

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
Average Utilization: 78.8%
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	52.2%	1,773	1,953	96.3%	73.8%	Improvement Needed
Distribution Center B	Dallas, TX	88.8%	2,599	2,998	98.1%	82.9%	Optimized
Distribution Center C	Atlanta, GA	75.8%	2,854	3,857	96.1%	81.7%	Optimized
Distribution Center D	Los Angeles, CA	44.1%	1,270	3,247	96.5%	90.7%	Optimized
Distribution Center E	Newark, NJ	67.3%	1,723	2,962	99.2%	64.8%	Improvement Needed

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