

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 48
Average Utilization: 82.2%
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	39.3%	1,889	3,175	96.1%	66.5%	Improvement Needed
Distribution Center B	Dallas, TX	40.3%	2,286	3,072	95.8%	89.6%	Optimized
Distribution Center C	Atlanta, GA	97.8%	1,876	3,291	97.6%	89.1%	Optimized
Distribution Center D	Los Angeles, CA	68.7%	2,332	3,794	99.2%	89.0%	Optimized
Distribution Center E	Newark, NJ	59.8%	1,577	2,176	98.7%	76.8%	Improvement Needed

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