

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 84.1%
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	78.8%	2,607	1,740	97.1%	71.2%	Improvement Needed
Distribution Center B	Dallas, TX	104.0%	2,031	2,662	98.0%	93.7%	Optimized
Distribution Center C	Atlanta, GA	73.3%	2,426	2,985	97.1%	89.8%	Optimized
Distribution Center D	Los Angeles, CA	54.8%	2,259	3,372	99.3%	83.6%	Optimized
Distribution Center E	Newark, NJ	58.1%	2,676	3,701	96.2%	82.1%	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