

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 84.1%
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	75.7%	2,504	2,111	98.9%	78.6%	Improvement Needed
Distribution Center B	Dallas, TX	90.6%	1,609	3,594	95.2%	69.4%	Improvement Needed
Distribution Center C	Atlanta, GA	59.8%	1,771	3,831	95.1%	94.5%	Optimized
Distribution Center D	Los Angeles, CA	64.2%	2,797	2,141	95.1%	87.0%	Optimized
Distribution Center E	Newark, NJ	61.7%	1,730	2,960	96.9%	90.8%	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