

# For the Trenches

TIPS & NEWS FOR EQUIPMENT OWNERS AND OPERATORS

## Technology in the Field

*When your goal is no wasted time, no mistakes and 100% efficiency, technology solutions that work in the field can make a quantifiable difference.*



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Times have changed, and so have the machines that we own and operate. The technology that we can use to implement best maintenance practices on our equipment has also changed, in many cases allowing you to increase convenience, improve accuracy and reliability, document performance, and reduce waste and errors.

Here's an overview of some of the challenges that today's user-friendly, proven tools can help you solve. Ask your equipment dealer for more specific information

regarding availability and details for your own machines.

### **Keeping an eye on your equipment, at all times.**

You may already use this technology, or you may have noticed it on somebody else's fleet. It usually looks like an extra antenna sitting on the machine, and it transmits information such as machine location, diagnostic codes, history and alerts, via satellite to your office, cell phone or e-mail account.



### **Faster, easier and environmentally safe fluid changes.**

Equipment manufacturers are now utilizing on-board systems that give you the ability to evacuate transmissions, hydraulic tanks and other oil-based reservoirs in your equipment very efficiently. These systems may come standard or they can be installed by your dealer.

The advantages of an on-board system are numerous—it's environmentally clean, safe and easy, and a complete engine oil and filter change takes only 20 minutes. There are no leaks, no pans and no mess, and best of all, the entire operation is comfortably performed—no need to crawl under the machine!



When it comes to selling your equipment, an on-board system can provide an additional advantage. If your machine is connected to your dealer's service center via a wireless link system, every time you do a transmission, hydraulic or oil change, the operation gets automatically time-stamped, offering a reliable level of maintenance verification and record-keeping that increases the value of your machine.

### **24/7 parts ordering.**

Chances are when it's convenient for you to order parts, it's not within regular business hours. And chances are, your equipment dealer knows that, and has come up with an electronic solution. Ordering parts and consumables at your convenience, from your office, from the road or from the field, 24 hours a day, can save you time and aggravation. Electronic parts ordering means you get access to inventory 24 hours a day, seven days a week; you receive an immediate e-mail order acknowledgement and your orders are processed during the regular business hours. Other timesaving features that can truly make a difference in your busy life include real-time price and availability that allow you to make the best purchasing decisions.

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## Access to complete product information.

Having the most up-to-date product support information available, at your office, or at your home, on the road or on the jobsite, can make a difference in your busy life. Online product support information is a cost-effective alternative to paper and microfiche and a great tool for operations, maintenance and safety manuals, as well as disassembly and assembly schematics, troubleshooting, testing and adjusting for any machine or work tool in your fleet.

## Performing periodic checks on the health of your machines.

Scheduled oil sampling is a program that gives you an insight into the health of your machines. It is implemented by collecting small amounts of oil and other fluids stored in the cavities of the components in your machine, including the engine, powertrain, hydraulics, braking and coolant system. Samples are labeled and sent to the equipment dealer's lab, where they will be analyzed and interpreted; results are sent to you via regular mail or email.

Scheduled oil sampling is one of a number of important tools that can be used to support your decision-making when it comes to maintenance, helping you lower your owning and operating costs, maximizing component life and optimizing your investment.

Some equipment dealers make oil analysis services available on the web. This option allows you to access your fluid sample analysis history, reports and recommendations, any time, any place. Some key features of scheduled oil services on the web are notifications of new information being posted; search and sort data up to five years back; detailed descriptions and sample history.

## Scheduling repairs, reducing downtime.

Many new, larger machines come equipped with software that provides a graphic interface for diagnostic testing, troubleshooting and calibration. Generally available on a subscription basis, this is a proven cost-control application that can help you maximize your equipment investment, reduce downtime and efficiently schedule repairs.

Some of the most important uses of this type of application include:

- View active and logged diagnostic codes and quickly identify faulty sensors.
- Review logged event codes to check on engine over-speeds, high temperature, etc.
- Identify the root cause of problems through diagnostic tests.

- Calibrate key components to ensure operating efficiency.
- Record real-time data.
- View previously recorded data logs to monitor trends in the health of your equipment.
- Search help options to guide any tasks.
- Retrieve data for fuel used, miles traveled, hours operated and idle time.
- Display status of engine speed, throttle position, timing advance, etc.



Ask your dealer whether you can utilize this technology with your equipment,

In summary, nothing beats ongoing, hands-on maintenance, and technology can never replace a good and careful operator. Being aware of the available new tools, however, allows you to choose the ones that make the most sense for your particular fleet, and can help you prolong your equipment's life and save you time and money. ■



*This article is part of a series of articles designed to help equipment owners and operators lower owning and operating costs. Other article topics include:*

*Emissions • Scheduled Oil Sampling • Parts Options Certified Rebuilds • Getting the Most from Your PSSR (Parts and Service Sales Representative) • CSAs (Customer Service Agreements) • Machine Evaluations*

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