

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 32
Average Utilization: 84.1%
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	37.8%	2,802	2,672	95.2%	78.8%	Improvement Needed
Distribution Center B	Dallas, TX	119.2%	2,917	1,575	96.9%	82.5%	Optimized
Distribution Center C	Atlanta, GA	58.0%	2,447	1,657	95.7%	74.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	58.5%	2,070	3,688	97.0%	95.0%	Optimized
Distribution Center E	Newark, NJ	43.1%	1,421	3,516	96.4%	89.9%	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