

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 74.7%
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	58.4%	1,064	3,224	96.8%	70.4%	Improvement Needed
Distribution Center B	Dallas, TX	79.4%	1,539	3,511	97.1%	70.1%	Improvement Needed
Distribution Center C	Atlanta, GA	65.1%	2,470	1,997	97.4%	78.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	63.5%	2,381	1,847	98.9%	82.5%	Optimized
Distribution Center E	Newark, NJ	67.7%	2,095	3,271	95.2%	72.3%	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