

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: 78.3%
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	82.8%	1,652	3,440	99.2%	68.6%	Improvement Needed
Distribution Center B	Dallas, TX	30.4%	2,615	2,628	99.2%	82.8%	Optimized
Distribution Center C	Atlanta, GA	54.1%	2,773	1,615	97.7%	62.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	97.8%	1,162	1,650	98.1%	94.3%	Optimized
Distribution Center E	Newark, NJ	46.5%	2,484	2,305	99.4%	83.5%	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