

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 83.2%
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	105.7%	2,520	3,135	96.0%	71.6%	Improvement Needed
Distribution Center B	Dallas, TX	64.2%	1,783	2,792	95.7%	87.8%	Optimized
Distribution Center C	Atlanta, GA	73.5%	2,210	2,370	98.1%	87.2%	Optimized
Distribution Center D	Los Angeles, CA	63.3%	2,139	3,581	95.3%	91.1%	Optimized
Distribution Center E	Newark, NJ	38.7%	2,327	2,261	95.6%	78.2%	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