

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 84.6%
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	40.0%	2,271	2,873	95.0%	71.5%	Improvement Needed
Distribution Center B	Dallas, TX	35.3%	1,393	2,182	96.4%	93.1%	Optimized
Distribution Center C	Atlanta, GA	74.9%	2,844	2,390	99.4%	94.6%	Optimized
Distribution Center D	Los Angeles, CA	100.4%	2,830	1,576	99.4%	86.0%	Optimized
Distribution Center E	Newark, NJ	56.8%	2,293	2,784	96.1%	77.5%	Improvement Needed

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