

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 52
Average Utilization: 84.8%
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	82.7%	2,589	2,952	97.5%	77.2%	Improvement Needed
Distribution Center B	Dallas, TX	88.3%	2,084	2,423	98.7%	92.1%	Optimized
Distribution Center C	Atlanta, GA	45.1%	1,432	1,778	98.8%	88.9%	Optimized
Distribution Center D	Los Angeles, CA	79.4%	2,416	3,991	96.2%	93.6%	Optimized
Distribution Center E	Newark, NJ	63.9%	2,666	2,794	98.0%	72.5%	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