

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 79.4%
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	50.1%	2,158	3,508	95.4%	66.8%	Improvement Needed
Distribution Center B	Dallas, TX	67.1%	2,516	1,781	99.1%	85.8%	Optimized
Distribution Center C	Atlanta, GA	64.1%	1,660	3,398	95.1%	82.6%	Optimized
Distribution Center D	Los Angeles, CA	63.0%	1,235	1,703	96.3%	82.7%	Optimized
Distribution Center E	Newark, NJ	96.0%	1,787	3,153	98.7%	78.8%	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