

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 31
Average Utilization: 83.6%
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	109.2%	2,024	1,775	98.7%	77.0%	Improvement Needed
Distribution Center B	Dallas, TX	97.3%	1,738	1,749	97.7%	85.1%	Optimized
Distribution Center C	Atlanta, GA	48.5%	1,053	2,370	98.3%	92.1%	Optimized
Distribution Center D	Los Angeles, CA	54.6%	2,168	2,968	99.2%	69.9%	Improvement Needed
Distribution Center E	Newark, NJ	42.8%	2,720	2,035	98.3%	93.7%	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