

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 41
Average Utilization: 77.0%
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	89.1%	2,488	2,175	98.9%	67.4%	Improvement Needed
Distribution Center B	Dallas, TX	41.0%	2,259	3,071	95.3%	83.4%	Optimized
Distribution Center C	Atlanta, GA	72.1%	1,594	2,032	97.0%	62.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	69.0%	2,367	1,537	99.2%	84.4%	Optimized
Distribution Center E	Newark, NJ	57.5%	2,989	3,292	95.6%	87.1%	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