

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 81.0%
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	71.7%	2,287	3,004	98.3%	67.9%	Improvement Needed
Distribution Center B	Dallas, TX	70.3%	2,522	2,644	97.3%	94.7%	Optimized
Distribution Center C	Atlanta, GA	99.3%	2,546	2,792	96.5%	67.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	102.5%	2,636	1,767	96.6%	83.6%	Optimized
Distribution Center E	Newark, NJ	83.2%	1,130	3,159	96.9%	91.6%	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