

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 57
Average Utilization: 70.0%
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	40.5%	1,388	2,239	97.3%	61.7%	Improvement Needed
Distribution Center B	Dallas, TX	65.7%	2,079	2,877	99.4%	67.3%	Improvement Needed
Distribution Center C	Atlanta, GA	40.6%	1,254	2,849	97.1%	75.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	43.3%	2,480	1,793	97.4%	62.0%	Improvement Needed
Distribution Center E	Newark, NJ	69.8%	1,316	2,483	98.1%	83.5%	Optimized

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