

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 50
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	43.2%	2,599	3,174	98.8%	79.0%	Improvement Needed
Distribution Center B	Dallas, TX	39.8%	2,598	2,971	95.1%	64.3%	Improvement Needed
Distribution Center C	Atlanta, GA	58.1%	1,765	3,414	95.8%	91.5%	Optimized
Distribution Center D	Los Angeles, CA	81.7%	1,136	3,952	98.0%	89.5%	Optimized
Distribution Center E	Newark, NJ	108.7%	2,413	1,841	96.8%	80.2%	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