

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: 79.3%
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	42.2%	1,695	3,340	98.7%	62.4%	Improvement Needed
Distribution Center B	Dallas, TX	98.9%	1,830	2,200	97.3%	71.2%	Improvement Needed
Distribution Center C	Atlanta, GA	69.3%	2,468	3,965	97.8%	90.3%	Optimized
Distribution Center D	Los Angeles, CA	97.3%	2,676	2,314	95.4%	91.3%	Optimized
Distribution Center E	Newark, NJ	70.6%	2,165	2,989	99.3%	81.1%	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