

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 81.8%
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	90.6%	2,813	3,513	99.3%	65.5%	Improvement Needed
Distribution Center B	Dallas, TX	61.6%	2,611	2,323	96.5%	86.1%	Optimized
Distribution Center C	Atlanta, GA	74.2%	1,528	1,653	97.2%	88.5%	Optimized
Distribution Center D	Los Angeles, CA	59.4%	1,731	2,755	96.0%	78.7%	Improvement Needed
Distribution Center E	Newark, NJ	100.7%	1,032	2,728	95.3%	90.2%	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