

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 73.8%
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	90.8%	2,367	2,457	96.6%	77.5%	Improvement Needed
Distribution Center B	Dallas, TX	91.5%	1,433	1,958	98.2%	66.5%	Improvement Needed
Distribution Center C	Atlanta, GA	40.0%	2,983	1,607	98.1%	66.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	85.5%	1,859	1,953	98.9%	76.1%	Improvement Needed
Distribution Center E	Newark, NJ	102.1%	2,685	3,611	96.8%	81.9%	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