

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 84.7%
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	51.5%	2,833	3,642	95.5%	93.2%	Optimized
	Dallas, TX	59.9%	2,045	2,780	96.2%	81.7%	Optimized
	Atlanta, GA	71.5%	2,571	1,921	97.5%	83.0%	Optimized
	Los Angeles, CA	89.8%	2,927	1,568	98.9%	87.6%	Optimized
	Newark, NJ	107.1%	1,099	3,212	95.6%	78.1%	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