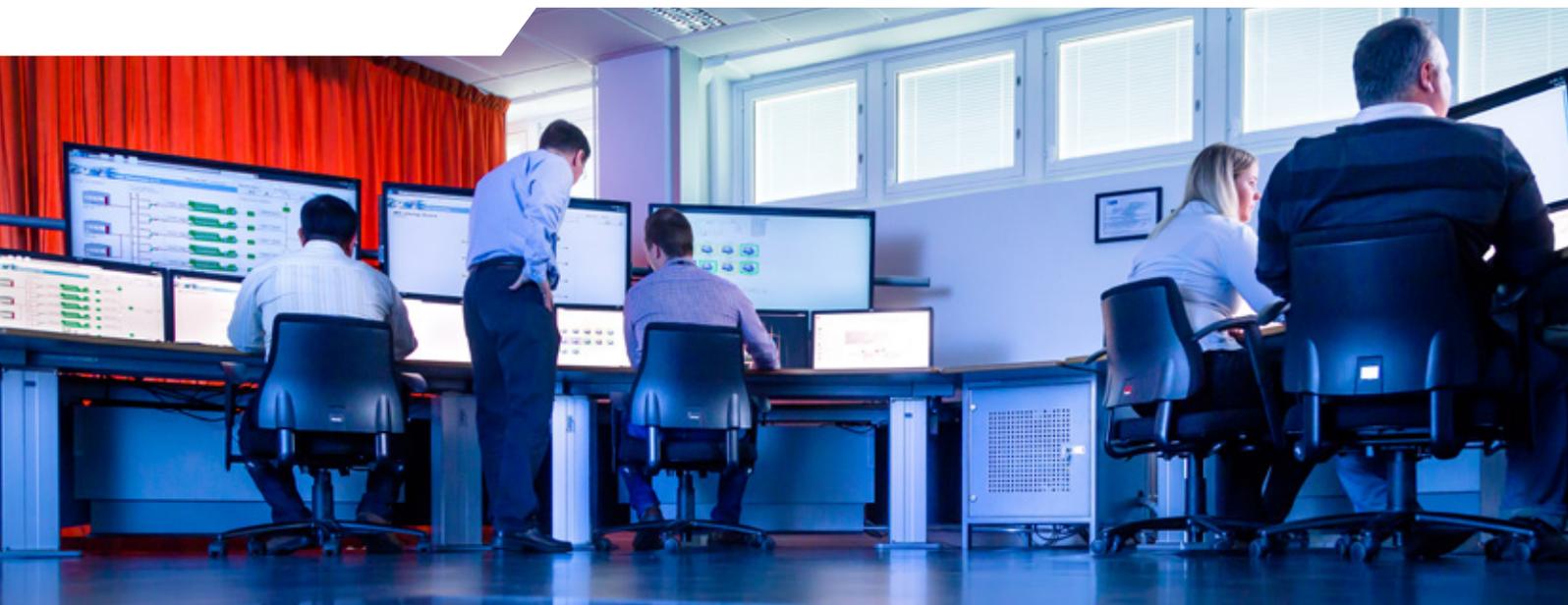
SOLUTION DESCRIPTION

The Wärtsilä Propulsion condition monitoring service provides you with real-time advice and regular reports about the condition of your machinery. With PCMS you can improve your vessel's availability, reliability and profitability, while reducing risks and maintenance costs.

PCMS measures vibrations and oil condition in order to effectively monitor gears, bearings, the propeller and other propulsion equipment components. The service also gathers operational parameters from the propulsion control system.

KEY BENEFITS

- Base operational decisions on the actual condition of your equipment
- Maximise the availability of your vessel by performing overhauls only when needed
- Reduce the likelihood of breakdowns by being proactively informed of faults
- Reduce the total cost of ownership and maximise profitability
- Increase the lifetime of your equipment and preserve its condition by getting feedback on the factors generating excess wear





Data is processed onboard and sent to an assigned technical expert at Wärtsilä. A dashboard installed on the bridge or in the engine control room allows the operator to monitor the condition of the vessel's propulsion machinery using both real-time and trend data, with advice available in case of irregularities.

The data that is sent to Wärtsilä is continuously processed by the PCMS central server and our certified experts are alerted when issues arise. In such cases, thorough analysis will be performed the same day if daily follow up is included in the PCMS agreement. If abnormalities that require immediate attention are detected the CBM expert will inform the operator.

Each month you receive a PCMS report that outlines the latest findings and recommendations. It also describes the condition of your propulsion equipment, the recommended maintenance interval and how the equipment can be kept in optimal condition.

SCOPE OF SUPPLY

PCMS can be installed on all kinds of vessels and is available for the following Wärtsilä and non-Wärtsilä propulsion or rotating equipment:

- Transverse thrusters
- Steerable thrusters
- Electric pods
- Controllable pitch propellers and gearboxes
- Water jets
- Rotating equipment (pumps etc.)

Delivery includes:

- Wärtsilä PCMS hardware to measure and monitor your equipment condition
- Interface to the propulsion control system for operational parameters
- A report including findings and recommendations is delivered on a monthly basis
- Execution of vibration and operational data analysis – every day when daily follow up is included in the scope, otherwise on a monthly basis during preparation of the report

WHY CHOOSE WÄRTSILÄ?

Wärtsilä is recognised as a condition monitoring service supplier by three of the major classification societies: the American Bureau of Shipping, Lloyd's Register and DNV-GL. These classification societies have acknowledged that Wärtsilä PCMS can determine the condition of propulsion equipment without visual internal inspections and detect potential failures weeks, or even months, in advance.

wartsila.com

WÄRTSILÄ® is a registered trademark. Copyright © 2018 Wärtsilä Corporation. Specifications are subject to change without prior notice.

