

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 61
Average Utilization: 79.4%
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	83.1%	2,184	2,499	97.6%	94.9%	Optimized
	Dallas, TX	95.0%	2,118	2,935	99.4%	80.5%	Optimized
Distribution Center B	Atlanta, GA	69.4%	1,434	2,262	95.1%	64.4%	Improvement Needed
Distribution Center C	Los Angeles, CA	58.6%	1,715	2,582	97.2%	65.1%	Improvement Needed
Distribution Center D	Newark, NJ	75.6%	1,442	2,984	98.6%	91.9%	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