

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 37
Average Utilization: 83.0%
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	86.5%	1,808	2,865	99.0%	69.2%	Improvement Needed
Distribution Center B	Dallas, TX	64.6%	1,673	3,578	95.6%	90.2%	Optimized
Distribution Center C	Atlanta, GA	58.8%	2,459	3,910	98.0%	75.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	54.6%	1,116	2,953	95.5%	85.5%	Optimized
Distribution Center E	Newark, NJ	126.9%	2,666	3,303	97.1%	94.4%	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