

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 78.5%
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	36.9%	1,150	1,513	96.8%	75.2%	Improvement Needed
Distribution Center B	Dallas, TX	33.9%	2,790	3,568	95.4%	61.0%	Improvement Needed
Distribution Center C	Atlanta, GA	82.0%	1,769	2,517	96.8%	81.0%	Optimized
Distribution Center D	Los Angeles, CA	89.4%	1,895	3,413	98.6%	93.9%	Optimized
Distribution Center E	Newark, NJ	64.0%	1,037	1,713	99.5%	81.5%	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