

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 75
Average Utilization: 71.6%
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	47.8%	2,405	3,609	97.3%	75.5%	Improvement Needed
Distribution Center B	Dallas, TX	80.0%	2,857	3,780	96.2%	66.8%	Improvement Needed
Distribution Center C	Atlanta, GA	82.2%	1,938	2,859	97.5%	80.5%	Optimized
Distribution Center D	Los Angeles, CA	66.8%	2,243	1,539	99.5%	72.7%	Improvement Needed
Distribution Center E	Newark, NJ	45.0%	1,772	2,657	96.9%	62.2%	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