

ACCESS MANAGEMENT REINS IN LIGHT TOWER OVERUTILIZATION

Keypad ignition locks reduce fuel costs and carbon emissions on large project.

While building a microchip processing plant, a large general contractor encountered a problem: Diesel light towers were guzzling fuel and breaking down at a surprising rate. Unauthorized users from across the jobsite were turning them on during the day to charge miscellaneous tools and devices by using the power supplied by the light towers' generators.

The energy draw created noticeable impacts. Fuel costs for the towers skyrocketed, straining the project's budget. Jobsite emissions were higher than expected due to the marked increase in diesel being burned. For the project owner, a tech company with rigorous corporate sustainability standards, both impacts raised serious strategic and operational concerns.

United Rentals, which supplied some of the light towers, analyzed the telematics data and confirmed that many towers were operated nearly 24 hours a day, seven days a week—the equivalent of triple shifts. The existing preventive maintenance schedule was not sufficient for that level of use, leading to breakdowns from blown breakers and other problems. Increasing the maintenance to cover triple shifts doubled the rental fee.

Equipment access management solves the problem

The size of the jobsite and number of workers onsite made it nearly impossible to monitor and restrict the use of light towers without optimizing technology offerings incubated by our Advanced Solutions Group at United Rentals.

Leveraging their experience with equipment access management across a variety of customer jobsites, United Rentals proposed a solution: Let's make every light tower "smart" within a Connected Job Site ecosystem. Equip each light tower with Access Management (keypad ignition lock). The GC jumped at the opportunity.

United Rentals took charge of deploying Equipment Access Management of all the light towers at the site. It created a small number of PIN codes for the GC to share with a few supervisors who needed access. The light towers could not be turned on without entry of one of those PIN codes.

The GC was able to create new PIN codes, alter them and delete them whenever they wished in Total Control®, United Rentals' cloud-based worksite management system.



Regaining control with Total Control

Telematics data from the light towers was managed through Total Control. Using the platform, the GC could see when each tower was turned on, which PIN code was entered to start it and when the tower was turned off. They could also see the exact location of each tower and its fuel status.

As a result of this visibility, the GC effectively and efficiently monitored light tower operation and all but eliminated unauthorized usage.

“All the data we’re looking for”

United Rentals prides itself on deploying effective solutions to whatever challenges our customers face. By equipping light towers with access management, UR managed utilization, reduced diesel fuel consumption, minimized equipment-related downtime and avoided rental surcharges. Immensely satisfied with the approach and the outcome, the GC proclaimed that the “easy-to-use” Total Control platform “provides all the data we are looking for.”

The GC was so impressed by the results that they are keen to work with United Rentals to adopt

equipment access management on a broader scale. As they explore opportunities to outfit other types of equipment with access management on other projects nationwide, they continue to rely on the expert guidance of United Rentals.