

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 72
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	107.6%	1,276	3,748	95.4%	66.9%	Improvement Needed
Distribution Center B	Dallas, TX	46.8%	2,197	1,979	97.2%	85.4%	Optimized
Distribution Center C	Atlanta, GA	44.4%	2,527	2,260	95.4%	83.1%	Optimized
Distribution Center D	Los Angeles, CA	90.0%	2,077	1,957	95.7%	89.4%	Optimized
Distribution Center E	Newark, NJ	58.6%	1,064	2,968	97.0%	80.7%	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