

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 34
Average Utilization: 76.4%
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	61.0%	1,446	1,653	96.2%	61.0%	Improvement Needed
Distribution Center B	Dallas, TX	55.3%	1,941	3,899	95.7%	81.8%	Optimized
Distribution Center C	Atlanta, GA	61.4%	2,506	2,550	96.4%	88.5%	Optimized
Distribution Center D	Los Angeles, CA	72.3%	1,361	3,209	98.7%	62.2%	Improvement Needed
Distribution Center E	Newark, NJ	66.9%	1,172	2,803	98.0%	88.6%	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