

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 86.9%
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	47.1%	1,978	3,901	99.4%	93.2%	Optimized
	Dallas, TX	88.9%	1,347	2,651	96.3%	93.0%	Optimized
Distribution Center B	Atlanta, GA	68.7%	2,885	2,832	98.4%	65.4%	Improvement Needed
Distribution Center C	Los Angeles, CA	32.1%	2,231	2,358	98.8%	93.2%	Optimized
Distribution Center D	Newark, NJ	61.0%	2,979	3,998	99.4%	89.8%	Optimized
Distribution Center E							

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