

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 83.6%
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	127.8%	2,132	3,008	99.3%	75.9%	Improvement Needed
Distribution Center B	Dallas, TX	39.3%	2,156	3,908	97.2%	82.0%	Optimized
Distribution Center C	Atlanta, GA	45.7%	2,692	1,685	96.4%	94.6%	Optimized
Distribution Center D	Los Angeles, CA	62.0%	2,310	3,499	98.1%	76.1%	Improvement Needed
Distribution Center E	Newark, NJ	57.2%	2,751	2,215	96.0%	89.3%	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