

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 41
Average Utilization: 82.1%
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	100.5%	2,501	3,133	96.0%	72.8%	Improvement Needed
Distribution Center B	Dallas, TX	91.1%	2,436	3,097	99.4%	75.5%	Improvement Needed
Distribution Center C	Atlanta, GA	80.7%	1,962	2,746	97.7%	91.4%	Optimized
Distribution Center D	Los Angeles, CA	79.1%	1,603	3,482	97.6%	80.0%	Optimized
Distribution Center E	Newark, NJ	72.3%	1,585	1,955	99.3%	90.8%	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