

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 86.1%
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	59.3%	2,269	2,018	99.1%	77.4%	Improvement Needed
Distribution Center B	Dallas, TX	63.9%	1,064	1,810	97.7%	90.8%	Optimized
Distribution Center C	Atlanta, GA	94.4%	1,977	3,069	97.1%	94.8%	Optimized
Distribution Center D	Los Angeles, CA	46.8%	1,507	2,283	97.1%	92.9%	Optimized
Distribution Center E	Newark, NJ	51.4%	2,469	2,903	98.5%	74.6%	Improvement Needed

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