

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 23
Average Utilization: 71.1%
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	64.2%	2,073	1,557	97.6%	61.4%	Improvement Needed
Distribution Center B	Dallas, TX	71.1%	1,935	3,711	98.0%	65.0%	Improvement Needed
Distribution Center C	Atlanta, GA	79.5%	2,589	2,705	96.9%	68.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	91.3%	2,463	2,961	96.9%	89.6%	Optimized
Distribution Center E	Newark, NJ	102.5%	2,819	3,321	98.1%	70.7%	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