

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 67.5%
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	42.3%	2,452	3,519	95.3%	71.8%	Improvement Needed
Distribution Center B	Dallas, TX	66.9%	2,745	2,538	98.4%	73.3%	Improvement Needed
Distribution Center C	Atlanta, GA	48.2%	1,873	2,160	96.8%	66.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	88.7%	2,842	3,367	98.5%	60.2%	Improvement Needed
Distribution Center E	Newark, NJ	61.6%	2,689	2,132	97.4%	65.6%	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