

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: 86.1%
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	50.7%	2,295	1,766	98.5%	70.4%	Improvement Needed
Distribution Center B	Dallas, TX	63.1%	2,616	1,755	95.1%	86.9%	Optimized
Distribution Center C	Atlanta, GA	55.2%	2,689	1,709	98.2%	91.3%	Optimized
Distribution Center D	Los Angeles, CA	95.2%	1,697	3,125	95.8%	90.7%	Optimized
Distribution Center E	Newark, NJ	49.1%	1,089	3,092	95.8%	91.2%	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