

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 29
Average Utilization: 79.9%
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	69.1%	1,424	3,026	98.8%	74.2%	Improvement Needed
Distribution Center B	Dallas, TX	59.3%	1,724	2,767	97.7%	94.1%	Optimized
Distribution Center C	Atlanta, GA	65.7%	1,135	3,699	97.7%	80.7%	Optimized
Distribution Center D	Los Angeles, CA	50.0%	1,528	2,741	97.8%	90.1%	Optimized
Distribution Center E	Newark, NJ	65.0%	2,621	2,037	97.8%	60.2%	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