

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 81.6%
Throughput Increase: 34.2%
Labor Cost Reduction: 28.5%
ROI Period: 2.3 years

Warehouse Performance

Warehouse Location		Capacity Used	Inbound/Day	Outbound/Day	Picking Accuracy	Automation Level	Status
Distribution Center A	Chicago, IL	62.6%	1,302	3,447	98.8%	68.6%	Improvement Needed
Distribution Center B	Dallas, TX	71.4%	1,067	2,491	97.4%	82.2%	Optimized
Distribution Center C	Atlanta, GA	67.2%	2,651	3,660	99.0%	75.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	55.6%	2,953	1,996	97.6%	93.0%	Optimized
Distribution Center E	Newark, NJ	57.2%	2,641	3,972	95.9%	88.6%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement voice-

picking
system to
improve
accuracy to
99.8%

- Upgrade WMS integration for real-time inventory visibility

- Add automated sortation system for small package handling

- Implement predictive analytics for demand-based staffing

- Consider AS/RS system for high-velocity SKUs