

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: 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	86.1%	1,436	3,655	99.2%	93.5%	Optimized
	Dallas, TX	66.2%	1,629	2,185	99.0%	71.9%	Improvement Needed
Distribution Center B	Atlanta, GA	40.8%	2,693	1,911	96.4%	80.2%	Optimized
Distribution Center C	Los Angeles, CA	119.9%	2,273	2,001	98.5%	62.7%	Improvement Needed
Distribution Center D	Newark, NJ	101.5%	2,000	1,876	97.5%	86.8%	Optimized
Distribution Center E							

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