

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 78.3%
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	45.3%	1,129	3,082	96.8%	66.0%	Improvement Needed
Distribution Center B	Dallas, TX	86.8%	1,040	3,808	97.6%	78.9%	Improvement Needed
Distribution Center C	Atlanta, GA	63.0%	2,859	2,976	95.1%	73.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	36.7%	1,338	3,580	96.6%	93.5%	Optimized
Distribution Center E	Newark, NJ	82.1%	2,651	2,556	97.4%	80.0%	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