

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 27
Average Utilization: 81.1%
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	130.1%	2,258	2,969	98.4%	94.4%	Optimized
	Dallas, TX	59.3%	1,388	1,596	95.9%	89.6%	Optimized
Distribution Center B	Atlanta, GA	96.5%	2,919	2,976	99.2%	60.1%	Improvement Needed
Distribution Center C	Los Angeles, CA	78.6%	2,727	2,464	96.4%	91.4%	Optimized
Distribution Center D	Newark, NJ	44.7%	2,351	2,779	97.5%	70.3%	Improvement Needed
Center E							

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