

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 76
Average Utilization: 79.2%
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	105.7%	2,444	1,627	96.8%	85.7%	Optimized
	Dallas, TX	69.4%	1,721	3,724	97.6%	89.0%	Optimized
Distribution Center B	Atlanta, GA	116.9%	2,527	3,514	98.0%	67.9%	Improvement Needed
Distribution Center C	Los Angeles, CA	45.0%	2,495	2,411	98.1%	93.1%	Optimized
Distribution Center D	Newark, NJ	48.7%	2,822	3,417	95.3%	60.6%	Improvement Needed
Distribution Center E							

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