

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 55
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	52.5%	1,047	1,857	95.2%	78.8%	Improvement Needed
Distribution Center B	Dallas, TX	76.8%	2,921	2,348	96.7%	89.1%	Optimized
Distribution Center C	Atlanta, GA	56.6%	1,355	3,919	98.8%	88.0%	Optimized
Distribution Center D	Los Angeles, CA	71.7%	2,167	1,750	98.0%	71.4%	Improvement Needed
Distribution Center E	Newark, NJ	56.7%	1,460	3,180	99.0%	88.8%	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