SPM update...

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From All of Us to All of You – A Very Merry Christmas!

Sign up for our newsletter SPM Update! You can receive it digitally via e-mail or by regular mail. Register on our web site **www.spminstrument.se** or via your SPM sales person.

New entry-level instrument

This fall, we introduced VibChecker, a new portable instrument för vibration measurement. VibChecker is a cost-effective and user friendly addition to our line of entry-level instruments for condition monitoring, where BearingChecker for bearing measurement is also a member.

VibChecker is a maintenance tool aimed primarily at customers looking for a handy instrument for simple vibration checks, but with built-in FFT capabilities, it is also an efficient tool for trouble-shooting.

WIth VibChecker, periodic vibration checks are easily done. Reliable and accurate vibration information is delivered in a matter of seconds. Its durable and ergonomic design and user friendly interface makes VibChecker the perfect maintenance companion for plant mechanics, machine operators and maintenance technicians.

The instrument has an internal probe and connector for external ICP transducers. It is capable of displacement, velocity and acceleration RMS and ISO 2372/10816 measurement over the 10-1000 Hz frequency range. VibChecker boasts very fast vibration measurement and built-in FFT functions. Readings are immediately and automatically evaluated according to established ISO standards. Results can be displayed in various ways, including a 200-line spectrum.

Accessories include a comfort grip protective sleeve and a small portable MEMS transducer with magnetic foot, convenient for measurement in narrow spaces. VibChecker will also be available in EX version for use in potentially explosive environments.

VibChecker

Measurement data from Bently Nevada integrated in Intellinova

Yanlian Petrochemical, located in the Shaanxi province in central China, is one of China's many petrochemical industries where crude oil is turned into various petroleum and plastic products. Here, SPM China has made an interesting installation where Intellinova accepts vibration signals from existing Bently Nevada and Metrix systems for further analysis in Condmaster.

Bently Nevada and Metrix are so called "protection systems", commonly found on large machinery such as turbines, generators and compressors. These machines are often steam operated and a common denominator is that they can cause extensive economical and physical damage in case of a catastrophic failure. Hence, such machinery is often equipped with protection systems on delivery. At Yanlian Petrochemical, the steam turbine is monitored through a Bently Nevada system, while a Metrix system monitors the turbo compressor.

Protection systems continuously measure vibration or various process parameters and automatically shut the machine down in case of emergency. However, these systemes normally do not save measurement results. Therefore, it is not possible monitor developing damages using these systems alone. This is where Intellinova and Condmaster come into play. The vibration signals from the steam turbine and turbo compressor are transferred to the Intellinova vibration monitoring module via the buffered outputs of the respective protection system and then on to Condmaster. Measurement history is thereby obtained, and using vibration analysis, orbit measurement and trending it is possible to find out the reasons behind a machine trip.

Buffered outputs are short-circuit proof outputs used to connect equipment for vibration analysis, oscillscopes and various other test equipment to the transducer signal.

Tips & Trix

Integrating lubrication measurement data in Intellinova

Do your machines have a lubrication oil measurement system? You can import those data to Condmaster!

On paper and board machines, lubrication oil monitoring systems are common. Via OPC, lubrication flow data can be transferred to Condmaster where they can be analyzed and alarms levels can be set, a possibility which is successfully utilized at the Stora Enso Skoghall board mill, where BM8 is equipped with a lubrication oil monitoring system from Kytola.

To accomplish this integartion, you'll need the Intellinova Condmaster module, which enables OPC communication. Additionally, the supplier of the lubrication oil monitoring system need to supply an OPC server.

In Condmaster, first activate the 'OPC' measurement technique. Then set up an OPC server and define what parameter (Item) from the lubrication monitoring system you wish to import. Finally, create a 'User defined' measuring assignment where you select 'OPC' as your measuring device and input an appropriate unit of measurement.

Kytola

SPM to deliver online condition monitoring to o2 Kraft

SPM Instrument has received an order for Intellinova online systems from o2 Kraft.

o2 Kraft is part of the privately held o2 group. Through its companies, o2 builds and operates wind turbines and sells cooperative windpower. o2 Kraft procures new wind turbines and are responsible for long term optimal and cost effective operation of the o2 group wind parks. o2 Kraft presently operates and monitors 47 wind turbines collectively producing 94 MW. o2, which is behind about one quarter of all wind turbines in Sweden, is expanding heavily and the intention is to install condition monitoring systems in a large number of projected wind turbines.

