

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 18
Average Utilization: 70.6%
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	87.2%	2,231	3,657	98.4%	66.0%	Improvement Needed
Distribution Center B	Dallas, TX	31.7%	2,774	1,910	97.5%	79.7%	Improvement Needed
Distribution Center C	Atlanta, GA	97.2%	1,574	2,344	96.4%	60.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	87.6%	1,454	3,906	96.0%	85.7%	Optimized
Distribution Center E	Newark, NJ	62.1%	2,678	1,581	99.3%	60.8%	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