

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 80.3%
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	83.8%	2,002	2,261	97.7%	76.0%	Improvement Needed
Distribution Center B	Dallas, TX	57.6%	2,813	2,686	95.2%	81.6%	Optimized
Distribution Center C	Atlanta, GA	55.4%	2,813	2,655	98.9%	67.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	90.0%	1,177	1,642	99.0%	82.8%	Optimized
Distribution Center E	Newark, NJ	101.8%	2,074	2,928	96.8%	94.1%	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