

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 61
Average Utilization: 80.9%
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	61.7%	1,856	3,038	97.0%	90.3%	Optimized
	Dallas, TX	78.5%	1,648	2,476	97.0%	87.0%	Optimized
Distribution Center B	Atlanta, GA	74.0%	2,348	3,766	97.9%	66.0%	Improvement Needed
Distribution Center C	Los Angeles, CA	58.3%	2,230	2,734	97.8%	75.9%	Improvement Needed
Distribution Center D	Newark, NJ	30.7%	2,274	2,853	98.7%	85.4%	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