



Want to enhance your condition monitoring capabilities and reduce walk-around costs?

Benefits

- Monitor bad actors or intermittent problems, 24/7
- Increase data collection frequency
- Complement walk-around routes
- Monitor equipment in hard-to-reach or hazardous areas

Typical applications

- Pumps
- Fans
- Temporary installations
- Installed sensor and switch-box systems

Do it with the SKF Multilog WMx wireless monitoring solution

In the hydrocarbon processing industry, monitoring mission-critical equipment is the first priority for any condition monitoring programme. Of course, monitoring support equipment can also help improve reliability, availability and safety, but is considered out of reach for many operations.

The problem? Manpower shortages can make expanding walk-around routes difficult and, thanks to tight maintenance budgets, the alternative of installing hard-wired online condition monitoring equipment is often cost-prohibitive. With the introduction of the SKF Multilog WMx, SKF has a solution that addresses both concerns.

A convenient, cost-effective alternative to online condition monitoring

The SKF Multilog WMx offers the same functionality as a portable data collector/analyzer, and is much more cost-effective to implement than a traditional online system.

The wireless design of the SKF Multilog WMx eliminates the need to run cables and trays, significantly reducing installation time and effort. It also requires less project engineering and documentation than an online system. In essence, installing the SKF Multilog WMx is like automating a walk-around route.



The SKF Multilog WMx is easy, quick and cost-efficient to install using an existing wireless network.

Features include 4 vibration and 4 temperature channels



Versatile and feature-rich, the SKF Multilog WMx operates on commonplace 802.11

WiFi wireless networks and has 8 inputs available – 4 acceleration and 4 temperature. The use of standard industrial accelerometers provides complete consistency with data from portable analyzers. In addition, there is 1 tachometer input available and 2 digital inputs for gating/triggering.

The unit can be hardwired to an existing power source, or powered by an internal lithium-based battery capable of taking up to two year's worth of daily measurements.



Wired versus wireless: Comparing automatic monitoring costs

Following maintenance staff reorganization, a chemical processing plant had to automate machine data collection for 8 medium-sized pumps in an ATEX Zone 2 area.

The plant already had a WiFi infrastructure installed near the pumps, which prompted consideration of two alternative solutions: a wired online system

located in the switch room, or a wireless system located at each pump.

Using calculations from SKF Documented Solutions Program software, SKF generated the following cost estimates. As the lower install costs and faster project times show, the wireless SKF Multilog WMx offered the plant a far more convenient, cost-effective choice.

Costs	Wired online system	Wireless Multilog WMx	Savings
Materials	\$53 180	\$43 680	18%
Installation	\$39 382	\$5 960	85%
Engineering	\$18 840	\$6 360	66%
Total	\$111 402	\$56 000	50%
Project Duration (Working Days)	43	12	

Crude oil carrier implements wireless with SKF

The challenge

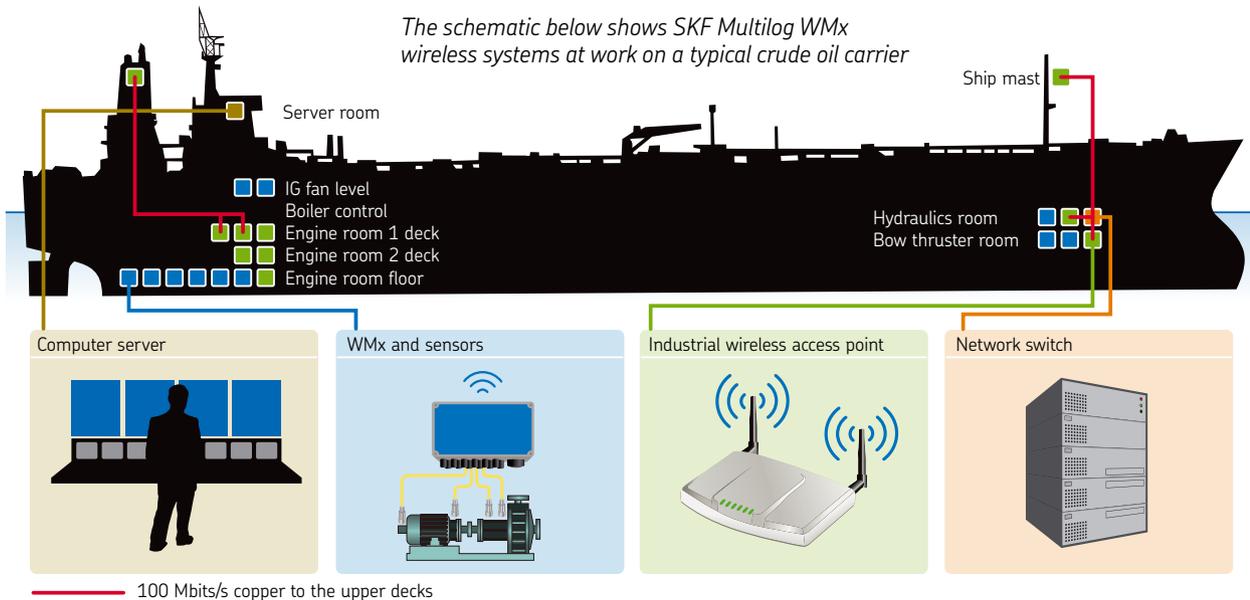
Portable condition monitoring programmes are used in the marine industry to obtain Class Exemption. Wireless technology can offer a complement to the walk-arounds to track “bad actors” more closely. However, a crude oil carrier offers the most difficult of environments for wireless signals – inside a huge metal box. The operator wanted to prove wireless could work.

The solution

The carrier installed SKF Multilog WMx wireless systems to collect complex dynamic vibration data from machines in the most difficult of locations. The back-haul of data to the host system used a mesh-network of access points throughout the vessel.

The result

The battery-powered SKF Multilog WMx systems have been successful in collecting repeated data in a challenging wireless environment. The additional data collected has been integrated with existing software and provides valuable information for increases in reliability.



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