

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 58
Average Utilization: 72.2%
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	80.1%	1,238	2,029	98.6%	63.6%	Improvement Needed
Distribution Center B	Dallas, TX	66.9%	2,900	3,294	96.2%	76.9%	Improvement Needed
Distribution Center C	Atlanta, GA	38.4%	1,364	3,135	97.8%	70.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	60.3%	1,387	2,814	96.7%	84.6%	Optimized
Distribution Center E	Newark, NJ	72.5%	2,031	3,634	95.3%	65.4%	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