

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 73
Average Utilization: 82.6%
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	58.2%	2,529	3,395	98.5%	79.3%	Improvement Needed
Distribution Center B	Dallas, TX	50.4%	2,948	3,834	97.1%	60.1%	Improvement Needed
Distribution Center C	Atlanta, GA	60.3%	2,620	2,683	96.8%	88.4%	Optimized
Distribution Center D	Los Angeles, CA	77.4%	2,929	3,888	95.7%	91.0%	Optimized
Distribution Center E	Newark, NJ	54.5%	2,891	2,100	95.7%	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