IoT changes the way construction equipment is tracked on the jobsite.
Smart equipment tracking gives construction companies a powerful tool to manage utilization, control costs and make smarter equipment decisions

- Traditional methods for heavy machinery and equipment are time consuming and prone to human error.

- Databases and spreadsheets don’t give managers a complete picture of utilization trends, making it difficult to assess and understand company-wide equipment needs.

- Smart equipment tracking, powered by Sigfox’s global IoT network, helps managers track heavy equipment, streamline oversight and assess utilization trends.

- Real-time tracking and cloud-based data sets help construction companies reduce theft, increase productivity and control usage costs.
For a machine that weighs upwards of fifty tons, an excavator can be surprisingly difficult to track down.

Just think about how much time your company’s site supervisors and equipment managers spend each day answering questions like: Was that backhoe really stolen from the storage warehouse, or did someone just park it at the edge of the last jobsite and forget about it? Are subcontractors logging all of their heavy equipment usage? Does the company really need to buy another loader, or can the existing fleet be used more efficiently instead?

Given the inherent complexity of construction projects, it’s no surprise that even the largest, most conspicuous pieces of heavy machinery are subject to being misplaced, misused and mismanaged. This is especially true when equipment is shared between scattered jobsites and used by multiple contractors.

But traditional methods for tracking heavy equipment, like databases and spreadsheets, are time-consuming and prone to human error. These methods also don’t give managers a complete picture of utilization trends across a company’s entire portfolio. Without detailed data about equipment usage, managers are left to make major purchasing and allocation decisions based largely on guesswork.

Smart equipment tracking systems are changing the way the construction industry tracks heavy machinery. Powered by Sigfox’s reliable IoT network, this new technology gives construction companies the tools to manage equipment, increase utilization and control usage costs across an entire portfolio of jobsites.

Construction industry seeks a better way to track and manage heavy equipment

Track
Locate misplaced or stolen machinery quickly.

Oversee
Streamline daily management oversight.

Assess
Understand big-picture usage trends.

Maintain
Perform maintenance based on accurate engine usage.
From a user perspective, smart equipment tracking systems are straightforward to deploy. A small, battery-powered device is securely mounted onto any piece of equipment. Once mounted, the device collects real-time information about the exact location of the equipment and transmits that information through Sigfox’s global IoT network. The information is then aggregated into a cloud-based app platform. The end result is a set of robust data that allows construction managers to not only locate a piece of heavy equipment with just the click of a button, but also to see when, and for how long, that equipment was in motion on any given day.

For anyone who has ever wasted time tracking and managing a fleet of heavy machinery, the efficiencies and cost savings made possible with this technology are clear. Real-time equipment tracking and cloud-based data sets help even the largest construction companies reduce theft, increase productivity and control usage costs.

One of the biggest benefits to smart equipment tracking is its ability to automate the entire tracking workflow. Real-time GPS location data, available in the form of maps and dashboards, gives the assurance that when anyone in the company needs to locate a piece of heavy equipment, they can do so quickly and with accuracy. A bird’s-eye-view of the entire fleet helps ensure equipment is in the correct location at the correct time. This level of oversight has the potential to reduce costly downtime and optimize equipment usage when it is most critical.
**Manage maintenance schedules**

If your company bases its equipment maintenance on recommended schedules, you run the risk of under-maintaining equipment that is heavily used, or performing unnecessary maintenance on less-used items. Smart equipment tracking accurately logs the time each piece of equipment is in motion, allowing you to perform maintenance based on accurate engine usage hours, not recommended schedules. Be proactive about maintenance when it is necessary, but delay routine maintenance at times when it simply isn’t needed.

**Reduce theft and misuse**

Unfortunately, tracking construction equipment sometimes involves more than just managing legitimate use. Theft of heavy machinery is on the rise, but it is often difficult to secure jobsites, especially in remote locations. Real-time alerts can be customized within the app platform, so that key employees receive notice via smartphone or tablet if a piece of equipment, or even a pallet of valuable materials, leaves a site during the night or is misused during off hours. Locate stolen equipment and pallets quickly with real-time GPS tracking.

**Allocate expenses and control costs**

For all of the difference smart equipment tracking makes in day-to-day operations, it’s also a powerful tool for assessing and controlling costs in the long term. With access to historical data about when, and for how long, each piece of equipment was in use on any given project, managers can gain a clearer picture of equipment usage over time, allowing them to identify inefficiencies and re-allocate equipment when necessary.

Automated records make it easy to assign usage expenses accurately to each project. Know exactly when a piece of equipment arrives and leaves a jobsite, and how often it is used once it is there. Integrate this information into equipment rates and job costing reports for more accurate expensing.

For more informed, long-term decision making, a complete set of utilization data can be accessed, both per-project and company wide. When it comes time to purchase new equipment, decisions will be made based on objective data, not best guesses. And, because tracking devices are plug-and-play, they can be attached to rented equipment as well, allowing your company to determine at what point it becomes more cost-effective to purchase a piece of equipment rather than rent.

**Construction equipment management**

is complicated, with many moving parts and a complex landscape. Tracking large construction equipment and heavy machinery, and managing its usage across scattered jobsites, has traditionally been one of the largest headaches in the industry. But with the latest advances in smart tracking technology, it’s now one of the most manageable.

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