

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: 82.2%
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	68.8%	1,214	2,261	96.1%	68.1%	Improvement Needed
Distribution Center B	Dallas, TX	64.1%	1,792	2,582	99.4%	86.5%	Optimized
Distribution Center C	Atlanta, GA	63.7%	2,400	2,970	96.3%	68.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	58.1%	2,681	3,736	99.3%	93.4%	Optimized
Distribution Center E	Newark, NJ	39.3%	1,048	2,861	96.9%	94.6%	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