

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 19
Average Utilization: 81.1%
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	48.9%	2,200	3,810	99.2%	66.9%	Improvement Needed
Distribution Center B	Dallas, TX	57.0%	1,639	2,577	96.8%	65.9%	Improvement Needed
Distribution Center C	Atlanta, GA	42.4%	2,615	3,697	96.2%	94.1%	Optimized
Distribution Center D	Los Angeles, CA	82.1%	2,061	2,213	97.9%	85.8%	Optimized
Distribution Center E	Newark, NJ	48.5%	2,235	3,118	95.9%	93.0%	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