

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 82.7%
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	75.6%	2,960	3,797	97.1%	69.3%	Improvement Needed
Distribution Center B	Dallas, TX	53.2%	1,716	2,662	96.1%	76.2%	Improvement Needed
Distribution Center C	Atlanta, GA	54.3%	2,518	3,431	96.0%	92.4%	Optimized
Distribution Center D	Los Angeles, CA	114.9%	1,211	1,534	97.3%	87.4%	Optimized
Distribution Center E	Newark, NJ	44.6%	1,560	3,379	98.5%	88.1%	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