

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 80.7%
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	63.8%	2,282	1,619	95.1%	68.0%	Improvement Needed
Distribution Center B	Dallas, TX	128.0%	2,265	2,422	95.5%	94.2%	Optimized
Distribution Center C	Atlanta, GA	71.0%	2,360	1,885	97.1%	87.6%	Optimized
Distribution Center D	Los Angeles, CA	79.6%	2,940	2,769	96.2%	80.8%	Optimized
Distribution Center E	Newark, NJ	37.0%	2,481	3,398	96.0%	73.1%	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