

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 74.4%
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	51.0%	1,706	1,533	98.0%	72.1%	Improvement Needed
Distribution Center B	Dallas, TX	87.2%	1,271	3,951	95.2%	61.0%	Improvement Needed
Distribution Center C	Atlanta, GA	84.4%	1,531	3,111	97.9%	87.7%	Optimized
Distribution Center D	Los Angeles, CA	57.3%	2,494	2,806	96.1%	78.7%	Improvement Needed
Distribution Center E	Newark, NJ	60.7%	1,647	2,980	98.1%	72.2%	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