

# CASE STUDY

## Crown Battery Manufacturing Company

### QR-Patrol Guard Tour System Project

#### Overview

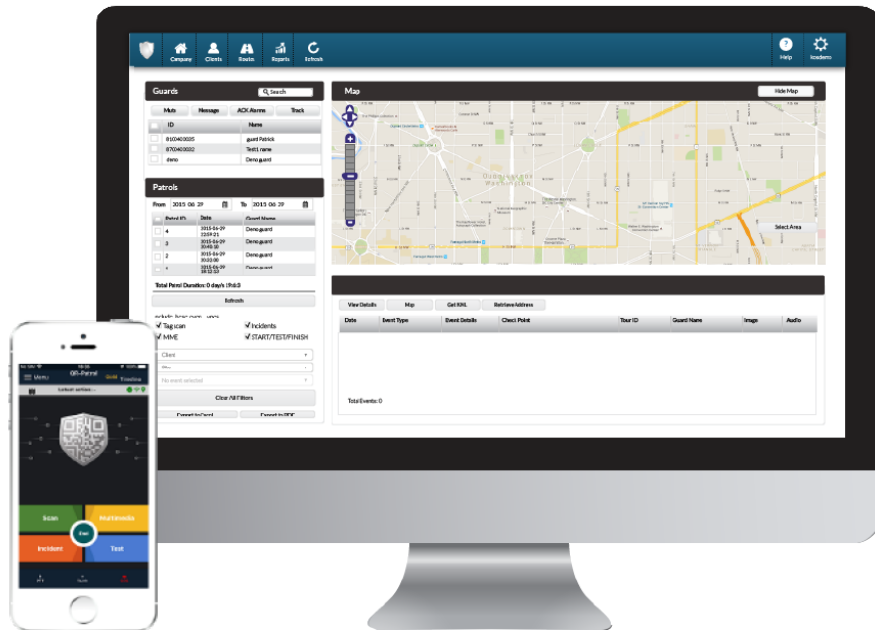
“Knowing that a strong safety culture also leads to increased quality and productivity, I was looking for ways to integrate safety observations and audits into the supervisors’ daily rounds, alongside quality checks, productivity coaching and the many other duties that supervisors must juggle every day. QR-Patrol allows me to collect date- and location-stamped signatures, photos and videos as evidence of safety observations, quality checks and production “work-in-progress” (WIP), which provide me with confidence that the work is being done where it counts – out on the production floor! The strong reporting features of QR-Patrol make it easy to track progress towards goals, and the ability import all the raw data into spreadsheets also gives me lots of opportunities for data analysis.”

***Jim Anderson (Health, Safety and Environmental Manager)***

Crown Battery Manufacturing Company is privately owned, with more than 90 years of experience and located in Fremont, Ohio. They have 14 sales and distribution offices throughout North America, 615 employees and a network of authorized business partners, distributors and dealers across the world.

Their principles:

- Recognize that the customers and the employees are the first priority.
- Maintain total commitment to quality system excellence.
- "The Power behind Performance" – represents Crown Battery’s commitment to providing power to millions of people around the world – power that makes life easier, and raises standards of living, health and safety for the communities they



## Before

Prior to adopting QR-Patrol, supervisors were faced with auditing Safety, Quality, Productivity, Energy Management and Wellness (Crown's "Five Pillars") throughout each day by making rounds, talking to workers and auditing processes and paperwork. Reporting on all of the many tasks performed throughout the day was often not done until the end of the shift, if at all.

## The need

The Company's managers agreed on the fact that they need to find a flexible, easy and efficient way to gather proof that the necessary actions, checks, inspections are being performed by the supervisors and the employees. A mobile smartphone based app was needed to avoid burdening the supervisors with any more hardware than necessary. Reporting features and export to Excel were also important needed features.

## The solution

QR-Patrol, a tool used by the security industry for all these purposes and more, had all of the features that Crown was looking for, as well as a proven track record.

Since its adoption a few years ago, Crown continues to discover additional uses for QR-Patrol's multiple advanced reporting options, automated and manual export of up to 10 different kinds of reports and the real time proof of presence functionalities.

Jim Anderson (Health, Safety and Environmental Manager) found that QR-Patrol was ideal for verifying actions items related to the company's five core values:

- > Safety
- > Productivity
- > Quality
- > Energy Management
- > Wellness

The system initially focused primarily on Safety and was later expanded to include the other pillars as well. "Management has found that QR-Patrol's premade and custom Excel & PDF reports provide valuable insight into daily activities on the manufacturing environment, and in addition to helping promote a safe workplace, are especially useful in the Quality and Productivity areas." Jim Anderson (Health, Safety and Environmental Manager)

The goal was to gather data through work instructions and check lists from the supervisors, verifying that quality and productivity tasks are being completed, and taking proactive measures for the employees' safety.

3 of the many features Jim emphasized that proved especially useful are:

- > The main web app's easy to use interface allows each manager can see what happened and what has been reported in real time, or go back to a specific date since the system is cloud-based. He/she can see each Scan, Incident or filled in questionnaire which is being reported by the employee on the field through a single dashboard.
- > The fact that it is very easy for the employees to perform checks on machines and equipment, using their mobile app, proving that they did it by scanning a checkpoint and filling in digital mobile forms.
- > Using beacon technology, makes it easy to map the whole factory and pay attention to the workflows. The system is taking advantage of beacons' signal to map the whole property, indoors and outdoors, thus making it easy for managers to locate employees, achieving proof of presence.

# Results

After moving on with QR-patrol:

- Supervisors know exactly what checks they should perform with a tap in their mobile apps.
- Employees are proving they were in specific places on time, performing maintenance actions in equipment.
- Using QR-Patrol to schedule, record and track safety behavior observations not only increases safety awareness in the workplace, it allows for better data analysis to guide safety initiatives, resulting in fewer injuries.
- QR-Patrol is a perfect tool for scheduling and tracking supervisor Toolbox Safety Talks and other trainings, and even allows online access to images of the training sign in sheets.
- Evacuation & Shelter in Place drills (fire, tornado) are being conducted, using real time, cloud based nature of the software to count heads.
- Pen and paper eliminated.
- Automatically delivered reports daily, weekly or monthly consisting the basic tool for audit purposes, thus helping to locate pain points and taking proactive, ameliorative measurements.
- Support and success options and tips via multiple ways of communication plus self-help knowledge base.
- They avoid wasting time and energy thus productivity and performance are bring increasing within a safe work environment.
- The injury rate dropped down to 1,9 from 3,4 from 2019 to 2021.