



## Monitoring machinery 24/7 can improve plant availability, planning and safety

### Benefits

- Minimize machine failures and unplanned downtime
- Improve worker safety and reduce walk-around inspections
- Improve maintenance planning
- Enable cost-effective, flexible installs with wired or wireless deployments
- Allow root cause failure analysis on assets and process-induced problems
- Integrate with SKF @ptitude Decision Support software for automatic system prognostics

### Typical applications

- Condensate, circulating water, cooling water, feed-water, and lube oil pumps
- Induced draft, forced draft and primary air fans, cooling water tower fans, and dust collector fans and blowers
- Conveyor motors and gearboxes
- Coal pulverizers and crushers
- Gas and steam turbines and generators



### The SKF Multilog On-line System IMx-S makes it easy

For electric power generation plants, maintaining peak performance and availability of critical plant systems is a growing challenge. Many systems operate in harsh environments or conditions that can lead to failures and unplanned downtime. Faced with graying or retiring workforces, plants are also finding it difficult to maintain their condition- or predictive-based maintenance strategies.

The result: poor planning, increased outages, and ultimately, higher maintenance costs. The solution: the SKF Multilog On-line System IMx-S. Intended to complement the use of handheld periodic data collection tools, the SKF Multilog IMx-S helps enhance plant productivity and worker safety by reducing the need for time-consuming, potentially dangerous walk-around inspections.

### Affordable, powerful condition monitoring for harsh environments

Designed to withstand the toughest industrial environments, the SKF Multilog IMx-S is a robust, continuous condition monitoring solution. The system helps plants prevent machine

failures and plan maintenance activities more cost-effectively. Work can be scheduled to ensure the availability of skilled labor, spare parts and the proper tools, helping to increase plant availability while minimizing repair times and costs.

### A scalable, flexible solution with expert support

The SKF Multilog IMx-S integrates with SKF @ptitude software modules, enabling SKF to tailor new solutions to changing plant requirements. When used with SKF @ptitude Decision Support software, for example, the system provides complete information for early fault detection, prevention and condition-based maintenance. SKF can also provide a complete range of support services, from design and installation to data analysis and enterprise system integration.



## Increase the return on your maintenance investment with SKF

The whole idea behind the SKF 360° Solution is to help you get more out of your plant machinery and equipment investment. This may mean lowering your maintenance costs, raising your productivity, or both! Here's an example of the SKF 360° Solution at work in the traditional electric power generation industry.

### The SKF Multilog IMx-S boosts reliability and safety at combined cycle power plant



#### The problem

A North American combined cycle power plant was having problems with condition monitoring round compliance on critical plant assets. Along with conflicting schedule priorities, this base load plant struggled with weather-related safety issues, which prevented plant personnel from climbing outdoor structures to collect critical asset data.

Plant management knew the missing information presented a problem, yet considered the installation of an on-line system to be too cost-prohibitive, as critical assets were distributed widely over the plant's acreage.

#### The SKF solution

SKF assessed the system requirements, looking at asset locations as well as the locations of existing plant LAN access points. The SKF Multilog IMx-S solution featured over 32 16-channel IMx-S cards distributed strategically near the assets, with data automatically acquired, stored and managed by SKF @ptitude Monitoring Suite software and diagnostic tools.

The system was configured to take advantage of the LAN access points close to critical assets, while using wireless modems and routers to link remote assets such as cooling water tower fans, circulating water pumps, and service water pumps.

SKF managed the overall system installation, software and server setup, and built the system database and alarm parameters for over 90 critical and important plant assets.



#### The results

In addition to detecting faults before they lead to unplanned outages or plant de-rates, the plant's capability for 24/7 condition monitoring of assets is freeing up time for maintenance teams to perform root cause failure analysis work, and properly plan maintenance activities for scheduled maintenance outages.

Six months after the SKF Multilog IMx-S installation, plant personnel were able to detect and correct a developing problem on a service water tower motor that would have otherwise caused a plant de-rate if it had gone undetected during peak summer operation.

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