The o2 Kraft order comprises an Intellinova system for online condition monitoring of the Råshön 8 wind turbine north of Östersund in Jämtland, Sweden. The turbine is of type Vestas V90-2 MW, projected to produce circa 5.600 MW.h annually. Delivery and installation of Intellinova will be finished by end of December, 2009. In addition to hardware, software and installation, SPM is also to supply condition monitoring services to o2 Kraft.

Find out more about our windpower solutions at spminstrument.se and intellinova.se.

Underhåll 2010

On March 9-12, SPM will take part in Underhåll 2010 in Gothenburg, the leading maintenance exhibition in Scandinavia. This time, the focus is on efficient maintenance solutions.

Welcome to our booth B02:42 at Svenska Mässan! Contact your SPM representative for tickets.

Portable Intellinova premieres!

We continue to develop our very successful Intellinova system and now introduce a portable version of the system.

We can now offer a portable version of Intellinova, where the hardware is installed in a robust, plastic MIL standard case, an suitable alternative for test installations or temporary monitoring of critical machines. The case comes with connectors, internal measuring cables and a power supply unit. It fits a fullblown Intellinova system, using all the same components as the non-portable version and with all the features.

The portable version of Intellinova can also be used as a multichannel logger with data acquisition based on various triggers, stand-alone or in networks.

One of our first customers to use the portable Intellinova version is Engy Airtech, working with windpower service, mainly to windpower and waterpower owners. Linus Sturesson, technical support with Engy, comments: "The portable Intellinova from SPM is yet another tool for us to be able to analyse our wind turbines and those of our customers in a more flexible manner, which is sometimes requested.".

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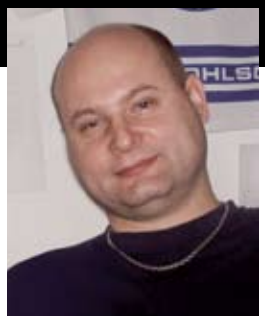
SVERIGE
PORTO BETALT

Customer portrait

Conny Sandberg, Stora Enso Fors



We had a talk with Conny Sandberg, Preventive Maintenance technician at Stora Enso Fors near Avesta in Dalecarlia, Sweden. The board mill in Fors produces fully coated folding boxboard for various consumer packagings and for printing purposes, e.g. postcards and book covers. The Stora Enso Fors mill is one of the world's largest producers of folding boxboard with an annual capacity of 400,000 tons in total. About 700 people work at the Fors mill.

How is your maintenance organized?

In total, 48 people work with mechanical maintenance. Seven people work at the Preventive Maintenance department: the PM manager, five PM inspectors and myself. I work with special measurements and average adjustments, among other things.

How long have you worked with condition monitoring?

I started working with condition monitoring in 1999.

What does a normal workday look like for you?

We go through the online system, perform various special measurements and work with electricians and others to try and find out disturbance causes .

On what applications do you use SPM equipment?

On most rotating equipment, actually. We measure online as well as with handheld instruments.

What do you measure (shock pulse and/or vibration) and on how many measuring points?

I measure mostly vibration, while my colleagues work more with shock pulse measurement. We have thousands of measuring points, most of them SPM. On some gearboxes, we measure vibration.

What is your opinion on the value of conditon monitoring?

Without conditon monitoring, equipment availablity would drop dramatically. Unplanned stoppages are incredibly expensive. We're thinking of extending our conditon monitoring program further because it is so rewarding.

What are your experiences with SPM?

It works really well. We have a good relationship with the sales reps and they're always ready to help.

Course schedule, spring 2010

SPM Academy provides qualified training in condition based maintenance, aiming to enable participants to carry out measurements, evaluate the results and make decisions. The courses take place at SPM Academy, SPM's training center in Strängnäs, Sweden.

Basic, T2001/T30 Leonova™		Advanced Leonova™	
March 23-25	*GRK 012*	*April 13-15*	*PÅB 015*
May 18-20	*GRK 020*	*May 25-27*	*PÅB 021*

Read more and enroll at **www.spminstrument.se**

SPM
condition monitoring solutions

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