

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 50
Average Utilization: 79.8%
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	101.6%	2,558	1,979	99.1%	64.0%	Improvement Needed
Distribution Center B	Dallas, TX	116.1%	1,194	1,951	96.2%	87.3%	Optimized
Distribution Center C	Atlanta, GA	48.6%	2,200	2,473	98.7%	84.2%	Optimized
Distribution Center D	Los Angeles, CA	70.4%	1,046	3,019	98.2%	90.1%	Optimized
Distribution Center E	Newark, NJ	64.4%	1,022	3,102	97.5%	73.5%	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