

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 56
Average Utilization: 77.4%
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	92.0%	1,445	1,728	95.2%	61.8%	Improvement Needed
Distribution Center B	Dallas, TX	76.8%	1,487	2,339	99.2%	77.7%	Improvement Needed
Distribution Center C	Atlanta, GA	67.8%	2,026	2,001	95.2%	80.0%	Optimized
Distribution Center D	Los Angeles, CA	67.3%	2,669	2,247	96.3%	81.4%	Optimized
Distribution Center E	Newark, NJ	99.3%	2,817	3,148	96.4%	86.1%	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