

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 31
Average Utilization: 78.2%
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	79.4%	2,354	2,906	96.4%	76.1%	Improvement Needed
Distribution Center B	Dallas, TX	60.5%	2,833	3,543	97.4%	62.2%	Improvement Needed
Distribution Center C	Atlanta, GA	80.1%	2,494	1,972	97.7%	92.2%	Optimized
Distribution Center D	Los Angeles, CA	79.0%	2,336	3,263	95.3%	80.4%	Optimized
Distribution Center E	Newark, NJ	115.3%	2,084	2,752	98.0%	80.1%	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