

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: 83.1%
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	77.4%	2,452	2,004	99.3%	66.4%	Improvement Needed
Distribution Center B	Dallas, TX	84.5%	2,080	2,587	98.0%	91.3%	Optimized
Distribution Center C	Atlanta, GA	94.9%	1,023	3,233	95.4%	71.9%	Improvement Needed
Distribution Center D	Los Angeles, CA	76.5%	1,673	3,501	97.1%	94.0%	Optimized
Distribution Center E	Newark, NJ	55.7%	1,866	3,811	98.2%	91.7%	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