

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 70
Average Utilization: 80.9%
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	59.3%	1,856	1,880	99.0%	71.1%	Improvement Needed
Distribution Center B	Dallas, TX	92.6%	2,533	3,128	97.9%	91.8%	Optimized
Distribution Center C	Atlanta, GA	40.4%	1,597	3,733	95.3%	63.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	56.3%	2,380	3,559	98.7%	88.0%	Optimized
Distribution Center E	Newark, NJ	82.1%	2,007	1,624	97.1%	90.7%	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