

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 82.0%
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	86.6%	2,766	3,371	96.0%	68.4%	Improvement Needed
Distribution Center B	Dallas, TX	51.0%	2,346	3,274	96.2%	88.0%	Optimized
Distribution Center C	Atlanta, GA	75.3%	2,893	3,896	97.8%	71.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	58.2%	1,294	3,454	95.0%	91.1%	Optimized
Distribution Center E	Newark, NJ	93.7%	1,383	1,845	97.7%	90.9%	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