

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: 71.5%
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	59.1%	1,524	1,890	97.0%	77.3%	Improvement Needed
Distribution Center B	Dallas, TX	57.1%	1,457	1,971	97.7%	75.5%	Improvement Needed
Distribution Center C	Atlanta, GA	60.9%	2,598	1,538	98.2%	60.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	74.0%	2,141	3,105	96.2%	76.3%	Improvement Needed
Distribution Center E	Newark, NJ	65.5%	1,085	2,990	99.4%	67.9%	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