

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 40
Average Utilization: 86.6%
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	47.4%	2,424	3,945	95.0%	81.0%	Optimized
	Dallas, TX	33.0%	1,083	3,862	97.6%	91.0%	Optimized
	Atlanta, GA	63.9%	2,910	3,219	96.4%	92.6%	Optimized
	Los Angeles, CA	56.3%	1,562	1,810	98.5%	85.7%	Optimized
	Newark, NJ	74.0%	1,531	1,615	96.0%	82.8%	Optimized
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