

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 33
Average Utilization: 75.6%
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	60.1%	2,215	3,544	98.0%	68.2%	Improvement Needed
Distribution Center B	Dallas, TX	103.2%	1,463	3,989	96.3%	79.0%	Improvement Needed
Distribution Center C	Atlanta, GA	89.2%	2,309	1,928	97.4%	91.7%	Optimized
Distribution Center D	Los Angeles, CA	87.4%	2,688	1,907	95.1%	70.3%	Improvement Needed
Distribution Center E	Newark, NJ	112.1%	2,524	2,145	95.9%	68.5%	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