

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 66
Average Utilization: 83.0%
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	110.2%	1,241	3,698	97.9%	79.1%	Improvement Needed
Distribution Center B	Dallas, TX	54.9%	1,311	1,591	95.8%	67.2%	Improvement Needed
Distribution Center C	Atlanta, GA	42.5%	2,358	3,648	99.2%	92.9%	Optimized
Distribution Center D	Los Angeles, CA	75.8%	2,956	2,845	96.3%	90.3%	Optimized
Distribution Center E	Newark, NJ	47.0%	1,893	1,565	98.3%	85.4%	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