

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 11
Average Utilization: 76.5%
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	72.2%	2,763	3,931	96.0%	78.5%	Improvement Needed
Distribution Center B	Dallas, TX	45.8%	1,763	3,334	97.9%	77.8%	Improvement Needed
Distribution Center C	Atlanta, GA	81.5%	2,574	1,681	97.1%	85.4%	Optimized
Distribution Center D	Los Angeles, CA	78.4%	2,230	3,983	97.6%	61.6%	Improvement Needed
Distribution Center E	Newark, NJ	51.6%	2,517	3,355	99.1%	79.3%	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