

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 40
Average Utilization: 85.6%
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	63.8%	2,078	2,629	98.7%	93.7%	Optimized
	Dallas, TX	71.6%	2,482	1,698	98.0%	81.3%	Optimized
Distribution Center B	Atlanta, GA	65.8%	1,486	3,355	98.9%	73.6%	Improvement Needed
Distribution Center C	Los Angeles, CA	39.5%	1,317	2,581	96.9%	88.0%	Optimized
Distribution Center D	Newark, NJ	42.8%	2,407	3,343	97.0%	91.7%	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