

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 80.7%
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	53.4%	2,322	1,506	96.1%	72.9%	Improvement Needed
Distribution Center B	Dallas, TX	53.5%	2,897	1,819	98.7%	84.1%	Optimized
Distribution Center C	Atlanta, GA	71.8%	2,473	3,494	97.2%	87.7%	Optimized
Distribution Center D	Los Angeles, CA	94.0%	1,668	2,493	98.2%	86.0%	Optimized
Distribution Center E	Newark, NJ	63.3%	2,240	2,602	95.4%	73.1%	Improvement Needed

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