

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 80.5%
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	68.5%	1,366	3,699	97.2%	80.2%	Optimized
Distribution Center B	Dallas, TX	48.7%	2,910	3,437	95.1%	71.2%	Improvement Needed
Distribution Center C	Atlanta, GA	50.8%	1,683	3,023	96.6%	72.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	96.7%	2,753	3,737	96.9%	94.0%	Optimized
Distribution Center E	Newark, NJ	111.5%	1,217	2,924	99.2%	84.2%	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