

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: 81.3%
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%	2,426	1,572	96.0%	63.8%	Improvement Needed
Distribution Center B	Dallas, TX	77.7%	2,462	2,902	98.1%	90.4%	Optimized
Distribution Center C	Atlanta, GA	80.2%	1,341	3,359	98.2%	88.9%	Optimized
Distribution Center D	Los Angeles, CA	42.8%	2,850	1,754	98.5%	86.6%	Optimized
Distribution Center E	Newark, NJ	40.5%	1,491	3,223	97.8%	76.6%	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