Case Study



YARD MANAGEMENT

From 20–Minute Bobtails to Real–Time Precision: A Yard Management Evolution



The Company's Profile

- ★ COUNTRY
 United States
- NUMBER OF EMPLOYEES
- ★ INDUSTRY

 Manufacturing
- ★ BIGGEST OPERATIONAL CHALLENGE Manual process, long distances, Complex movements

Overview

A renowned battery manufacturer with a vast production network across the united states, was struggling with yard management inefficiencies. Managing the logistics between manufacturing plants and distribution centers, became increasingly difficult due to complex material movements, long distances, and outdated manual processes.

After evaluating options, the manufacturer chose to migrate from their existing system to <u>C3 Yard</u>, driven by a desire to future-proof their operations.

The Challenge(s)

The manufacturer's biggest site, a hub for manufacturing and dispatching batteries, grappled with a range of yard management issues:

Complex Coordination of Movements and Stakeholders

The site featured multiple manufacturing buildings that required raw materials, such as lead oxide, stored in various silos. Coordinating the transportation of these materials to the right building at the right time, along with managing external suppliers, quickly became an overwhelming task.

▶ Too many manual processes

Despite the scale and complexity of operations, one department still relied heavily on **manual processes**—using radios, pens, and paper to track movements—leading to inefficiencies and errors.

Long Distances Between Sites

The site also needed to transport finished goods to nearby distribution centers, with trips sometimes exceeding 20 minutes each way. This led to excessive bobtailing, which wasted time and resources.



The C3 Solution

Recognizing the need for a more flexible and integrated system, the manufacturer chose to switch to C3 Yard. Familiarity with the manufacturer's operations and the seamless transition to C3 Yard allowed for a tailored solution with minimal new development.

C3 Yard replaced manual methods with an automated system that tracked and optimized movements across the campus, from managing raw materials to dispatching finished goods. The system provided Yard Jockeys with real-time instructions and clear communication with external carriers.

The implementation, which began in September 2023, followed a clear roadmap:

- Two on-site design weeks to customize the system for the manufacturer's needs.
- Consolidation of processes to align with C3 Yard's capabilities.
- A successful go-live on May 5, 2024, followed by a longer stabilization period to fine-tune parameters and integrate with existing BI tools.

The Results



Automating manual processes

The new system eliminated the need for manual tracking, allowing for better coordination of material movements across the manufacturing buildings and external suppliers. Movements were optimized, significantly reducing bobtailing and unnecessary trips by 70%.



Sustainable efficiency

The system streamlined the tracking and handling of hazardous materials, ensuring that all movements were compliant with safety regulations and environmental standards. By automating these processes, the manufacturer reduced the risk of human error, minimized potential hazards, and maintained a safe working environment.

The manufacturer's leadership was particularly impressed by C3 Yard's flexibility. The system required only minor custom development to meet their unique needs, and



Future-Proofing the Operations

By transferring institutional knowledge into an intelligent system, the manufacturer no longer relied on a few individuals with operational expertise nearing retirement. The new system created continuity and ensured that operations would run smoothly even in the absence of key personnel.



Clear Communication

With C3 Yard, the department that once relied on radios and paper now operated digitally. Real-time visibility and tracking reduced miscommunication and errors, leading to a more efficient operation.

C3 Solutions provided extensive support during the stabilization phase to ensure optimal performance.

Why choose C3 Yard

The manufacturer's experience with C3 Yard highlights the value of a configurable, scalable yard management system. The system allowed them to move away from manual processes, improve efficiency, and future-proof their operations—all with minimal disruption. Other yard management providers couldn't offer the same level of

customization and long-term support that the manufacturer required.

For organizations facing similar challenges, C3 Yard stands out for its unmatched adaptability to complex needs and deliver measurable improvements in yard operations.

