

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 83.0%
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	59.6%	2,849	2,274	97.6%	76.7%	Improvement Needed
Distribution Center B	Dallas, TX	108.6%	1,953	2,131	98.9%	75.1%	Improvement Needed
Distribution Center C	Atlanta, GA	103.0%	1,044	1,777	98.0%	90.4%	Optimized
Distribution Center D	Los Angeles, CA	50.8%	1,977	1,615	95.5%	84.2%	Optimized
Distribution Center E	Newark, NJ	82.1%	2,608	2,075	98.8%	88.4%	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