

NEW PRODUCT

BASIC BEARING WEAR MONITORING

Since Rovsing Dynamics introduced the OPENpredictor™ Advanced Bearing Wear Monitoring for diesel engines, numerous ship owners have installed the system. To meet demand for a cost-attractive and less comprehensive system, we have developed a new solution limited to bearing wear only.

The new Basic Bearing Wear Monitoring system uses the same monitoring method: The system frequently measures the distance between the engine's crosshead location in relation to the engine frame at the so-called bottom dead centre. It also offers all the unique OPENpredictor™ features: Automatic, early detection of slowly and rapidly developing bearing wear, prediction of lead

time to inspection, integration with vessel alarm system etc.

Main differences

- The Basic system is limited to monitoring two-stroke diesel engine bearings. It has a sample frequency of up to 6,000 times/second and up to 32 channels per data acquisition unit (DAU). If required, it can be extended to also include lube oil temperature measurements for classification of operational state.
- The Advanced solution is scalable and fully expandable for online and offline monitoring of other machinery (turbochargers, thrusters, gearboxes, pumps and fans) with one and the same system. It also integrates data from control system, maintenance management system etc.

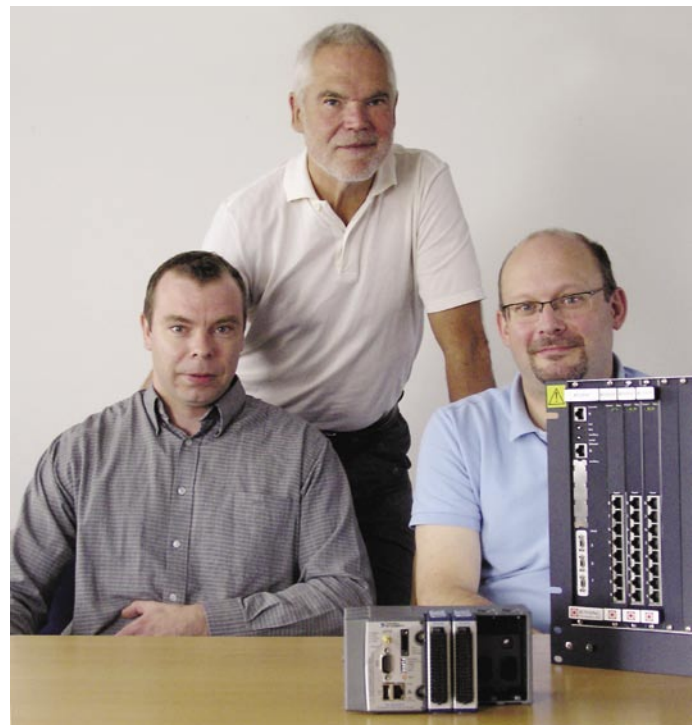
The sample frequency is up to 48,000 times/second and a signature processing unit (SPU) with up to 80 channels is included.

"We created a less costly, basic bearing wear monitoring solution mainly by introducing a 32-channel standard data

acquisition unit (DAU) as an alternative to our own advanced 80-channel signature processing unit", says Rovsing Dynamics' Product Development Manager Lars Glæsel.

For further information, please contact info@rovsing-dynamics.com.

The team behind the new Basic Bearing Wear Monitoring system, left to right: Steen A. Kristensen, Ole Døssing and Lars Glæsel (not present Alain Migeon), and the new Data Acquisition Unit, and the advanced Signature Processing Unit (right).



→ arrangements and guidance on criteria used to determine needs for opening the main bearing.

Condition monitoring pays off

Rovsing Dynamics presented

OPENpredictor™ as a cost-efficient tool for condition monitoring of multiple vessel machinery with one system only. Case stories included bearing wear monitoring of a 14-cylinder two-stroke engine

on the world's largest container ship and a VLCC tanker, whose owner chose OPENpredictor™ for online monitoring of the main engine and turbochargers plus offline monitoring of 170 machines. The objective is to avoid bearing and turbocharger inspections, thus saving 7 days off-hire worth approx. USD 430,000 during a 5 years maintenance cycle.

Since the event several Greek ship owners have shown strong interest in implementing online condition monitoring, recognizing the economic benefits of increased availability as a derived effect of condition based maintenance.



Bearing totally damaged due to steel-to-steel contact. Such a damage, with repair time up to 6 months, as well as damage and costs statistics from a large ship insurer clearly demonstrated the need for condition monitoring.