

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: 83.5%
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	61.8%	1,368	3,819	98.1%	79.7%	Improvement Needed
Distribution Center B	Dallas, TX	69.2%	1,257	1,687	95.6%	66.9%	Improvement Needed
Distribution Center C	Atlanta, GA	94.0%	1,531	1,777	95.9%	88.4%	Optimized
Distribution Center D	Los Angeles, CA	42.8%	1,113	2,870	98.2%	91.4%	Optimized
Distribution Center E	Newark, NJ	48.0%	2,556	3,643	95.7%	91.2%	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