

# Appliance Manufacturer Transforms National Asset Inventory Process with Cloudleaf, Saving Millions of Dollars

To increase the accuracy of their inventory tracking, one of the largest appliance brands in the U.S. deployed Cloudleaf to monitor the real-time condition and location of 32,000 pieces of heavy equipment that's spread across a dozen production plants across the United States.

One of the largest appliance manufacturers needed better location visibility on thousands of pieces of heavy equipment spread across multiple production plants, to improve inventory tracking and reduce capital asset write-downs.

Heavy equipment, such as press machines and welding machines, was dispersed around multiple factories across the U.S. The movement of this equipment was tracked manually and was very inaccurate. The company needed to have an accurate, real-time inventory count of their equipment to improve warehouse efficiencies and reduce millions of dollars of year-end write downs.

## CHALLENGE

The company needed to accurately track the location of over 32,000 pieces of heavy industrial equipment that are spread across 13 production plants in five different locations across the U.S.

Over 125,000 of these types of tools were dispersed across the manufacturing footprint of the company. Often, these tools were disassembled into smaller components when moved from one building to the next, or when shipped to a third party for repair. Often, these tools skipped the manual or bar code scan on the way in or out of their destination. Because of this, the appliance manufacturer often had difficulty locating these pieces of equipment at year-end for their digital audit record. If they couldn't locate the various pieces of equipment, they couldn't be considered assets, and therefore the company was forced to take huge markdowns on these tools.

They wanted this system to help them streamline inventory levels, optimize asset utilization and reduce over provisioning.

## CUSTOMER

Large U.S. Appliance Manufacturer

## INDUSTRY

Industrial Manufacturing

## OBJECTIVES

Capital Asset Monitoring

## CHALLENGE

An outdated, manual inventory process could not keep track of the thousands of pieces of industrial manufacturing equipment which resulted in expensive unaccounted equipment that they had to post as write-downs on their capital asset inventory.

## SOLUTION

By collecting location and condition data throughout the supply chain — indoors, in the yard and in transit — the company now has a comprehensive digital audit record that tracks capital asset location, condition and context in real time for accurate inventory levels nationwide.

## RESULTS

Replacing an annual physical audit with real-time tracking saved millions of dollars in annual write-downs from lost or misplaced equipment and tools and provided **100% accurate inventory** levels and the exact location of capital assets.





## SOLUTION

### Cloudleaf Seamlessly Extends Tracking from Four Walls to Transit to Final Destination

Cloudleaf used Bluetooth low-energy asset sensor tags that captured three core pieces of data: 1) location, 2) the environmental condition that those pieces of equipment were exposed to, such as shock or vibration that could occur if a tote or crate gets dropped from a forklift, and 3) contextual data.

**Fixed assets within four walls:** The company initially used RFID tags and gateways to track of goods on the move. Using RFID technology was problematic because there is a lot of signal bounce in heavy metal/steel environments, which means that signals are emitting from the RFID tags, but they can't be accurately picked up by the RFID reader because it can't tell where the signal is coming from. Cloudleaf's solution takes advantage of advanced digital signal processing, which makes it possible to identify the signals from signal bounce noise, and pinpoint where the tag is in relation to its proximity to the gateway.

**Yard management:** For pieces of equipment that were located in a lay down yard or dock area just outside the facility, Cloudleaf incorporated gateways outside and sensors were placed on the tractor trailers. Sensors were also placed on the pallets, so as they were coming in or out, the employees knew what the pallets were carrying when they were placed onto the back of the trailer.

**In-transit:** Mobile gateways were used so when the trailer started to leave the yard, it would communicate the location of the trailer as well as the contents of the trailer, all in real time.

**Seamless interoperability with system of record:**

Cloudleaf can seamlessly interact with third party enterprise asset management tools to gather additional information, such as where it was acquired, its condition, and when it's due for repair. The addition of contextual data with real-time location and condition information provided the appliance manufacturer with a significantly more complete details about all their tools.

**Conditional analytics:** Cloudleaf analytics paired with business rules provide conditional analytics. For example, if a particular container or truck is going off-route according to the schedule, alerts can be sent via SMS or email, or an API can be used to send an instruction set to an upstream or downstream system.

Because of Cloudleaf's ability to seamlessly interact with planning systems, warehouse management systems, and ERP systems, the appliance company was able to get accurate inventory levels, product condition information, and location data in real time, resulting in significant cost savings and reduced capital asset write-downs. In addition, damaged and lost equipment can now be accounted for.

## RESULTS

After deploying the Cloudleaf Digital Visibility Platform and adding tracking sensors to all capital assets, the global manufacturer now has a real-time comprehensive digital audit record of all capital assets. By knowing the location, condition and context in real time, and achieving 100% accurate inventory levels nationwide have improved efficiencies and resulted in millions of dollars of savings from limiting asset write-downs.



To take the first steps in transforming your supply chain, reach out to **Cloudleaf**.

