

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 77.4%
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	91.3%	1,064	2,328	97.5%	65.8%	Improvement Needed
Distribution Center B	Dallas, TX	37.4%	1,267	3,249	99.3%	64.4%	Improvement Needed
Distribution Center C	Atlanta, GA	100.3%	2,618	2,746	98.6%	91.3%	Optimized
Distribution Center D	Los Angeles, CA	64.4%	1,552	1,680	95.1%	83.5%	Optimized
Distribution Center E	Newark, NJ	56.0%	1,616	1,992	97.3%	81.7%	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