

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	66.7%	2,056	3,396	97.4%	73.4%	Improvement Needed
Distribution Center B	Dallas, TX	76.5%	1,701	2,950	95.7%	82.1%	Optimized
Distribution Center C	Atlanta, GA	71.1%	1,107	2,874	95.1%	80.4%	Optimized
Distribution Center D	Los Angeles, CA	69.2%	1,601	2,984	99.2%	82.6%	Optimized
Distribution Center E	Newark, NJ	56.4%	1,120	3,869	97.1%	86.4%	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