

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 59
Average Utilization: 83.5%
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	95.0%	1,470	2,976	97.0%	68.5%	Improvement Needed
Distribution Center B	Dallas, TX	85.6%	1,005	2,735	96.0%	81.0%	Optimized
Distribution Center C	Atlanta, GA	44.6%	1,204	1,626	97.4%	84.1%	Optimized
Distribution Center D	Los Angeles, CA	52.9%	2,030	3,137	97.3%	94.6%	Optimized
Distribution Center E	Newark, NJ	89.4%	1,469	2,108	97.2%	89.0%	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