

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 82.1%
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	48.3%	1,229	3,318	95.6%	61.0%	Improvement Needed
Distribution Center B	Dallas, TX	98.3%	1,129	3,202	97.8%	92.3%	Optimized
Distribution Center C	Atlanta, GA	60.2%	1,263	1,717	98.7%	73.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	40.3%	1,023	2,144	96.8%	94.4%	Optimized
Distribution Center E	Newark, NJ	57.0%	2,728	3,964	95.6%	89.6%	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