

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 74.7%
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	84.5%	1,762	3,278	97.7%	68.6%	Improvement Needed
Distribution Center B	Dallas, TX	84.1%	1,785	3,805	96.7%	70.5%	Improvement Needed
Distribution Center C	Atlanta, GA	80.9%	1,339	3,739	97.4%	86.3%	Optimized
Distribution Center D	Los Angeles, CA	56.3%	1,678	3,057	98.4%	69.0%	Improvement Needed
Distribution Center E	Newark, NJ	74.5%	2,239	1,579	99.2%	79.2%	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