AlphaSystem™ for marine

Keep fleets on the move with a diagnostics solution for the complete propulsion system of vessels

www.alphadiagnostics.ch
AlphaSystem™ for engines

Easily monitor the condition of several engines simultaneously with accurate condition indicators.

Real time condition monitoring system for all types of combustion engines. Based on torsional vibration measured by speed sensor. Analyzes the thermal and mechanical operating condition of an engine.

**Product features**
- Two and four stroke engines
- Up to 24 cylinders
- Inline and V-type engines
- Diesel, natural gas, gasoline and heavy oil engines
- Cylinder-specific diagnosis requires only two speed sensors
- Existing speed sensor signals can be used if available
- Independent of manufacturer

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AlphaSystem™ for torque

Ensure highly sensitive and reliable shaft diagnostics data with just two externally mounted speed sensors.

AlphaSystem™ is suitable for any rotating shaft. It measures the power transmitted by the shaft and detects twist angle. Without any installation of electronic or electric components on the shaft it measures the dynamic and static torque and power transmitted by the shaft.

**Product features**
- Easy retrofit on any rotating shaft
- Only two speed sensors required
- Dynamic and static torque measurement
- Power transmitted by shaft
- Shaft fatigue indicator
AlphaSystem™ for bearings

Detect the earliest symptoms of operational anomalies in bearings with real time condition monitoring.

AlphaSystem™ is used on plummer and stern tube bearings. It detects shaft misalignment, prevents catastrophic damages on the propulsion system.

**Product features**

- Four health indicators
- All types and sizes of bearings
- Only one speed sensor required
- Existing speed sensor can be used if available

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AlphaSystem™ for alternators

Accurately monitor all critical health indicators of an alternator with a single speed sensor.

AlphaSystem™ is suitable for electric alternators. It monitors the condition of several alternator parts and detects electric issues as well as rotor shaft misalignment.

**Product features**

- Three indicators for mechanical and electrical health
- For use on AC & DC motors and alternators
- Only one sensor required
The newest technology in machine condition monitoring

Monitoring the condition of a vessel’s main and auxiliary engines is not the only function AlphaSystem™ provides - it also allows crews to diagnose turbochargers, alternators, and bearings on their powertrain. Additionally, the torque module provides operators a measurement of static and dynamic torque on the vessel's shaft. Diagnostic data of a complete fleet can be analyzed through the use of a central database, enabling fleet owners to optimize maintenance time and avoid excessive fuel consumption.

**What it monitors**
- Main and auxiliary engines
- Bearings
- Alternators
- Torque

**Business benefits**
- Reduce maintenance costs
- Minimize downtime
- Save fuel and operating costs
- Reduce emissions

**Benefits of AlphaSystem™**
- Early detection of impending failures
- Avoidance of unnecessary shutdowns
- Quick ROI and reduced energy cost
- Easy retrofit on all powertrains
- Significant savings due to targeted maintenance
- Extended and optimized propulsion system lifetime

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