

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 80.7%
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	97.9%	1,467	3,120	99.2%	64.2%	Improvement Needed
Distribution Center B	Dallas, TX	69.8%	1,110	1,769	99.2%	81.9%	Optimized
Distribution Center C	Atlanta, GA	49.8%	1,354	3,084	96.9%	81.0%	Optimized
Distribution Center D	Los Angeles, CA	82.4%	1,231	3,130	95.7%	81.9%	Optimized
Distribution Center E	Newark, NJ	95.7%	2,653	1,804	96.8%	94.3%	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