

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 80.8%
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	87.5%	2,489	1,808	96.1%	66.5%	Improvement Needed
Distribution Center B	Dallas, TX	53.8%	1,747	2,818	95.9%	71.5%	Improvement Needed
Distribution Center C	Atlanta, GA	56.8%	2,266	1,504	95.2%	88.0%	Optimized
Distribution Center D	Los Angeles, CA	85.2%	2,807	2,539	97.1%	94.8%	Optimized
Distribution Center E	Newark, NJ	54.2%	2,511	3,987	99.3%	83.1%	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