

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 38
Average Utilization: 79.0%
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	72.9%	1,489	1,627	96.3%	67.8%	Improvement Needed
Distribution Center B	Dallas, TX	41.6%	1,697	2,751	97.9%	85.5%	Optimized
Distribution Center C	Atlanta, GA	57.3%	1,704	2,931	98.2%	88.7%	Optimized
Distribution Center D	Los Angeles, CA	55.7%	1,019	3,183	99.4%	82.7%	Optimized
Distribution Center E	Newark, NJ	39.6%	1,059	2,456	97.8%	70.4%	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