

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 27
Average Utilization: 73.3%
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	46.9%	1,062	3,831	97.6%	73.9%	Improvement Needed
Distribution Center B	Dallas, TX	72.3%	2,607	3,581	96.4%	69.3%	Improvement Needed
Distribution Center C	Atlanta, GA	60.5%	1,775	3,230	99.0%	73.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	107.0%	1,872	2,352	95.3%	88.1%	Optimized
Distribution Center E	Newark, NJ	47.9%	1,431	2,440	97.3%	61.8%	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