

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 71
Average Utilization: 81.5%
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	82.6%	2,631	3,539	97.8%	72.7%	Improvement Needed
Distribution Center B	Dallas, TX	58.2%	1,085	2,333	95.8%	65.5%	Improvement Needed
Distribution Center C	Atlanta, GA	40.9%	1,236	3,761	96.9%	88.6%	Optimized
Distribution Center D	Los Angeles, CA	42.0%	2,381	2,201	97.1%	86.5%	Optimized
Distribution Center E	Newark, NJ	63.3%	1,951	3,704	97.3%	94.4%	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