

CASE STUDY



Revolutionizing Maintenance: The 50% Productivity Boost at Tucson Electric Power

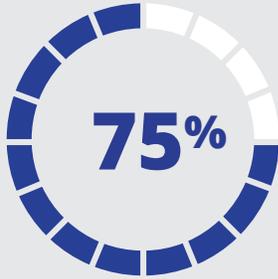
To support its extensive network of substations and transmission lines, Tucson Electric Power required a fast, accurate parts retrieval system to keep operations running seamlessly. LD Systems designed a high-capacity solution to streamline parts handling, ensuring critical components reached repair crews efficiently.

The Client

Tucson Electric Power provides 24/7 electricity delivery across a large service area. Their extensive infrastructure requires tens of thousands of parts for maintenance and repairs, demanding a system that enables quick, precise access to vital components.



Results Snapshot

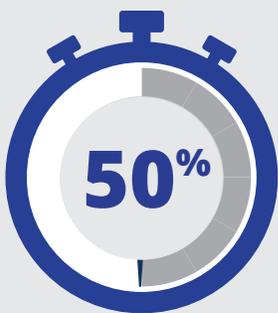


Reduction in
retrieval time



99.7%

Improved
accuracy



Productivity
boost

THE CHALLENGE

Tucson Electric Power's critical repair operations required an optimized system for fast and accurate parts retrieval. Managing thousands of unique parts with varying availability needs was crucial for consistent service. Tucson Electric Power sought a scalable, precise solution that reduced retrieval time and enhanced accuracy to support uninterrupted power delivery.

RESULTS

LD Systems' integrated carousel system provided Tucson Electric Power with the speed and accuracy required. The implementation doubled picking productivity, reduced order cycle time by 83%, and increased the available pick faces, significantly improving operational efficiency.

THE SOLUTION

01



Operations Review

LD Systems conducted an in-depth review of Tucson Electric Power's parts management processes to identify efficiencies and streamline parts accessibility.

02



Layout and Design

A custom layout was created using AutoCAD to integrate vertical and horizontal carousels for efficient use of space and easy access to high-demand parts.

03



Equipment Selection and Installation

LD Systems implemented two vertical carousels and two horizontal carousels to handle a broad range of parts and components. The carousels were strategically installed to ensure seamless integration and easy retrieval, enhancing both speed and accuracy.

04



Project Management

LD Systems oversaw every project phase, coordinating resources to ensure on-schedule completion and minimal operational disruptions.

DETAILS AND EQUIPMENT

LD Systems designed a high-efficiency system combining vertical and horizontal carousels. The carousels optimized space, making thousands of maintenance parts quickly accessible, while reducing retrieval time and enhancing accuracy.

Storage Solutions and Strategy

LD Systems implemented advanced storage solutions to streamline retrieval:

Vertical Carousel: Optimized storage for high-density parts, providing quick, automated retrieval.

Horizontal Carousel: Doubled available pick faces, maximizing space for frequently accessed items and expediting the selection process.





CONCLUSION

With LD Systems' integrated carousel system, Tucson Electric Power's facility now operates with enhanced speed and accuracy. This streamlined parts management system ensures that critical components are always readily available to support Tucson Electric Power's network maintenance and repair needs.

The Results

- Doubled picking productivity
- Reduced order cycle time from 90 minutes to 15 minutes
- Quadrupled number of pick faces available for picking