

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 73.9%
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	79.8%	2,843	2,852	99.1%	77.4%	Improvement Needed
Distribution Center B	Dallas, TX	49.6%	2,563	1,701	96.0%	62.5%	Improvement Needed
Distribution Center C	Atlanta, GA	72.5%	1,356	1,655	99.1%	71.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	55.8%	1,926	2,408	98.2%	71.9%	Improvement Needed
Distribution Center E	Newark, NJ	49.2%	2,923	3,703	96.6%	86.3%	Optimized

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