

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 77.2%
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	49.5%	1,292	3,133	96.7%	60.8%	Improvement Needed
Distribution Center B	Dallas, TX	53.6%	2,077	2,283	95.9%	81.4%	Optimized
Distribution Center C	Atlanta, GA	78.5%	2,044	2,937	98.8%	85.3%	Optimized
Distribution Center D	Los Angeles, CA	55.6%	1,977	3,458	97.4%	74.6%	Improvement Needed
Distribution Center E	Newark, NJ	69.7%	2,007	3,384	97.4%	84.1%	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