Wärtsilä Seals and Bearings has developed a state-of-the-art portable condition measurement system to fulfil the need of root cause investigation. Compared to static alignment checks, the portable condition based monitoring system can dynamically detect faulty alignment and determine how the equipment is actually performing when in use.

DYNAMIC ALIGNMENT

With this technology, health checks or troubleshooting of equipment can be carried out flexibly while the vessel is in operation. The system can be mounted in one working day and it can then sail along with the ship to the next harbour, where data is collected for analysis and a repair proposal is given.

To ensure a good root cause investigation the CBM system measures vibration levels, temperature, runout, whirling, movement, torque, stress and position of the equipment. The portable condition measurement system can be used for investigation of gearboxes, engines, stern tubes, stern tube seals, intermediated bearings, water jets, propellers, generators and thrust bearings.

BENEFITS

- Fast and flexible installation
- Fast and accurate measurement
- Determine the real cause of parts failure
- Pinouts and live visual displays provided
- Reduce risk of breakdowns
- Increase vessel uptime Increased operating time and productivity
HOW THE PORTABLE CONDITION BASED MONITORING SERVICE DOES WORK?

1. The drawings of the equipment are sent to Wärtsilä.
2. One Wärtsilä Superintendent mounts the system together with the vessel crew.
3. The vessel sails with the equipment for 2-3 weeks recording data.
4. The vessel crew dismounts the system and ships it back to Wärtsilä.
5. Wärtsilä analyses the collected data.
6. A report is produced along with a repair proposal.

SECURING VESSEL UPTIME

Insurance companies, classification societies and ship owners have also used the new system as an additional layer of security after repairs. This is because the system can easily be mounted and set up with alarm points so that equipment shutdown can be carried out quickly before any additional damage occurs.

AROUND THE WORLD, AROUND THE CLOCK

At Wärtsilä Seals and Bearings we ensure that our support meets our customers’ demands. Our global network of services and engineers is available anywhere in the world, helping you to avoid any unnecessary downtime.

INTRODUCING WÄRTSILÄ MEASUREMENT AND ALIGNMENT SERVICES

Wärtsilä Alignment and measurement services offers advanced solutions for, alignment and vibration analysis (through the use of a portable condition measurement system), reporting and performing corrective actions using Original Equipment Manufacturer (OEM) parts and class-approved methodology. These services can help improve the vessels’ operational life and productivity through fast and accurate measurements, provided through printed reports and live visual displays.