

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 74.3%
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	48.3%	1,128	3,860	98.7%	65.0%	Improvement Needed
Distribution Center B	Dallas, TX	37.8%	2,369	1,839	99.4%	79.8%	Improvement Needed
Distribution Center C	Atlanta, GA	71.4%	1,426	2,857	96.7%	87.3%	Optimized
Distribution Center D	Los Angeles, CA	98.5%	1,170	2,416	97.2%	70.7%	Improvement Needed
Distribution Center E	Newark, NJ	106.8%	2,909	2,890	95.7%	68.6%	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