

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 82.6%
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	71.4%	2,612	3,389	98.2%	74.5%	Improvement Needed
Distribution Center B	Dallas, TX	71.3%	1,271	1,696	98.5%	76.3%	Improvement Needed
Distribution Center C	Atlanta, GA	88.4%	2,317	1,990	96.7%	87.0%	Optimized
Distribution Center D	Los Angeles, CA	52.0%	2,394	1,645	99.4%	91.3%	Optimized
Distribution Center E	Newark, NJ	92.6%	1,436	2,450	97.8%	83.7%	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