

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 84.5%
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	65.3%	1,333	2,969	96.0%	93.6%	Optimized
	Dallas, TX	77.6%	1,398	1,961	97.9%	86.0%	Optimized
Distribution Center B	Atlanta, GA	36.2%	2,809	2,713	99.1%	67.2%	Improvement Needed
Distribution Center C	Los Angeles, CA	77.1%	1,005	1,998	97.6%	87.4%	Optimized
Distribution Center D	Newark, NJ	31.1%	2,967	3,922	95.9%	88.5%	Optimized
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