

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 77.0%
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	90.1%	1,559	3,155	98.2%	87.4%	Optimized
	Dallas, TX	74.9%	1,198	1,704	96.9%	60.7%	Improvement Needed
Distribution Center B	Atlanta, GA	73.5%	2,203	1,961	96.0%	60.3%	Improvement Needed
Distribution Center D	Los Angeles, CA	121.7%	2,409	2,803	96.0%	93.4%	Optimized
Distribution Center E	Newark, NJ	62.0%	2,193	2,147	97.9%	83.0%	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