

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 62
Average Utilization: 75.3%
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	97.8%	1,767	2,211	98.9%	60.7%	Improvement Needed
Distribution Center B	Dallas, TX	58.6%	2,410	3,351	98.1%	60.3%	Improvement Needed
Distribution Center C	Atlanta, GA	43.7%	1,121	2,152	98.8%	82.6%	Optimized
Distribution Center D	Los Angeles, CA	34.0%	1,613	3,968	98.2%	81.2%	Optimized
Distribution Center E	Newark, NJ	60.5%	1,335	3,749	99.4%	91.7%	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