

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 79.9%
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	76.5%	2,123	1,585	96.2%	69.9%	Improvement Needed
Distribution Center B	Dallas, TX	93.1%	2,479	1,853	95.9%	78.9%	Improvement Needed
Distribution Center C	Atlanta, GA	51.5%	1,827	3,049	97.1%	82.8%	Optimized
Distribution Center D	Los Angeles, CA	74.3%	2,093	3,953	95.2%	82.0%	Optimized
Distribution Center E	Newark, NJ	85.3%	1,796	3,764	98.6%	85.9%	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