

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 48
Average Utilization: 78.3%
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	68.1%	2,088	1,937	99.4%	70.1%	Improvement Needed
Distribution Center B	Dallas, TX	91.3%	2,486	3,886	96.1%	88.0%	Optimized
Distribution Center C	Atlanta, GA	97.0%	2,720	3,556	97.9%	82.7%	Optimized
Distribution Center D	Los Angeles, CA	56.2%	1,158	3,581	95.4%	64.7%	Improvement Needed
Distribution Center E	Newark, NJ	65.9%	2,486	3,230	98.7%	86.2%	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