

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 59
Average Utilization: 80.6%
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	79.6%	2,393	3,886	95.2%	73.8%	Improvement Needed
Distribution Center B	Dallas, TX	85.9%	1,491	2,820	97.8%	66.7%	Improvement Needed
Distribution Center C	Atlanta, GA	61.6%	1,194	1,882	97.0%	88.6%	Optimized
Distribution Center D	Los Angeles, CA	46.3%	2,858	1,552	97.0%	83.5%	Optimized
Distribution Center E	Newark, NJ	65.5%	2,230	3,978	98.3%	90.6%	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