

## **Four Business Considerations for Telematics**

*Offering features that aid in security and machine maintenance, telematics technology is taking over the construction industry one machine at a time.*

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Though its only recently gained popularity in the last two to three years, telematics has been around much longer than people think. A web-based system that is compatible with all current computers and can be accessed from any standard device that's used to access the web, telematics is simple and cost-effective.

The system provides owners and operators a handful of benefits that include equipment utilization, machine maintenance, equipment security, and billing and estimating. This article details just how contractors can use this technology to better manage equipment, boost profitability and improve how business gets done.

### **Better Equipment Utilization**

Telematics is a web-based technology that uses a Global Positioning System (GPS) receiver and an onboard communication device on each machine. The GPS receiver identifies the machine location, while the modem collects information sent to it by sensors on the machine. The data is then transmitted through the modem to designated users via a Web portal.

Many telematics packages are purchased with a subscription on a per-unit-basis. Some manufacturers offer telematics as a standard service at the time of purchase on select models. CASE Construction Equipment, for example, provides its SiteWatch™ telematics system during the first three years of service under its ProCare program.

When it comes to equipment utilization, telematics provides data that provides insight into how a piece of equipment is being used.

The system displays the machine's operating status for optimized utilization and idle management, which improves fuel economy. It's important to take note of engine idling because it not only wastes fuel, but also is an inefficient use of the equipment and can create higher depreciation with excessive engine use. Telematics ultimately evaluates the overall performance of the machine and makes sure it's being used to its full potential

By reviewing the utilization reports via telematics, decisions can be made that can diagnose systematic problems that are hurting the productivity of your business.

For example, excessive idling could point to operator inactivity. Therefore, the owner knows his operator needs to be taught a more effective approach when it comes to the operation of the machine.

Many fleet managers and business owners also utilize the data to help manage equipment assets. For example, users can generate a report quickly and easily to help make smarter choices such as whether to purchase or rent new equipment based on the utilization rate of current equipment.

### **Improving Machine Maintenance**

Telematics helps to introduce automation to the realm of equipment maintenance. Information gathering and decision-making becomes easier and faster, which streamlines maintenance and recordkeeping activities.

Users can schedule automatic maintenance alerts to keep the machines serviced consistently and more accurately. This process provides ease of mind for the owners and operators, and saves time by eliminating jobsite visits or phone calls to obtain data such as engine hours, fluid levels and operating temperatures. The telematics system keeps track of all that data and displays it on the web-based system for easy access.

Another key advantage is the planning and execution of scheduled maintenance. With up-to-date data and the ability to send automatic alerts, decision makers can better determine the best time to perform maintenance. Specifically, it helps reduce the chances of a machine being pulled out for service too early or too late, which contributes to the overall health of the machine and the optimal productivity of the project where equipment is used.

Telematics will also detect any failures from bad operating conditions. The system keeps accurate records and allows operators to be aware of the conditions of their machines, which can help identify problems before they occur. Being able to track the health of equipment and detect problems before they become unnecessary expenditures and downtime saves the company time and money.

Having a keen understanding of operation characteristics of machines and operators over time allows telematics users to flag issues that appear out of the ordinary, and in the process, minimize potential maintenance headaches before they strike.

## **Protecting Your Equipment**

Security is always a top concern when it comes to expensive construction equipment. Telematics has the ability to identify location, which can detail many different things about that specific piece of equipment. It can identify if a piece of equipment is moving when it shouldn't be, where to find it if it has been stolen and can identify unauthorized use, thus saving owners time, money and headaches.

Telematics offers another important feature when it comes to equipment security: geofencing. Geofencing creates a virtual perimeter around a jobsite or yard. If the machine moves outside the perimeter, an alert will be sent to an employee or manager to notify them of the unauthorized use. This alerts owners to whether or not they need to take action and investigate what is going on with their machine.

Depending on system setup, the engine doesn't need to be running in order for this technology to work. For instance, if a backhoe is sitting on a trailer and a thief hooks up to it and drives off, that backhoe can still send an alert when it passes the geofence.

In order to further deter theft, telematics systems provide curfew tracking. Owners have the ability to set up a "curfew" for when their equipment can and cannot operate. If the machine turns on at any point outside of that allowable operating time, it will notify those who have been selected to receive notifications.

If a machine falls victim to theft, owners can use their telematics system to trace the machine's entire journey from when it was first turned on. Details include when it was activated last, what path it took, the rate of speed and more. This "breadcrumb tracking" aids in recovering equipment in a timely and efficient manner.

## **A Smarter Machine Means a Smarter Business**

Telematics give contractors a more efficient way to track equipment hours on a day-to-day basis, which helps in two areas of business: billing and estimating.

Data pulled from the system gives the contractor an exact amount of hours a piece of equipment was used on a job. Telematics also allows contractors to look back at the equipment hours for a comparable job in order to make accurate estimates. This helps contractors stay competitive with their bids.

The use of telematics on construction equipment is only expected to grow as more and more contractors put the tool to practical use and experience the value it

delivers. It offers a variety of benefits to owners and contractors alike and is becoming a standard throughout the construction industry.

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