

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 68
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	94.2%	2,811	2,659	95.1%	76.9%	Improvement Needed
Distribution Center B	Dallas, TX	42.3%	2,585	3,135	99.0%	93.8%	Optimized
Distribution Center C	Atlanta, GA	62.1%	2,029	3,323	98.1%	90.7%	Optimized
Distribution Center D	Los Angeles, CA	51.1%	2,374	2,134	99.1%	81.1%	Optimized
Distribution Center E	Newark, NJ	69.1%	1,377	2,529	99.5%	70.7%	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